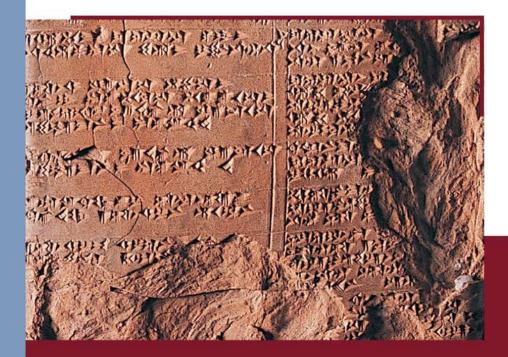
# Contacts of Languages and Peoples in the Hittite and Post-Hittite World

Volume 1, The Bronze Age and Hatti

Federico Giusfredi, Alvise Matessi, and Valerio Pisaniello



ANCIENT LANGUAGES AND CIVILIZATIONS



Contacts of Languages and Peoples in the Hittite and Post-Hittite World

Volume 1

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VOLUME 1

The Bronze Age and Hatti

Ву

Federico Giusfredi Alvise Matessi Valerio Pisaniello

With contributions by

Paola Cotticelli-Kurras Alfredo Rizza Maurizio Viano Ilya Yakubovich



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## Abbreviations

/a–/z ABoT	Inventory number of the tablets excavated in Boğazköy (1931–1967). <i>Ankara Arkeologji Müzesinde bulunan Bogazköy Tabletleri</i> (Bogazköy Tablets in the Archaeological Museum in Ankara), vol. 1 İstanbul: Milli Eğitim Basımevi, 1948; vol. 2 Chicago: The Oriental Institute of the University of Chicago, 2011.
ACLT	Yakubovich, Ilya, <i>Annotated Corpus of Luwian Texts</i> (http://web-corpora .net/LuwianCorpus/search).
AT	Wiseman, Donald J., <i>The Alalakh Tablets</i> , London: The British Institute of Archaeology at Ankara, 1953.
AUAM	Tablets in the collections of the Andrews University Archaeological Museum.
AuOrS 23	Arnaud, Daniel, <i>Corpus des Textes de Bibliothèque de Ras Shamra-Ougarit</i> (Aula Orientalis Supplements 23), Barcelona: Editorial Ausa, 2007.
Bk.	Büyükkale.
BM	British Museum, London.
Во	Inventory number of the tablets excavated in Boğazköy (1906–1912).
BT	Bronze Tablet (= Bo 86/299).
CAD	<i>The Assyrian Dictionary of the University of Chicago</i> , Chicago: The Oriental Institute of the University of Chicago, 1956–2010.
CBS	University Museum in Philadelphia, Catalogue of the Babylonian Section.
CHD	<i>The Hittite Dictionary of the Oriental Institute of the University of Chicago</i> , Chicago: The Oriental Institute of the University of Chicago, 1980 ff.
CIL VI	<i>Corpus Inscriptionum Latinarum VI. Inscriptiones urbis Romae Latinae</i> , Berlin: De Gruyter, 1876–2000.
CODL <sup>2</sup>	Matthews, Peter H., <i>The Concise Oxford Dictionary of Linguistics</i> , 2nd ed., Oxford: Oxford University Press, 2007.
CSAI	Corpus of South Arabian Inscriptions, Pisa (http://dasi.cnr.it/).
СТ	<i>Cuneiform Texts from Babylonian Tablets in the British Museum</i> , London: British Museum, 1896 ff.
СТН	Laroche, Emmanuel, <i>Catalogue des textes hittites</i> , Paris: Klincksieck, 1971; premier supplément, <i>Revue Hittite et Asianique</i> 30 (1972), pp. 94–133; On- line edition: Košak, Silvin et al., https://www.hethport.uni-wuerzburg.de/ CTH/.
CUSAS	<i>Cornell University Studies in Assyriology and Sumerology</i> , Bethesda: CDL Press, 2007 ff.
DAAM 1	Rieken, Elisabeth, ed, <i>Keilschrifttafeln aus Kayalıpınar 1. Textfunde aus den Jahren 1999–2017</i> (Documenta Antiqua Asiae Minoris 1), Wiesbaden: Harrassowitz, 2019.

#### ABBREVIATIONS

DBH 46	Akdoğan, Rukiye, <i>Hethitische Texte. Bo 4658–Bo 5000</i> (Dresdner Beiträge zur Hethitologie 46), 2 vols., Wiesbaden: Harrassowitz, 2016.	
DCL	Melchert, H. Craig, <i>A Dictionary of Cuneiform Luvian</i> . Ann-Arbor: Bee Stave, forthcoming.	
EA	Knudtzon, Jörgen A., <i>Die El-Amarna-Tafeln</i> (Vorderasiatische Bibliothek II), Leipzig: Hinrichs, 1915.	
EDHIL	Kloekhorst, Alwin, <i>Etymological Dictionary of the Hittite Inherited Lexicon</i> (Leiden Indo-European Etymological Dictionary Series 5), Leiden/Boston: Brill, 2008.	
eDiAna	Digital Philological-Etymological Dictionary of the Minor Ancient Anato- lian Corpus Languages (https://www.ediana.gwi.uni-muenchen.de/index .php).	
EHS	Kronasser, Heinz, <i>Etymologie der hethitischen Sprache</i> , Wiesbaden: Harrassowitz, 1966.	
Emar vı	Arnaud, Daniel, <i>Recherches au pays d'Aštata. Emar v1</i> , Paris: Editions Re- cherche sur les Civilisations, 1985–1987.	
EWAia	Mayrhofer, Manfred, <i>Etymologisches Wörterbuch des Altindoarischen</i> , 3 vols., Heidelberg: Winter, 1992–2001.	
GrHL	Hoffner Jr., Harry A. and Melchert, H. Craig, <i>A Grammar of the Hittite Language. Part 1: Reference Grammar</i> (Languages of the Ancient Near East 1/1), Winona Lake: Eisenbrauns, 2008.	
Н	Tablets from Tell-Haddad.	
HE <sup>2</sup>	Friedrich, Johannes, <i>Hethitisches Elementarbuch. Zweite verbesserte und erweiterte Auflage</i> , Heidelberg: Winter, 1960.	
HED	Puhvel, Jaan, <i>Hittite Etymological Dictionary</i> (Trends in Linguistics. Documentation 1 ff.), Berlin: De Gruyter Mouton, 1984 ff.	
HEG	Tischler, Johann, <i>Hethitisches Etymologisches Glossar</i> (Innsbrucker Bei- träge zur Sprachwissenschaft 20), Innsbruck: Institut für Sprachwissen- schaft der Universität Innsbruck, 1983–2016.	
НКМ	Alp, Sedat, <i>Masat-Höyük'te bulunan civi yazili Hitit tabletleri/Hittite Cunei-</i> <i>form Tablets from Masat-Höyük</i> (Türk Tarih Kurumu Yayınları v1/34), Anka- ra: Türk Tarih Kurumu Basimevi, 1991.	
HSK 26.1	Kittel, Harald, Frank, Armin Paul, Greiner, Norbert, Hermans, Theo, Koller, Werner, Lambert, José, and Paul, Fritz, eds, <i>Übersetzung   Translation   Tra-</i> <i>duction</i> , vol. 1 (Handbücher zur Sprach- und Kommunikationswissenschaft / Handbooks of Linguistics and Communication Science 26.1), Berlin: De Gruyter Mouton, 2004.	
НТ	King, Leonard William, <i>Hittite Texts in the Cuneiform Character from Tablets in the British Museum</i> , London: British Museum, 1920.	
HW <sup>2</sup>	Friedrich, Johannes and Kammenhuber, Annelies, <i>Hethitisches Wörterbuch</i>	

ABBREVIATIONS

Zweite, völlig neubearbeitete Auflage auf der Grundlage der edierten hethitischen Texte, Heidelberg: Winter, 1975ff. Rüster, Christel and Neu, Erich, Hethitisches Zeichenlexikon. Inventar und HZL. Interpretation der Keilschriftzeichen aus den Boğazköy-Texten (Studien zu den Bogazköy-Texten Bh. 2), Wiesbaden: Harrassowitz, 1989. IBoT İstanbul Arkeoloji Müzelerinde bulunan Bogazköy tabletleri, vol. 1 İstanbul: Maarif Matbaası, vol. 2 İstanbul: Milli Eğitim Basımevi, vol. 3 İstanbul: Maarif Basımevi, vol. 4 Ankara: Türk Tarih Kurumu Basimevi, 1944ff. ICK 1 Hrozný, Bedřich, Inscriptions cunéiformes du Kultépé, vol. 1 (Monografie Archivu Orientálního 14), Prag: Státní pedagogické nakladatelství, 1952. KAI Donner, Herbert and Röllig, Wolfgang, Kanaanäische und aramäische Inschriften, Wiesbaden: Harrassowitz, 1962-1964. KAR Ebeling, Erich, Keilschrifttexte aus Assur religiösen Inhalts I/II (Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 28 and 34), Leipzig: Hinrichs, 1919 and 1923. *Keilschrifttexte aus Boghazköi*, vols. 1–6 Leipzig: Hinrichs; vols. 7–70 Berlin: KBo Mann; vol. 71: Mainz: Akademie der Wissenschaften und der Literatur, 1916 ff. Kp Inventory numbers of Kayalıpınar texts. Kt Inventory numbers of Kültepe texts. KTK Jankovskaja, Ninel B., Klinopisnye teksty iz Kjul'-Tepe v sobranijach SSSR (pis'ma i dokumenty torgovovo ob'edinenija v Maloj Azii XIX v. do n.ė.) (Pamjatniki Pis'mennosti Vostoka 14) Moskau: Nauka, 1968. KTU Dietrich, Manfried, Loretz, Oswald, and Sanmartín, Joaquín, Die keil-alphabetischen Texte aus Ugarit (Alter Orient und Altes Testament 24/1), Neukirchen-Vluyn: Neukirchener Verlag, 1976. KTU<sup>3</sup> Dietrich, Manfried, Loretz, Oswald, and Sanmartín, Joaquín, Die keilalphabetischen Texte aus Ugarit, Ras Ibn Hani und anderen Orten | The cuneiform alphabetic texts from Ugarit, Ras Ibn Hani and other places (Alter Orient und Altes Testament 360/1), 3rd ed., Münster: Ugarit-Verlag, 2013. KUB Keilschrifturkunden aus Boghazköi, Berlin: Akademie-Verlag, 1921–1990. Msk Texts from Meskene. MSL Materialien zum sumerischen Lexikon/Materials for the Sumerian Lexicon, Rome: Pontificio Istituto Biblico, 1937 ff.; SS = Supplementary Series (1, 1986). MZL Borger, Rykle, Mesopotamisches Zeichenlexikon (Alter Orient und Altes Testament 305), Münster: Ugarit-Verlag, 2003. Neşr. Cı Tablet quoted in Veenhof 1989 (see Bibliography).

- Ni Texts from Nippur (Archaeological Museum, Istanbul)
- NPNGelb, Ignace J., Purves, Pierre M., and MacRae, Allan A., Nuzi Personal<br/>Names. Chicago: The University of Chicago Press, 1943.

OIP	<i>Oriental Institute Publications</i> , Chicago: The Oriental Institute of the University of Chicago, 1924 ff.
OIP 2	Luckenbill, Daniel David, <i>The Annals of Sennacherib</i> (Oriental Institute
	Publications 2), Chicago: The University of Chicago Press, 1924.
PRU	Schaeffer, Claude FA., ed, <i>Le Palais Royal d'Ugarit</i> 1–6, Paris: Klincksieck,
	1955–1970.
RIMA	<i>The Royal Inscriptions of Mesopotamia, Assyrian Periods</i> , Toronto: University of Toronto Press, 1987 ff.
RlA	Ebeling, Erich, Meissner, Bruno et al., eds, <i>Reallexikon der Assyriologie und vorderasiatischen Archaologie</i> , Berlin/New York: De Gruyter, 1932 ff.
RS	Texts from Ras Shamra.
RV	Rigveda (https://vedaweb.uni-koeln.de/).
TC	Contenau, Georges, <i>Tablettes Cappadociennes</i> (= TCL 4), Paris: Paul Geuth-
	ner, 1920.
TCL	<i>Textes cunéiformes, Musées du Louvre,</i> Paris: Paul Geuthner, 1910 ff.
TL	Kalinka, Ernst, <i>Tituli Lyciae lingua Lycia conscripti</i> (Tituli Asiae Minoris 1),
	Wien: Österreichische Akademie der Wissenschaften, 1901.
TLB	Tabulae Cuneiformes a F.M.Th. de Liagre Böhl collectae, Leiden: Nederlands
	Instituut voor het Nabije Oosten, 1954 ff.
VAT	Vor derasiatisches Museum, Berlin(Vor derasiatische Abteilung: Tontafeln).
VBoT	Götze, Albrecht, Verstreute Boghazköi-Texte, Marburg: Author's Printing
	Press, 1930.
YOS	<i>Yale Oriental Series, Babylonian Texts</i> , New Haven: Yale University Press, 1915 ff.

#### Linguistic and Paleographic Abbreviations

abl.	ablative	
acc.	accusative	
с.	common gender	
CV	consonant-vowel	
CVC	consonant-vowel-consonant	
dat.	dative	
EL	Empire Luwian	
gen.	genitive	
IL	Ištanuwa Luwic	
imp.	imperative	
impf.	imperfective	
instr.	instrumental	

KL	Kizzuwatna Luwian
l. col.	left column
loc.	locative
lo. e.	lower edge
MB	Middle Babylon
MS	Middle Script
MH	Middle Hittite
n.	neuter gender
NB	New Babylon
NH	New Hittite
nom.	nominative
NS	New Script
OA	Old Assyrian
OB	Old Babylonian
obv.	obverse
ОН	Old Hittite
OS	Old Script
OV	object-verb
PA	Proto-Anatolian
PIE	Proto-Indo-European
pl.	plural
PN	personal name
pres.	present
pret.	preterit
r. col.	right column
rev.	reverse
sg.	singular
SOV	subject-object-verb
SVO	subject-verb-object
TL	Tauriša Luwian
VC	vowel-consonant
VO	verb-object
VSO	verb-subject-object

#### Historical Periods and Other Abbreviations

AMW	Anatolian Metallic Ware
EBA	Early Bronze Age
ETC	East Transcaucasian Culture

XVI

- ECh Early Chalcolithic
- KG Kurgan LCh Late Chalcolithic
- LBA Late Bronze Age
- LSU Landschenkungsurkunde(n)
- MBA Middle Bronze Age
- MCh Middle Chalcolithic
- RBBW Red and Black Burnished Wares

#### CHAPTER 1

### Introduction

F. Giusfredi

#### 1 What Is This Book?

#### 1.1 Authors and Contributors

This book contains a synthesis of the main results of the ERC project PALaC, *Pre-classical Anatolian Languages in Contact*, which received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (grant agreement n°757299). The project ran from February 2018 to July 2023, including a six-month extension due to the COVID-19 pandemic.

This book features a stratified model of authorship. It is a multiauthored monograph divided into two volumes. The first volume, dedicated to the Bronze Age (late third and second millennium BCE), has three main authors (F. Giusfredi, A. Matessi and V. Pisaniello). The second volume, dedicated to the Iron Age (first millennium BCE) and Western contacts, has four (F. Giusfredi, A. Matessi, S. Merlin and V. Pisaniello). These researchers worked for PALaC for three to five and a half years, contributing extensively to the analysis and synthesis of the scientific results and authoring or coauthoring most of the book's chapters. F. Giusfredi worked on the Bronze Age corpora and some of the historical chapters, V. Pisaniello was mainly responsible for the research on Luwic (especially, but not exclusively, for the Iron Age), S. Merlin was responsible for the research on the Aegean interface (hence her contributions to this monograph will be in Volume 2), and A. Matessi was responsible for most of the historical (and occasionally archaeological) research.

Besides the main authors, other contributors participated in this publication, each providing one or two chapters or parts thereof. Three are young scholars who held shorter postdoctoral positions funded by PALaC or visited the project in an official fashion and worked under the direct supervision of the principal investigator. They are, in alphabetical order, F. De Decker (FWO funded ERC Visiting Researcher in 2020), E. Martínez-Rodríguez (PALaC postdoc April 2021 to March 2023), and B. Obrador Cursach (PALaC postdoc February to November 2020).

A few other contributions were written or cowritten by external scholars who agreed to provide their expertise on specific subjects: P. Cotticelli-Kurras

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This is an open access chapter listributed under the terms of sthice field. Adolice matessi - 978-90-04-54863-3 Downloaded from Brill.com07/06/2023 07:59:14AM (Verona) on Indo-Iranian, H.C. Melchert (UCLA) on Iron Age Cilicia, A. Rizza (Verona) on the Hattian corpus, Zs. Simon (Budapest) on the hypotheses of long-distance contacts during the Iron Age, I. Yakubovich (Marburg) on the Luwian corpus, and M. Viano (Turin) on the Sumerian corpus. While these five scholars did not work under the academic supervision of the principal investigator and their contributions were not, of course, direct products of the ERC funding, this monograph is offered in full in Open Access, including the chapters or parts of chapters that they wrote.

Finally, as regards this first volume, we would like to thank Mauro Giorgieri, Michele Massa, Craig Melchert, Velizar Sadovski, David Sasseville and Lisa Wilhelmi for discussing with us important topics or sharing unpublished materials. Of course, the responsibilities for the contents, including any shortcomings, belong only to the authors.

#### 1.2 The Aim of the Book

PALaC was a 66-month ERC project hosted by the Department of Cultures and Civilizations of the University of Verona. The goal of the project was to study the traces of language contact in the corpora from Bronze and Iron Age Anatolia, analyzing and contextualizing them in a historical and geographical scenario through the collaboration of linguists, philologists, and historians who specialize in Anatolia and the ancient near East.

Due to the geographical position and historical coordinates of the Hittite civilization and its cultural descendants, Anatolia represents a highly interesting case study. In its Mediterranean context, the Hittite and post-Hittite cultures are the westernmost members of the ancient Near Eastern cultural koiné, with a peripheral interface on the Aegean Sea. Within the ancient Near East proper, these cultures were characterized by the use of Indo-European languages whose speakers were in constant contact with contemporaries who spoke the Semitic or isolated languages of the area. For these reasons, Anatolia can be described as a crossroads of languages and cultures and a bridge between several different worlds.

The metaphor of the bridge, while not exactly original, is particularly fitting for this work. Due to the vitality of the fields of classics and Assyriology, Anatolia has often been seen as either the eastern periphery of the Indo-European Mediterranean world or the northwestern periphery of the cuneiform cultural area. Instead of concentrating on the lands that it may have connected, the focus in this book will be on the bridge itself. We will try to provide as detailed a picture as possible of an area that was naturally exposed to and projected significant influence on several neighboring regions, using the evidence for contacts between languages as the fundamental heuristic engine of the research.

#### 1.3 The Title

Some archaeologists may find the title of this book confusing or inaccurate because we chose to use the word 'post-Hittite.' Archaeologists, indeed, use the word 'post-Hittite' to refer to what is found stratigraphically in central Anatolia between the layers deposited at the end of the Hittite kingdom and those of the Phrygian era. We, however, will employ a broad cultural and less localized conception of the Hittite world and use the word 'post-Hittite' to refer to what happens after the Hittite kingdom until the hellenization of Asia Minor, as long as a direct or indirect inheritance of the Bronze Age Anatolian emic set of cultural and linguistic constructs (language, culture, religion) appears to have existed.

#### 2 What This Book Is Not

This is a book on linguistic contacts among cultures in and around ancient Anatolia. Of course, the topic is not new. However, since the methodologies and aims of PALaC are not always the same as those prevailing among Indo-Europeanists, we must also clarify what this book is not, and what one will not find in it. First of all, this is not a book that attempts to reconstruct Indo-European culture. It is not infrequent to witness some degree of polysemy regarding the definition of 'contact.' When organizing conferences on contacts, for instance, it is typical to receive abstract proposals with titles such as 'the concept of 'supper' among the Indo-Europeans: a comparative approach' (we pick 'supper' to avoid referencing the specific work of any colleagues). While these topics are fascinating to those who want to reconstruct a unitary Indo-European culture and certainly contribute to explicating some of the problems that pertain to contacts (migrations, chronology of cultural dispersals, local alteration of migrating concepts due to substrata, etc.), PALaC more humbly investigates interferences whose results are attested in texts composed during historical times.

Furthermore, this book will not be a list of formal or semantic isoglosses. While the topic of contacts in and around ancient Anatolia is not new, a significant number of contributions dealing with linguistics are oriented toward the identification of lexical isoglosses, that is, they aim to distinguish inherited and borrowed material using procedures that are typical of internal reconstruction. We find this kind of purely mechanical approach to contact extremely important but partial and, unless well-founded in both theory and context, sometimes misleading, as it frequently relies on the use of etymological dictionaries with no examination of context.

Etymological dictionaries work very well for internal reconstruction and intralinguistic diachronic phonetic change, but contact phenomena cannot be investigated by ignoring the texts and contexts, which provide information on nonlexical change patterns and their cultural-historical and geohistorical levels of credibility. Therefore, phenomena of interference, even in the chapters devoted to the most technically linguistic (as opposed to cultural) types of contact, will be categorized rather than listed. We preferred to represent and duly contextualize the categories of relevant phenomena rather than aiming at the unrealistic goal of listing 'all loanwords in language X from language Y': while we obviously rely on the corpus, we feel that an honest, well-founded model is a better and longer-lasting contribution to science than a long, but never long enough, list of forms. A third thing that this book is not is a historical grammar of Indo-European or Anatolian. While the disambiguation between inherited and noninherited elements in the ancient Anatolian languages canwe hope!-be useful for a better definition of the diachrony of the grammar (inclusive of the phonological level) of the Indo-European languages, the phenomena studied by PALaC emerge from the historical corpora of Anatolian and the isolated and Semitic languages that surrounded Hatti and the post-Hittite kingdoms and polities.

#### 3 Structure of the Book

This work is divided into two volumes. Volume 1, which contains this introduction, is devoted to the Bronze Age. It is divided into three parts. Part 1 discusses the concept of contact (both from a cultural and a linguistic point of view) and then defines the historical setting, starting from the Early and Middle Bronze Ages (the former being anepigraphic; the latter coinciding with the age of the Old Assyrian trades, during which the earliest cases of language interference emerged). Part 2 concentrates on the Late Bronze Age. Because it relies on the available documentation, it focuses on the archives of Hattuša on the foreign languages that were written down in cuneiform in the Hittite world, although other significant archives from both Anatolia and the neighboring areas are considered whenever relevant and necessary. Part 3 contains the technical discussion of linguistic interference and examines the significance of interference in the second millennium BCE.

Volume 2 will begin with Part , which will be dedicated to the Iron Age contacts in the Near Eastern interface of the post-Hittite Anatolian world. Part 5 will discuss the Aegean and more generally Western interface. Chronologically, Volume 2 will kick off with the 12th century BCE and end with the Hellenis-

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tic age. It will include a brief but fundamental discussion of the late Greek evidence that is so often mentioned too cursorily in works in the Western literature dedicated to Anatolian glosses. For reasons of thematic consistency—and also because of the very limited amount of evidence for interference that is available—Mycenaean will be treated in Volume 2, although diachronically it would belong to the Bronze Age.

While Part 3 of Volume 1 is dedicated to the discussion of linguistic aspects of interference, such topic will be treated in single chapters in Volume 2 because of the lack, for the first millennium, of the *trait d'union* that is represented by the Hittite archives and the cuneiform epigraphic culture for the II.

#### 4 Multi-Authored Chapters

Regarding the chapters in this volume that have multiple authors, attributions of the single sections are as follows. In Chapter 4, section 3, with all its subsections, is by F. Giusfredi, all other sections by A. Matessi. In Chapter 6, sections 1, 2.1 and 4 are by F. Giusfredi, section 2.2 by F. Giusfredi and A. Matessi, sections 3, 3.1, 3.2 by V. Pisaniello. In Chapter 8, sections 2, 3.3 and 4 are by V. Pisaniello, all other sections by F. Giusfredi. In Chapter 10, sections 3, 3.1, 3.1.1, 3.2–3.4 are by V. Pisaniello, all other sections by F. Giusfredi. In Chapter 13, sections 1.2, 3.1, 3.1.1–2 are by P. Cotticelli-Kurras, section 4 is by P. Cotticelli-Kurras and V. Pisaniello, all other sections by V. Pisaniello. In Chapter 14, sections 2, 2.1, 2.2, 3, 3.1, 3.2, 7 are by F. Giusfredi, all other sections by V. Pisaniello. In Chapter 15, sections 3.4, 3.4.1–3 are by V. Pisaniello, all other sections by F. Giusfredi. 3.4, 3.4.1–3 are by V. Pisaniello, all other sections by F. Giusfredi. 3.4, 3.4.1–3 are by V. Pisaniello, all other sections by F. Giusfredi. 3.4, 3.4.1–3 are by V. Pisaniello, all other sections by V. Pisaniello. 3.4, 3.4.1–3 are by V. Pisaniello, all other sections by V. Pisaniello. 3.4, 3.4.1–3 are by V. Pisaniello, all other sections by V. Pisaniello. 3.4, 3.4.1–3 are by V. Pisaniello, all other sections by F. Giusfredi, all other sections by F. Giusfredi. 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by V. Pisaniello, 3.4, 3.4.1–3 are by

#### 5 Chronologies

A historical note is also in order. In this book, we follow the Middle Chronology, with the Hittite sack of Babylon dated to 1595 BCE. This choice is conventional but works better than other options up to the 14th century BCE when more precise assessments are made possible by other dating factors. The chronological uncertainties typical of ancient Near Eastern Studies dissipate after the Dark Age (13th–11th centuries BCE): starting from the end of the 10th century BCE, the absolute dates generally employed are the standard ones reconstructed using the Neo-Assyrian eponym system.

A summary of the main chronological coordinates is contained in the following table.

Dates (BCE)	Phase (ancient Near East)	Phase (Aegean)
3rd millennium	Early Bronze Age	Early Helladic
ca. 2000–1600	Middle Bronze Age	Middle to Late Helladic
ca. 1600–1200	Late Bronze Age	Late Helladic/Mycenaean
ca. 1200–1000	Syro-Anatolian Dark Age	Late Mycenaean/Greek Dark Age
ca. 1000–539	Iron Age	Greek Dark Age to Archaic Greece
539–330 ca.	Achaemenid Period	Classical Greece
330 onwards	Hellenistic/Late Period	Hellenistic/Late Period

#### 6 Philological Conventions

We will generally follow the standard transcription and transliteration practices for the study of the languages that will be analyzed. For cuneiform Hittite, Luwian and Palaic, we will follow the system of the Munich *Hethitisches Wörterbuch*: Sturtevant's clusters will be rendered as  $\langle k \rangle$  and  $\langle kk \rangle$  respectively, and plene notation for vowels will correspond to graphic sequences. The only exception will be the fricative /h/ which will be rendered as an  $\langle h \rangle$  with no diacritics (a rule that we will apply to all cuneiform transcriptions). Etymological vowel length and consonantal phonetics will be used when lemmas are quoted out of context or for reconstruction. Hurrian forms will be based on the glossaries contained in Wilhelm 2018 and the grammars by Giorgieri 2000 and Wegner 2007; Hattian ones will generally follow Simon 2012.

For cuneiform Akkadian, small problems exist; however, the reference works are the *Chicago Assyrian Dictionary* for the textual transcriptions and the *Akka-disches Handwörterbuch* for lemmatization. The Sumerian of the Hattuša archives will follow Viano 2016. For Ugaritic, which is quite unproblematic, we lemmatize following Del Olmo Lete and Sanmartín 2015. For the alphabetic Semitic languages of the Iron Age, we provide a romanization of the forms. Egyptian is transcribed following the conventions of the Thesaurus Linguae Aegyptiae (https://aaew.bbaw.de/tla/index.html).

Epichoric alphabetic Anatolian languages pose more delicate issues. After a painstaking discussion of the available options, this monograph will follow the eDiAna (https://www.ediana.gwi.uni-muenchen.de/project.php) system for Lydian, the conventions by Melchert 2004 for Lycian, and Adiego 2007 for Carian. For Phrygian, which is Indo-European but not genealogically Anatolian, we follow Obrador Cursach 2020. Finally, Mycenaean texts will be transcribed in italicized transliteration, while ancient Greek ones will be quoted using the standard character set. Any further conventions for sparsely quoted languages will be explained case by case. Deviations from the guidelines detailed in this section may occur if we propose a change in the standard or analyze a form differently than the authors of the reference works, but we will provide explanations in such cases.

For philological diacritics, we follow the usual conventions. Square brackets are used for integration, as in *ap*[*pa*], while square and round indicate certain integration (due to the presence of a parallel or duplicate), as in *ap*[(*pa*)]. The  $\langle \langle \rangle \rangle$  is used to expunge (e.g., EGIR-*pa*  $\langle \langle \text{EGIR-$ *pa} \rangle \rangle <i>paišta*).

Federico Giusfredi & the PALaC team Verona, July 2022

## PART 1

## *The Theoretical and Historical Setting and the Earlier Phases*

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### **Contacts of Cultures and Contacts of Languages**

F. Giusfredi

#### 1 Defining 'Contact'

#### 1.1 Contact and Inheritance

Contact can be defined in two ways depending on the perspective. As a phenomenon, contact is the exchange of information between two portions of a system. As an epiphenomenon, contact is any diachronic event pertaining to non-system-internal information exchange. In the evolution of a phylogenetic system, regardless of the anthropic fact represented (be it the manuscript tradition of an exquisite literary work, the evolution of a religious creed or system of administration, or the diachronic phylogenesis of a family of related languages), contact models share features in nodes that are not mechanically inherited from common ancestors.

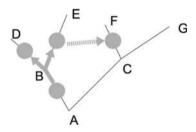


FIGURE 2.1 An example of diffusion of a feature by contact

The graph in Fig. 2.1 contains a generic example. The gray-dot innovation occurs within the AB branch. In the history of writing, it may represent the emergence of vowel notation in a writing system derived from writing system A that only wrote consonants. In the history of religion, it may represent an innovative ritual practice in a cult or system of beliefs that did not yet exist at stage A. In the history of crafting, it may represent a new ceramic technique developed as material culture A was evolving to become material culture B. In linguistics, it may represent the loss of a grammatical category in the morphology of language A, which will no longer be present in language B. The gray-dot innovation is mechanically inherited in the segments BD and BE (full arrow) that stem from node B. In contrast, Segment CF does not have B as an ancestor but displays the gray-dot feature, which, in this case, has been spread by contact

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This is an open access chapter distributed under the terms of state CCBY. And Ado license Downloaded from Brill.com07/06/2023 07:59:14AM via free access with BE (dotted arrow). This is, of course, a very simple model. However, with refinement and further formalization, it will prove to be an extremely powerful diagnostic tool for the study of change in human history.

#### 1.2 Types of Change

So far, we have considered only two options for the emergence of a new feature: mechanical inheritance and contact. Obviously, this does not describe all of the possible changes in a system over time. Let us consider the history of writing systems—a very useful example of a historical field of research that features 'concrete,' observable changes-and specifically, the introduction of syllabic phonographic notation through the so-called acrophony principle. The acrophony process—much debated and sometimes misunderstood<sup>1</sup>—consists in assigning the value of the first phoneme, syllable, or quasi-syllabic cluster of a word to the sign that represents it logographically. For instance, acrophony was at work when the syllabic values of the Anatolian hieroglyphs were established, with the logogram indicating the verb 'to give,' whose reading in Luwian was *piya*-, becoming a syllabogram with the value /pi/.<sup>2</sup> Similar patterns of evolution of writing systems have been securely identified in Egypt and-with a more complex debate due to the number of xenographic adoptions of the cuneiform script-in Syro-Mesopotamia. While all of these areas were contiguous and the cultures that inhabited them were in contact with each other for millennia, there are cases of application of the acrophony principle that cannot be related in any way-for instance, the definition of the syllabic values of the Maya logo-syllabary.<sup>3</sup> This means that the feature 'acrophonic reduction of logograms' is not necessarily diffused by mechanic inheritance/development or areal contact but rather can emerge as an independent development in more than one place and time.

We may refer to such events as *polygenetic changes*. A polygenetic change, being likely to occur independently in different areas and times, is obviously

<sup>1</sup> Acrophony is the process by which the initial part of the phonetic form that is encoded by a sign starts to be used as a phonographic value of the sign. This marks the script's evolution toward the second level of patterning in Martinet's double patterning. Whether the initial part of the phonetic form that is selected is syllabic, pseudo-syllabic, consonantal, or alphabetic is irrelevant, as is the degree of iconicity maintained by the glyph. Acrophony is important because when it takes place, it does so within a specific glottographic tradition, thereby helping disambiguate the cultural context of the evolution of the script.

<sup>2</sup> Whether the acrophonic evolution of the Anatolian hieroglyphs occurred in a Luwian, Hittite or mixed Luwo-Hittite environment is still debated. Cf. Yakubovich 2008; Oreshko 2013:400– 409. For a general discussion of the acrophonic principle, see Vertegal 2021: 295–298.

<sup>3</sup>  $\,$  Cf. Mora-Marı́n 2003 for further references.

a poor diagnostic tool for the study of the mutual relationship between systems or subsystems in any field of research. Instead, our focus is on monogenetic changes. The concept of monogeneticity is not polar but scalar as it can only be defined in terms of the likelihood that an identical change would occur independently. Some innovations appear highly unlikely to emerge independently in multiple places. To take an example from the history of religions, one may consider the conception of the solar deity as a god of law(suits) and justice in several cultures in the sphere of influence of the southern Mesopotamia Sumero-Akkadian world. These included the Elamite culture, whose peoples were in close contact with the Sumerians at least since the proto-urban phases of the fourth and third millennia BCE. The solar god of Anšan and Susa was Nahhunte, and his many connotations and functions may have included the supervision of lawsuits and administration of justice (although, to be fair, the only positive evidence of this seems to be his role as a divine witness in legal texts).<sup>4</sup> The assignment of this type of divine competence to a specific god is not a universal feature. It may emerge accidentally in areally unrelated contexts (after all, the sun does look like an eye watching our every move), but its extension from the Sumerian religion to other Semitic and non-Semitic ones (including Elam) makes it, in all likelihood, a locally monogenetic one.

However, is it accurate to state that we are dealing, in this case, with a diffusion of a divine feature *from* Sumer to other surrounding cultures? As a matter of fact, no, and this introduces another problem that pertains to the definition and description of contact: the problem of the direction of diffusion. For instance, chronological bias can lead to the assumption that a Sumerian sun god, Utu, influenced a Semitic one, Šamaš, and an Elamite one, Nahhunte. Indeed, the name of Utu is attested earlier than the other two, and the Sumerian culture is considered to have a foundational role with respect to the other cultures of what, in Chapter 6, will be defined as the 'cuneiform koiné.' But visible history, especially its most archaic phases, often reflects deeper phenomena that, even during areas of written history, tend not to be represented in the official sources. Whether the early attested god Utu was the source of the diffusion of the shared features of the Sun god or simply one of the targets of said diffusion, is unknown, nor is it possible to imagine a falsification 'test' that could answer the question experimentally. Therefore, once contact is identified, an area of interaction will also have emerged, but it will remain extremely important not to push the interpretation of the details any further than the data will allow.

<sup>4</sup> Cf. RlA, N, s.v., with references to further literature.

#### 2 Language Study as a Historical Tool

#### 2.1 Why Is Language Relevant to Historical and Cultural Studies?

Many features of human societies and cultures can be studied from the perspective of inheritance, contact and diffusion. Section 1 above offers a few examples from the histories of writing systems and religions, but contact-based inquiry models can be applied to other aspects of culture as well, such as systems of administration, literary traditions, models of urban organization, emic kinship structures (and labels), and human languages. In most cases, categorizing the fundamental features of a human construct—be it cultural, social, religious, political, or juridical—is a very difficult task. A rigorous definition of the object of study in the humanities is not as easy as in the hard sciences. The boundaries of concepts are often ill-defined: a discussion about the extension of the 'god-of-law' feature to the solar deity in certain Near Eastern cultures presupposes: 1) a clear definition of the connotation, 2) a clear definition of the concepts of 'law' and 'justice' in said cultures, 3) the assumption that this concept was shared by the cultures under investigation, 4) a necessarily hypothetical reconstruction of the societies that were involved, and 5) the very assumption that the direction, significance, and diachrony of a hypothetical diffusion can be described based on the available data (which can be shown to be incomplete but never demonstrated to be complete). Each of these presuppositions can be challenged in competing interpretive frameworks, and the probability of validating or disproving any acquisition is low.

Human languages stand out from this picture, at least in part. Social and cultural constructs are innovations that are *produced* by human beings, but language, as a natural faculty of humans, while being strongly connected to the social and cultural sphere also belongs to the field of natural phenomena, and many of its features evolve mechanically or in ways that depend on their structural features and the implications of their structural patterns. Historical phonology, for instance, works in a way that depends on the Saussurean concept of the *arbitrariness* of the linguistic sign:<sup>5</sup> no logical implication connects a given concept or meaning to a phonetic form, so any change in the phonological inventory of a language will depend on the phonological level and environment *only*. This yields to the concept of *sound law*: the phonological inventory of a language undergoes *mechanical* alterations over time, which

<sup>5</sup> Saussure 1916. The principle of arbitrariness can be described as follows: no necessary logical connection exists between the *signifiant* and the *signifié* of a linguistic sign. If this principle were not valid, no variation and no diachronic language change would occur, and there would be only one human language.

are completely regular in identical phonetic environments and are automatically *inherited* by the subsequent stages of a language and the languages that derive from it.

Sound laws, while belonging to one of the most technical fields of linguistics, are hugely significant to the general study of the ancient world. Consider the example of Latin rhotacism. It is defined as

Old Latin *VsV* > Classical Latin *VrV* for all *V*'s,

meaning that an intervocalic sibilant of Old Latin, regardless of the position of the accent and any surrounding vowels, will become an /r/ in Classical Latin (for simplicity, we ignore here the special cases in which dissimilation blocks the change, e.g., *miser* instead of *mirer*). Cross-analysis with epigraphic material that contains historical information has led linguists to date the change to the third or second century BCE, with older compositions, such as the *Carmen aruale*, still presenting forms with an intervocalic /s/ (*Lases* for *Lares*).<sup>6</sup> This kind of evidence is of paramount importance for dating documents: an epigraph that does not exhibit rhotacism must have predated the shift.

The highly measurable nature of some (not all!) types of change in language structures has more subtle implications in analyzing cultural interactions. Indeed, if language-internal changes are, to some extent, more measurable than the evolution of other cultural traits, this implies that changes that cannot be explained language internally must have occurred for other reasons. Sticking to the example of the rhotacism of Latin, we can conclude that any Old Latin word must have undergone rhotacism in the passage to Classical Latin, so a word that does not show rhotacism must have entered the lexicon after the time in which the change was applied. A word that famously represents an apparent exception to rhotacism is the Latin word for 'donkey' (a somewhat mysterious word in several ancient Mediterranean languages). If asinus had been an inherited word in Classical Latin, it would have turned into \*arinus by the third century BCE at the latest. Since it did not, the word must have entered the lexicon after the shift occurred. Indeed, the earliest attestations are in Plautus.<sup>7</sup> Plautus was probably not a native speaker of Latin but of Umbrian (a language in which rhotacism also occurred)<sup>8</sup> and almost

<sup>6</sup> The inscription that contains the holy chant of the *fratres aruales* (*CIL* VI 2104) contains a dating formula that corresponds to the year 218 BCE and probably was inscribed during the phase in which rhotacism was occurring.

<sup>7</sup> E.g., Pseudolus 1.2.135, dating back to 191 BCE.

<sup>8</sup> Voice 'Umbrian' from the Mnamon project (http://mnamon.sns.it/index.php?page=Lingua& id=58&lang=en), accessed May 5, 2022.

certainly knew something of the Oscan language (which was impervious to the change).<sup>9</sup> Could Oscan have been a medium of transmission for the word asinus? The situation, which at this point involves not only linguistics but also the fields of sociolinguistics and social history, is even more complex than this. The words for 'donkey' show some superficial similarities and have no clear origin in several Mediterranean languages, including Greek ὄνος,<sup>10</sup> the Anatolian compound *tark=AŠŠANA*-, Sumerian ANŠE, and perhaps even Hebrew 'aton' and Akkadian *atānu*, both meaning 'female donkey'.<sup>11</sup> While the technical curiosity of the linguist is destined to remain frustrated as no solutions have been found to the word's diffusion and formal changes, the circulation area of this possible Wanderwort is extremely interesting for the general and historical study of preclassical Mediterranean. If the word circulated, how did it circulate? Can its origin be traced to Africa, matching the diffusion of the Equus africanus to Mesopotamia, the Levant and Anatolia? Was the path of Western diffusion unique or was the pattern of expansion even more complex and discontinuous?

Phonological change is one of the most powerful tools for tracking the diffusion of changes by inheritance or contact, but it is not the only way in which idioms evolve. Morphological structures (e.g., the presence of nominal inflection) also change over time (e.g., the nominal inflection decays, cases are defunctionalized and disappear), and so do the language-dependent, nonuniversal syntactic structures (e.g., a verb-final, or 'OV,' mother language yields to a verb-medial daughter language, as occurred with the passage from Latin to Spanish, French, Italian, and all of the other Romance languages). These changes follow *typological tendencies*, but they are not entirely mechanical. Comparison between genealogically and areally unrelated languages, however, allows assessment of the likelihood of the occurrence of unsolicited changes occurring. For instance, ignoring the complex problem of the position of the subject in epigraphs, all West Semitic languages are head-initial, meaning that the verb precedes the object and adpositional elements have prepositional distribution:

<sup>9</sup> Voice 'Umbrian' from the Mnamon project (http://mnamon.sns.it/index.php?page=Lingu a&id=56&lang=en), accessed May 5, 2022.

<sup>10</sup> According to Beekes 2010:1082, the word could be Pre-Greek. The complex problem of the noninherited Greek lexicon will be touched on in Volume 2, but for a methodological discussion of Pre-Greek and references to previous scholarship, cf. Merlin 2020.

<sup>11</sup> The idea of a connection would be highly speculative, but one may be tempted to also add the Egyptian *jaA-t*, 'female donkey' to the list.

Phoenician: KAI 24, 16 *w- yšḥt r'š b'l ḥmn* and smash.FUT3SG<sup>12</sup> head Ba'al Ḥammon "And Ba'al Hammon will smash (his) head"

Old Aramaic KAI 216, 19–20 w(20) 'nh bnyt byt' znh and I build.PST1SG house.DEF this "And I built this palace"

South Arabic CSAI 1,31 (as read by Robyn 1987) **bny** w-  $s^{-1}hd[t$   $l^{-1}ttr Nwf]^{2}n$  wbuild.PST3SG and dedicate. PST3SG to Athtar-Nawfan and 'lhw S<sup>1</sup>qmtm bytn Byhn to.gods.of. S<sup>1</sup>qmtm temple Bayhan "... has built and dedicated to Athtar-Nawfan and to the Gods of S<sup>1</sup>qmtm the temple Bayhan"

Akkadian, on the other hand, being one of the two assured members of the East Semitic branch of the language family (the other being Eblaite) has final verbs (but, contrary to the tendency of OV languages), features prepositions and no postpositions.

A general typological shift may, of course, have occurred as an East Semitic or Proto-Akkadian innovation; however, the retention of the unexpected prepositional pattern seems to contradict this idea. Therefore, the pattern is likely to have emerged due to areal contacts with languages that had a similar structure. The interpretation that seems most likely is that the change in the syntactic clause architecture of Akkadian was the result of Sumerian influence,<sup>13</sup> which is a verb-final agglutinative language with no proper adpositional elements.<sup>14</sup> Of course, the implications of this reconstruction are different in terms of cultural contact. We are no longer dealing with the circulation of words over a large area but rather with a very deep structural change in the grammatical

<sup>12</sup> Glossing based on the most likely interpretation (G-stem imperfective present-future); often the consonantal writing systems of West Semitic make several interpretations possible.

<sup>13</sup> Cf. Deutscher 2000:162.

<sup>14</sup> For a reference grammar of Sumerian, cf. Edzard 2003 or the more recent grammar in Italian by D'Agostino et al. 2019. While it is true, as the joke goes, that there is a Sumerian grammar for each Sumerologist, the two works cited are sufficient to support this simple reference to the syntactic typology of the language.

features of a language in a small region (southern Mesopotamia) in which two languages must have been in close contact for an extended period.

Further explanations of the heuristics of these analyses are necessary to rigorously define the framework that will be employed in this book. Therefore, we will proceed by, first, describing two further methodological and scientific concerns, and, second, explaining the societal and cultural-historical significance of the evidence that will be collected, studied, and discussed in the central chapters of this work.

## 2.2 Language or 'Code'?

Despite its potential for the study of the ancient cultures and societies and their interactions, the study of the languages of ancient areas and civilizations present several interpretive problems, some of which are more obvious than others. An obvious limitation is the significance of the available corpora. This is not necessarily equivalent to the amount of material that is preserved and can be studied. If some languages-ancient Lydian, for instance-survive in a limited number of documents and thus can be difficult to interpret, other languages, even those with large corpora, present more subtle difficulties. One could hardly state that Akkadian, Sumerian or Hittite are attested in too small corpora; still, some text types are overrepresented, others are barely visible, and still others are virtually absent. We have, for instance, no proper private juridical or administrative documents from the Bronze Age kingdom of Hatti, and the vast majority of the texts come from a few official archives from the core area.<sup>15</sup> This prevents us from assessing contact-related features such as the diffusion of local linguistic varieties in peripheral areas, unless these were accidentally represented in the central scribal offices, or-even more interesting for the general description of the society-foreign anthroponyms were diffused outside of the elite classes. These issues are corpus-dependent, and, alas, can be dealt with only by acknowledging them. Luckily, if serious caution is applied whenever data are incomplete or only describe a stratum of a culture's social semiotic inventory, such limitations do not prevent a fruitful analysis of the available data.

Apart from the obvious problem of the limits of the evidence, a subtler issue must be described to determine how it could affect the analysis of ancient documents and be solved and even turned into an advantage for the heuristics of the current research. Ancient corpus languages are, by definition, written languages. Apart from the impossibility of fully reconstructing a spoken language

<sup>15</sup> See Chapter 6 for a description.

from ancient written records, we also face the problem of recognizing the different grapholects within a language. The Akkadian language used in Hattuša, for instance, was not homogenous: international Akkadian was used for diplomatic documents. In some cases, groups of treaties or letters even display peculiar uses and practices not only in paleography and graphemics but also from a lexical or grammatical perspective. Old Babylonian appears to have been used for early political documents as well as for some literary compositions (unless these derive directly from an elusive Middle Babylonian tradition), as well as for some technical texts that, however, could have been more or less open to infiltrations from the peripheral Akkadian traditions or international Middle Babylonian during the Late Bronze Age. Furthermore, merely graphical phenomena may interfere with the encoding and decoding of the written text, which results in other problems—for example, unusual word ordering derived from the practice of sumerographic (or generally heterographic) writing. Often it is difficult to distinguish *epigraphic* from linguistic interference.

Although the study of languages in contact is the central heuristic tool of this research, this monograph has not only a traditionally linguistic but also a cultural-historical goal. Our aim is not to reconstruct the phonetics of a Lydian vowel or the original verbal system of Semitic or Indo-European but rather to employ the evidence for contacts to areally describe the interactions between languages and cultures in the Anatolian and peri-Anatolian regions. Therefore, the fact that the graphic medium was also open to interferences that did not necessarily mirror a true linguistic shift is not an obstacle but rather a further opportunity to identify interactions between traditions. Indeed, in the area of interest of the present work, preclassical Anatolia and its ancient Near Eastern and Mediterranean contexts, the word 'tradition,' in a scholastic and scholarly sense, is key. Although Indo-European studies, especially in the strict frameworks of European historical phonologists, generally tackles ancient languages from a very rigid perspective, aiming at the reconstruction of their true historical forms, how languages were learned and reproduced in the corpora from the ancient Near East differed from how they are learned and reproduced in modern 'alphabetic' cultures. The approach in scribal schools was, probably, essentially a combination of a graphical approach and a glottic one, so that language and script in the cuneiform cultures formed an entangled system.

The lexical lists from the Mesopotamian and Syro-Mesopotamian traditions were, at one time, tools for learning languages, writing, and science.<sup>16</sup> An awareness of this fact makes it possible to appreciate the interference between scribal

<sup>16</sup> On the lexical lists in the cuneiform world, see Civil 1975; RIA 6 s.v. Lexikalischen Listen.

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traditions, graphemic practices, and writing systems and is vital to an areal study of the cultural interactions in and around Anatolia. The pattern of diffusion of a paragraphematic device, such as, for instance, that of gloss wedges from the Syrian area to Anatolia before and during the Amarna age, is not less informative than the diffusion of the Luwic *i*-mutation to Hittite. The presence of an almost unique variant of the sign NUMUN<sub>2</sub> in the medical texts of Hattuša<sup>17</sup> matches the technical grapholect of Akkadian used in these texts. It is also suggestive of the existence of a local scribal school that re-elaborated the materials of the Mesopotamian tradition, which in turn is related to the local elaboration of Sumerian and Akkadian lexical lists in Anatolia by locals or Mesopotamians.

In light of the kaleidoscopic nature of the elements that can help us track the *contexts* of the Anatolian civilizations and languages, the perspective of contact must be expanded from a purely linguistic conception to a broader historical study of contacts between the Bronze Age Hittite, Akkadian, and Hurrian traditions and between the Luwian, Akkadian and West Semitic Iron Age cultures.

## 2.3 Language and Culture

The concept of 'code,' introduced here in the previous section, should be kept in mind as we proceed to the next theoretical issue that needs to be discussed: how to integrate the competing definitions of a 'culture.'

The word 'culture' and the adjective 'cultural' will be used quite frequently in the next chapters. Most people have a basic understanding of what a culture is: if an author employs the label 'the Etruscan culture,' the reader will immediately understand that a reference is made to the Etruscan populations that inhabited parts of Italy in the proto-historical and early historical times. But the answers to more complex questions about Etruscan culture will depend on the theoretical framework employed. What are the historical coordinates of 'Etruscan culture'? An archaeologist will sensibly refuse to neglect the protohistorical one, and, if our imaginary author were a scholar in such discipline, her or his work would certainly include a discussion of the Villanova ceramic production as well as of the funerary practices that were employed in different areas of central Italy during the early centuries of the first millennium BCE. A linguist, on the other hand, would probably employ the label to refer to the historical phase only, thereby applying a glottocentric definition of the

For an overview of the cuneiform literature in Mesopotamia, see Van de Mieroop 1999, and in particular 27–38. For the lexical lists in the Hittite world, see, in general, Scheucher 2012.

<sup>17</sup> Cf. Giusfredi and Pisaniello 2019.

culture. Therefore, before sources started being produced (or before we can hypothesize a reconstructed phase of the language), we simply could not tell. A philologist or a historian of classical religions would have yet another perspective, using traces of the Etruscan literary and religious constructs that emerge in the classical sources to shape a description of the 'culture' that produced them and the way they were diffused. A historian of writing would be tempted to use the development of the Etruscan alphabet as a defining criterion, and so on. Each of these definitions and approaches is entirely legitimate but partial.

Culture is multifactorial.<sup>18</sup> Therefore, a culture is not fully defined by its linguistic code, which is, indeed, a part of the culture. However, if by linguistic code we refer to the group of languages that are employed by a group in association with two other cultural constructs, its writing system and writing traditions, then the code becomes strong enough to use as a marker to label the culture (even if it cannot describe it in its entirety) and can be used to track a number of its features. In turn, when language, being subject to well-defined patterns of stability and variation, is affected by contacts, the trace left by these contacts allows the reconstruction of social changes that affected one or more of the cultures associated with a given linguistic code.

#### 3 Types and Areas of Language Contact in the Ancient Near East

# 3.1 Geographical Connotations of the Area(s)

That language contact, being the 'norm' rather than an 'exception' (Thomason 2001:10), was at work in multilingual as well as interface monolingual settings in the ancient Near East is not a new claim, nor is it sufficient to state this to investigate the cultural and linguistic features of the contact scenarios. Areas of language contact have been described variously in literature, and the definitions and details vary in the secondary literature.<sup>19</sup> There are also many types of interference, ranging from simple lexical borrowing to the sharing of structural and grammatical features; from scenarios of simple borrowing to those featuring a seemingly stable coexistence of two or more codes.<sup>20</sup> While this is not the place to enter into the details of the labels and definitions used by historical

<sup>18</sup> Cf. the discussion in Giusfredi (forthcoming-a).

<sup>19</sup> See Matras (2009:286–295) for an overview on linguistic areas and reference to further literature. On the application to the concept to Ancient Anatolia, cf. also Cotticelli-Kurras 2021.

<sup>20</sup> See Thomason and Kaufmann 1988:35 ff., Hajnal 2014 and 2018, and Goedegebuure 2008: 145, 164–165.

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and general linguists, the construction of a framework for the categorization of the phenomena and cases that will be discussed in the core chapters of the present monograph is essential.

First of all, we are interested in the problem of the geographical dimension of the areas that should be examined when dealing with cultural and linguistic interference in the ancient world (specifically, of Syro-Anatolia and its more or less immediate neighbors). Since the documents available for examination often come from archives or monumental inscribed landscapes or cityscapes, the data tend to capture a picture of the diastratic and diaphasic level of a language code in a given location at a given time. Therefore, while the identification of larger-than-local areas (those that include several languages, as opposed to local varieties, and may potentially host a *Sprachbund*)<sup>21</sup> is more than welcome when it can be achieved, in this work we will generally need to concentrate on smaller environments. This will depend on the type of documents we possess and the range of intensive contacts, which, with exceptions that will need to be historically contextualized (e.g., the circulation of Wanderwörter within specific networks), will generally fade with increasing distance. Renouncing the study of the linguistic and cultural situation of-say-Early Iron Age Sam'al (modern Zincirli)—in terms of the areal interference of Luwian, Aramaic and Phoenician only because the area was probably small in the first place (say, east of the Cilician Plains, north of the Amuq Valley, west of the Middle Euphrates river valley, and south of the Middle Ceyhan River) and because the available documents were produced only in a small portion of it (mostly, in the very site of Zincirli), would mean forfeiting the possibility of observing several dynamics that are extremely interesting to the historian and linguist alike.<sup>22</sup> In general, most of the areas that will be discussed in the core chapters of this work will be limited in size. This, however, is far from being a limitation. Instead, it grants us the opportunity to investigate to what extent this should be considered an implication of applying the areal methodology to the ancient world and to what extent it constitutes, instead, a specific and real feature of Anatolia and 'peri-Anatolia' as a sort of meta-area of cultural and linguistic contacts.

In these peculiar 'leopard spots' in the super-area under consideration, the differentiation between specific types of linguistic interferences acquires, if

<sup>21</sup> A *Sprachbund* is a group of languages that co-exist in an area for a long time and strongly influence each other grammatically. The most obvious example is the Balkan area during the medieval and modern ages, on which see Friedeman 2006, with reference to previous scholarship.

<sup>22</sup> On Sam'alian and Sam'al, see Giusfredi and Pisaniello 2021.

possible, even more significance than it does in general. The difficulty of forming and maintaining strong long-distance connections might have hindered the formation of large networks that would result in intensive and extensive grammatical interference. However, grammatical interference occurred in *local* subareas (see Chapter 15 for further discussion); in such cases we can easily infer that social and cultural *melting-pot* or *mixed-salad* contexts emerged. Such shared structures virtually disappear when there are long distances between cultures, but lexical circulation exists, mostly following commercial routes and, to a lesser extent, the political extension of specific dominating cultures. Networks of this type, however, almost never produced large stable areas of intensive cultural, social, and linguistic superposition.

## 3.2 Type of Phenomena

After clarifying the main types of interference that we will study, it is extremely important to present a taxonomy of the types of contact phenomena that we will encounter and categorize. In general, ever since the birth of modern contact-linguistics during the 20th century, several fine-grained models of the types of contact phenomena have been identified and discussed in the literature. Some categorizations aim at describing the role of the different languages in contact scenarios (e.g., the more prestigious and often intrusive 'superstrate' as opposed to the less prestigious 'substrate'). Other try to distinguish contact scenarios in terms of mechanisms and potential outcomes (will a new superstrate language prevail, will it disappear, or will it mix with local substrate languages and produce a new code?). Distinctions also apply to the different type of contact-induced changes that one may observe, with the fundamental opposition between lexical interference and grammatical one.<sup>23</sup>

In the present work, we will assume (and show) that the behavior of interfering linguistic codes in the ancient world shared several common features with modern ones; however, the extension and complexity of the observable ancient areas differed somewhat from those of modern areas. Therefore, to avoid forcing the theory onto the data, we now need briefly outline a dedicated taxonomy for the present research.

When looking at the ancient world in general and ancient Anatolia in particular, for instance, following Goedegebuure (2008:164–165) one may start by referencing the distinction described by Thomason and Kaufmann (1988) between 'borrowing' and 'shifting' situations. According to Thomason and

For further discussion, see Thomason and Kaufmann 1988; Thomason 2000, 2001; Clyne 2003; Matras 2009 (especially pages 1–6 for a coincise history of the discipline).

Kaufmann, phenomena may be categorized based on their prevalence in contexts that will produce (or not produce) the outcome of a change of code in a community. For instance, shifting scenarios that may lead to the generalization of a superstrate or the emergence of a mixed code involve grammatical interference in a way that is, instead, very uncommon in simple borrowing scenarios. While it is certainly legitimate to attempt to use these concepts of 'borrowing' and 'shifting' to describe contact dynamics in the ancient Near East, the limits of the corpora should be obvious: substrata tend to emerge only sparsely in official documents, and no mixed languages were ever securely identified.<sup>24</sup> Of course, phenomena of language shift *must* have existed: as Hittite disappeared from Anatolia, shifting occurred, and Hittite was replaced by Luwian and Phrygian; and as Aramaic replaced Akkadian in Mesopotamia in the Iron Age, long-standing interference must have produced changes. However, written corpora are not suitable sources for appreciating the steps that led to these shifts; the shifts are only evident after the new code becomes the official language of a literate polity. Therefore, most of the conclusions that can be reached using this distinction and approach are either projected backward based on later historical patterns or, when used in a predictive fashion for illiterate components of the ancient demographic, are destined to remain highly speculative.

A more interesting approach to the categorization of phenomena relating to contacts in the ancient Near East is proposed by Andrason and Vita (2016). They examined theoretical works by linguists and philologists to explore the relationship between the ways languages are exposed to other languages and the type of interference phenomena that may or may not emerge in the corpora of ancient text languages. Their model partially replaces or aims at partially replacing the concepts of linguistic strata with those of higher-ranking and lower-ranking languages, with the former being "more prestigious and dominant, being used as a cultured, ceremonial, scientific, administrative, lingua franca or hegemonial variety", and the latter being "less prestigious and less dominant, exemplified by vernacular, non-standard or local varieties."<sup>25</sup> As contact situations were probably never as simple as two-edge polarized systems, Andrason and Vita went on to investigate the mechanisms and roles of different codes to produce evidence that allows us to reconstruct a multilingual context based on written sources.

<sup>24</sup> While the variety of Akkadian spoken in Nuzi exhibits some structural features that may derive from interference with a Hurrian substrate, it is perhaps a bit too optimistic to call it a *creole* as has sometimes been done in the literature because we only have access to limited examples of the written language.

<sup>25</sup> Andrason and Vita 2016:297.

In all of the possible models, whether developed to describe modern, wellknown multilingual communities or areal convergences that are only indirectly observable through the written word, one generalized rule almost always governs the occurrence of interference between codes or languages or between representations of codes or languages. It deals with the direction of changes, based on a distinction between morphosyntactic or grammatical change on the one hand and lexical change on the other. By assuming a rather formal definition of a language, or code, as a pair of sets, the former being the set of grammatical rules and the latter the vocabulary set containing all lexical items to be combined by the said rules, there seems to be a tendency for lowerranking codes in contact scenarios to lend the grammar and higher-ranking codes to lend the lexicon. The core chapters of the present volume will generally reflect this distinction. After describing the historical contexts in which contacts occurred between cultures that had their own languages, we will illustrate the features of the relevant corpora (for the Bronze Age, those of the foreign languages in the central Hittite archives and, when relevant, those of the neighboring areas). After that, the contact phenomena will be described, aiming at a categorization that distinguishes between grammatical changes and lexical changes (a distinction that will be scalar rather than truly polarized). At the same time, when the sources will allow it, we will attempt to describe the historical and social contexts of the contacts.

#### 4 Concluding Remarks

Cultural and language contact imply one another in an asymmetrical fashion: cultures must be in some sort of contact for their languages to share features, but indirect cultural contacts do not necessarily imply significant interference between languages. This observation, combined with an accurate analysis of the different forms of contact phenomena that emerge in the textual corpora, will represent the heuristic 'engine' of this monograph. The book's aim is to highlight and categorize the evidence for contacts between languages in Anatolia and the surrounding regions of the ancient Near East and explore the historical context and significance of those language contacts.

# Interregional Contacts and Interactions during the Fourth and Third Millennia BCE

A. Matessi

## 1 Introduction: Some Definitions

The production of the textual corpora lying at the core of this project began no earlier than the second millennium BCE, with the records documenting the Old Assyrian trading activities of the Kārum period (20th–18th centuries BCE, see Chapter 4). Yet it is now clear that the sociolinguistic scenarios attested in these first documents were the result of cultural processes that began several centuries before the formation of the first Anatolian archives and thus are well rooted in what we would call Anatolian 'prehistory.' This is the period and context being addressed in this chapter, whose necessary premise, however, lies in a fundamental question: how far back in time should we take our investigation to make it useful for the evaluation of later phenomena?

In answering this question, we arrive at a conundrum that is better addressed at the onset. Insofar as it deals with a 'prehistory,' that is, a "history with all the words taken out,"<sup>1</sup> the synthesis informing this chapter will be largely based on the archaeological data made available by decades of research on stratigraphic sequences, pottery styles and technologies, craft production, habitation forms, burial customs, etc. The main problem, therefore, is how to employ this plethora of mute assemblages in pursuing a historico-linguistic agenda such as that of the PALaC project. Assumptions of any clear-cut equation between material cultural facies, chiefly pottery, and ethnolinguistic boundaries, although previously common in cultural-historical approaches to archaeology, have been generally abandoned and scholars are in agreement that "pots are not people."<sup>2</sup> Therefore, to use archaeological evidence in conjunction with linguistic data, this chapter starts with the observation that linguistic interference and contact are the long-term products of broad, intersecting, and overlapping webs of sociocultural interactions between groups (see Chapter 2).<sup>3</sup>

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<sup>1</sup> Gosden 2003.

<sup>2</sup> Trigger 2006:211-313.

<sup>3</sup> See also Wilkinson 2014:57-58 and Giusfredi and Matessi 2021.

Fortunately, some of the elements that compose such webs leave material traces that are easily recognizable in the archaeological record. The aim of this chapter will be to study these material traces in their broader environment as well as their mechanisms of circulation in a way that may account for the contacts attested later among the preclassical languages of Anatolia.

Within this framework, the upper chronological boundary of this chapter is by necessity the time when the first Indo-European speakers ancestral to the Anatolian group moved into Anatolia and started shaping their identities and interacting with other sociolinguistic groups. Theories by Renfrew (1987) and Bellwood (2001) that identify Anatolia as the homeland of Indo-European speakers and link their subsequent dispersal to the Neolithic expansion of the seventh millennium BCE are given little credit by linguists and archaeologists for reasons that will be discussed below.

Except for these minority views, a broad consensus points to the late fifth to mid-third millennium BCE as a safe timeframe for the separation of PA from PIE.<sup>4</sup> This chapter, therefore, will mainly deal with the approximately two millennia situated between the upper terminus post quem and the appearance of literate products in Anatolia, that is, the beginning of the second millennium BCE. These chronological boundaries, based on archeo-linguistic and historical evidence, are particularly convenient as they align well with the mainstream archaeological periodization employed for Anatolian cultural frameworks and their related research agendas.

Each millennium considered in this chapter broadly defines a different period: the Late Chalcolithic (ca. 4200-3200 BCE; hereafter LCh) and the Early Bronze Age (ca. 3200–1950 BCE; hereafter EBA).<sup>5</sup> However, this correspondence is only coincidental and by no means related to the arrival of Indo-Europeans or the introduction of literate products in Anatolia. At the beginning of the timespan, there is no perceptible boundary separating the LCh from the preceding Middle Chalcolithic period (ca. 5500–4200). The tripartite division between the Early Chalcolithic (ECh), Middle Chalcolithic (MCh), and LCh is little more than an adaptation to central and western Anatolia of periodizations applied to Upper Mesopotamia, Syria and Eastern Anatolia and based on the Halaf-Ubaid-Uruk cultural sequence.<sup>6</sup> The discontinuities that in this context determine the transition from MCh/Ubaid to LCh/Uruk are a reflection of local socioeconomic developments that are variably connected with the incipient urbanization of Lower Mesopotamia. These developments, however, had only

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<sup>4</sup> From different perspectives, see Melchert, forthcoming-a and Kloekhorst 2022: 78.

<sup>5</sup> Sagona and Zimansky 2009:144-224; Düring 2011:200-299; Bachhuber 2015.

<sup>6</sup> Düring 2011:200-203.

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marginal effects on Anatolia west of the Upper Euphrates basin. Regrettably, in many areas of the Central and Western Anatolian Plateau there is little evidence for evaluating the transition from the later fifth to early fourth millennium.<sup>7</sup>

Similar observations also apply to the transition between LCh and EBA. Again, major discontinuities are seen in the east, with the sudden contraction of the Uruk system and its gradual replacement by other forms of social organization and related cultural 'packages' (see below). Conversely, in the Anatolian peninsula, the transition was smoother in the wake of a continuous development. At some key sites, a few innovations in material culture, chiefly pottery, start to appear during a first phase of the EBA (ca. 3200–2700; EBA I) and become dominant later (ca. 2700–2500 BCE; EBA II), when LCh traditions were generally abandoned across Anatolia.<sup>8</sup>

The only remarkable rupture clearly identifiable on the cross-regional archaeological record in Anatolia occurred within the EBA, namely at the transition to the EBA III that occurred around 2500 BCE. In the southeast, around the Upper Euphrates, settlements experienced radical shifts with the emergence of large urban centers that were fortified and provided with large buildings and facilities indicative of a complex social organization. Such changes can be attributed, at least in part, to influences from Syrian and Mesopotamian powers, chiefly Ebla and Akkad.<sup>9</sup> Even more marked shifts are reflected by this time in the Central and Western Anatolian record, with a more indirect although no less perceptible echo of Syro-Mesopotamian developments. Here, several sites were abandoned and the relatively dense hierarchical settlement pattern characterizing the EBA I-II gave way to a more scattered landscape of large, fortified urban centers.<sup>10</sup> Material culture, formerly regionalized in several local frameworks, becomes now more homogeneous thanks to the expansion and intensification of exchange networks and the widespread diffusion of ideas of governance and new technologies, including the potter's wheel and the metallurgy of tin-alloyed copper.<sup>11</sup> Power centralization and the rush for the acquisition of wealth by the new urban elites are probably at the core of a phase of stark competition and conflict that led, around 2200 BCE, to the destruction

<sup>7</sup> Schoop 2011a:161.

<sup>8</sup> Yakar 1985; Steadman 2011:234–241.

<sup>9</sup> Ökse 2011:272–276. Eastern Anatolian periodizations often follow Syro-Mesopotamian chronologies, thus splitting the second half of the third millennium into two periods, EBA III and IV.

<sup>10</sup> Bachhuber 2015:19–21 (with Table 2), 46; Massa 2014b:110–111, Figs. 5–7.

<sup>11</sup> Şahoğlu 2005; Massa 2016.

of several centers and a generalized drop in settlement density.<sup>12</sup> This rupture marked the transition to another phase that represents a prelude to the developments unfolding in the early second millennium BCE.

#### 2 The Fourth and Third Millennia BCE: An Age of Migrations?

# 2.1 Migration Theory and Archaeology

Human mobility, in one form or another, represented the most obvious primary vector of virtually any process of cultural interaction in the premodern world. No one type of human mobility, however, is as evocative as migration, both as a phenomenon per se (e.g., in light of the impact that it has on political agendas) and as a concept that shaped or contributed to the shaping of major paradigmatic shifts in social sciences. In archaeology, migration is generally defined as a movement of individuals or population groups (i.e., 'folk migration') aiming at settling a target area permanently or for long periods. Debates over migration acquire special relevance here, insofar as the penetration in Anatolia of PIE language groups lies at the core of all subsequent linguistic developments.

In tandem with other historical disciplines, archaeology has been at the forefront of intellectual engagements with migration. Broadly considered, there have been three major phases in related debates from the late 19th century onwards.<sup>13</sup> In the first phase, which informed mainstream cultural-historical approaches up to the inception of the Cold War, migration was perceived less as a research topic per se than a key tool for explaining cultural change. Within this framework, best exemplified by the work of Kossinna on the German *Kulturkreis* (1911), any prehistoric archaeological assemblage tended to be identified with ethnolinguistic or racial affiliations. As a consequence, cultural changes were almost automatically assumed to be associated with substantial demographic shifts in the studied context. Childe, for example, identified material cultures with 'people' (1925:V) or 'societies' (1958:10) and argued that "when a whole culture replaces another we are clearly dealing with a migration" (1950:8).

Dissatisfaction with these mechanic associations, which coupled archaeological assemblages with ethnolinguistic boundaries and migration with cultural change, led to the emergence of the New Archaeology in the 1960s, marking a second phase in the archaeology of migration. The conceptual framework

<sup>12</sup> Mellaart 1958; Bachhuber 2015:46–50.

<sup>13</sup> For some recent overviews, see Batiuk 2005:47–71 and van Dommelen 2014.

of New Archaeology involved a positivistic approach to the discipline aimed at defining systemic laws or 'processes' deemed explanatory of cultural developments. Within this theoretical background, migration was replaced by 'cultural diffusion,' which assumed spontaneous, bottom-up processes of acculturation rather than the top-down imposition of foreign traits by active occupants on a passive host. Emphasis was thus placed on internal dynamics, favoring a focus on the indigenous and local. Separating linguistic, ethnic and material cultural data and viewing them as independent and mutually enriching variables is now a foundational part of any well-informed approach to the past. However, far from inspiring a fresh approach to migration, this perspective led to an overall 'retreat' from the topic as a whole—the baby was thrown out with the bathwater.<sup>14</sup>

In the third phase, which started in the 1980s, migration made its way back onto the archaeological agenda. Rouse (1986) made the first self-conscious attempt in this direction in searching archaeological proxies for population movements in the prehistoric Caribbean. This work, however, reiterated several cultural-historical paradigms, resulting in an unclear conceptualization of (material) cultures versus people and a general lack of interest in the mechanisms of migration, which was seen merely as an invasion of one people's territory by another people.<sup>15</sup> Conversely, Renfrew (1987) argued for a more indepth approach to migration, focusing on the Neolithic dispersal of farming in Europe, which occurred in waves that were ignited by demographic pressures at each wave front. Migration studies were also advanced by developments in bioarchaeological analysis that have enabled archaeologists to define possible geochemical signatures of migratory behaviors and trace archaeogenetic affinities between population groups.<sup>16</sup> However, these new tools can be misleading if the results they produce are not adequately examined in conjunction with the linguistic or ethnocultural processes associated with migration.

We owe to Anthony (1990; 1992; 1997; 2007:102–120) the most influential model of migratory processes that applies to archaeology. Incorporating advances in modern migration developed in other social disciplines, such as demography and geography, Anthony's work represents an authoritative attempt to understand the processes involved in migration dynamics. Lying at the core of Anthony's approach is the understanding of migration as a structured aspect of human behavior that develops according to a complex set of patterns. Rather than looking for individual primary causes, Anthony posits

<sup>14</sup> Adams et al. 1978; Anthony 1990 and 1992.

<sup>15</sup> Straus 1987; Burmeister 2001: 540; Anthony 1990:897–898.

<sup>16</sup> Bentley 2006; Gokcumen and Frachetti 2020.

that the main incentives for most migrations reside in a combination of "negative (push) stresses in the home region and positive (pull) attractions in the destination region." Push and pull factors are then weighted by considering the transportation costs to the destination before the migration proper is started. Information flow on the situation at the destination and conditions of the routes plays a determinant role in migration processes and, in turn, implies preexisting contacts between the home and destination regions—for example, through trade. Given these dynamics, Anthony argues, migratory movements are more likely to occur between sociospatial contexts subject to frequent interactions before the migration.<sup>17</sup> Looking at the interplay between the push, pull, and transportation cost factors and the processes leading to knowledge thereof, Anthony identifies different patterns of short- and long-distance migration. The basic idea derived from this approach is that most (pre)historic migrations were not unidirectional waves of invading hordes but rather small spin-off movements of people, interspersed with counter-streams back to the place of

From a practical viewpoint, the complex patterns produced by migrations in Anthony's model require a level of detail and accuracy that available archaeological records cannot provide. For example, without adequate quantitative assessments made on relatively large samples, it would be impossible to distinguish material flows derived from migration from those produced by other types of cross-regional exchanges that precede most migration processes in Anthony's model. Only in very rare circumstances are single objects or a single class of materials sufficient to hint at the presence of migrants in a given archaeological context. In this regard, Burmeister (2001) suggests that nonindigenous elements leave more visible traces in assemblages belonging to the domestic sphere, whereas host cultural practices are more likely to be adapted in the public sphere. In some well-studied cases, the presence of foreign groups within a community has indeed been assessed based on intra-settlement differences in foodways and other domestic activities.<sup>18</sup> Anthony (2007:111) also stresses technological transfers as occurrences that are likely to follow migration streams. By contrast, rare or prestigious foreign goods and conspicuous cultural practices such as elite burial customs could move along channels other than migration, such as trade or emulation. The degree to which migrations become identifiable in the archaeological record is highly dependent on the modalities of movement and the length of time that they lasted: swift migra-

origin.

<sup>17</sup> Anthony 1990:900–901.

<sup>18</sup> E.g., Yasur-Landau 2010; Greenberg and Palumbi 2015.

tions covering a long distance are more easily detected than slow-paced migrations proceeding through intermediate stages that have destinations located at short distances from one another. The material implications of this distinction derive from the tendency of migrating foreign elements to become attenuated over time, to the point of disappearing or taking on a completely new shape.

Bearing these considerations in mind, the following paragraphs will be devoted to outlining cultural phenomena involving Anatolia that can or have been addressed in terms of migration. The first phenomenon is purely archaeological in scope: the so-called Early Transcaucasian Culture (hereafter ETC). This emerged in the uplands and intermontane valleys of the southern Caucasus around the mid-fourth millennium BCE and spread during the EBA over a wide area that included northwest Iran and the northern fringes of Mesopotamia and extended as far south as the southern Levant.<sup>19</sup> An evaluation of the ETC and its extent will provide some guidelines for examining the possible trajectories of Indo-European expansion in Anatolia that are less archaeologically perceptible than relevant from a linguistic viewpoint.

This treatment is not meant to be comprehensive or original in any capacity given the sheer weight of the ETC and the Indo-European questions in the current literature and the complex interconnections they have with other cultural developments in and around the area addressed in this project. By reviewing the current state of the art, the intent is to bring to light unanswered questions and, at the same time, suggest possible ways to address them in future research.

## 2.2 The ETC Phenomenon: Areal Contacts with Central Anatolia

In the highlands of eastern Anatolia and the southern Caucasus, the fourth millennium BCE represented a period of dramatic change, intensified by complex interactions between radically different, competing, and partially overlapping forms of social organization and cultural identities. To the south, the Euphrates alluvium and the surrounding uplands became home to the formation of highly stratified societies based on a centralized economy. This development was the result of two main intersecting trends. One was the expansion of Mesopotamian urban models through the foundation of colonies or specialized quarters within preexisting settlements. This phenomenon is known as the Uruk expansion (Fig. 3.1), from the name of the large Lower Mesopotamian center where the first urbanization is deemed to have taken place.<sup>20</sup> Uruk settlements were characterized by distinctive traits, including monumental archi-

<sup>19</sup> For general overviews on the ETC phenomenon, see Palumbi 2016 and Sagona 2017:213– 280.

<sup>20</sup> Liverani 1998a; Algaze 1993; Stein 1999.

tecture, a quasi-standard repertoire of mass-produced Uruk-style ceramics, and administrative technologies such as seals and clay tablets with numerical symbols. Trade was the primary impetus for this expansion, which aimed at the acquisition of raw materials and exotica not available in the Mesopotamian alluvium such as metals, timber, precious stones and valuable liquids, namely, wine. According to Algaze (2008), exchange networks predating the Uruk system mostly involved slow-paced, down-the-line exchanges among nearby settlements. The Uruk centers, with their complex organization, aimed at replacing these older networks, which no longer sufficed to feed the demand for tools, weapons, jewelry, building materials, and other resources that Mesopotamian elites deemed necessary to increase their prestige and legitimate their power.

It has become clear, however, that the Uruk expansion was not the only complex phenomenon underway in the Euphrates region. Complex forms of organization were already flourishing in the area independently of Uruk as outgrowths of indigenous inputs. This is best exemplified by the frameworks unearthed at Arslantepe VII (3800–3400 BCE). Here the formation of a sophisticated system of staple and wealth management and sociocultural aggregation, with only marginal southern influences, was antecedent to closer contact with Uruk communities. At Arslantepe economic centralization reached an apex in the later levels of VIA (3350–3000 BCE), this time in the context of a tighter involvement of the site in Syro-Mesopotamian networks of exchange.<sup>21</sup>

Largely coeval with the Uruk expansion, the ETC horizon took shape as an equally distinctive but radically different cultural phenomenon (Fig. 3.1). Early Transcaucasian is one of several labels employed to describe this broad cultural horizon that was native to the southern Caucasus and eastern Turkey. This area is hydrologically governed by the rivers Kura and Araxes, so the cultural phenomenon here dealt with is also often termed the Kura-Araxes horizon vel sim. The processes leading to the genesis of the ETC have attracted much scholarly attention and remain problematic, especially due to the paucity of well-dated contexts relevant to the initial phases.<sup>22</sup> It seems, however, that most ETC traits appeared quite abruptly alongside earlier Chalcholitic facies around 3500–3400 BCE. By crosschecking sets of radiometric dates from a wide sample of Armenian sites, Badalyan (2014), followed by Palumbi (2016), hypothesized a twofold sequence with different subphases. The first phase (ca. 3600–2900 BCE) grew out of a period of coexistence between different traditions. Preexisting Chalcolithic frameworks were chiefly represented by a repertoire

<sup>21</sup> Frangipane 2001; 2011; Balossi Restelli 2019.

<sup>22</sup> Sagona 2017:224–225.

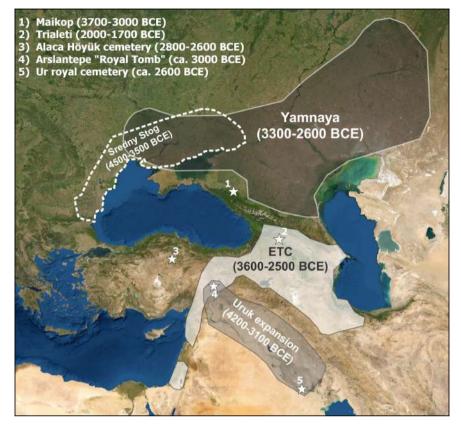


FIGURE 3.1 The main cultural phenomena in Eurasia from the mid-fourth through the third millennium BCE

of handmade chaff-faced ware with possible Syro-Mesopotamian influences<sup>23</sup> that appeared initially alongside novel classes of finely burnished handmade wares that were dark in color and often embellished with embossed or incised decorations. Around 3300 BCE, a general formalization of the ETC ceramic repertoire can be observed with the first appearance in the southern Caucasus of the red-and-black burnished pattern that is characterized by black exteriors and red interiors (see below).

The range of diffusion of ETC cultural traits during this first phase was still quite limited, approximately extending over a triangle defined by the Lake Urmia, the upper Kura River, and Erzurum, in eastern Anatolia. At the turn of the third millennium, however, the ETC horizon underwent a swift expansion

<sup>23</sup> Marro 2010. But see Badalyan et al. 2010 for a different view.

over a vast area, hitherto determined to range from the highlands of northwest Iran and eastern Anatolia to the plains and arid plateaus of the northern and southern Levant. This phenomenon, called the 'ETC expansion,' is the hallmark of the second phase of development of the ETC cultural framework and is generally bracketed between 2900 and 2500 BCE.

Subsequently, in undefined stages between 2500 and 2400 BCE, the sociocultural milieu and lifestyles that had characterized the ETC horizon for over a millennium went through a major transition into the so-called Early Kurgan phase, which was rooted in northern Caucasian traditions. At this juncture, most former ETC villages, which practiced an agropastoral economy, were abandoned in favor of more mobile forms of social organization, chiefly based on the metal trade and emphasizing rank through the construction of funerary tumuli. Some traits of the ETC ceramic repertoire survived, but the Early Kurgan horizon nonetheless marked a radical departure from the previous sociocultural trajectory.

The ETC phenomenon featured a high degree of diachronic and regional variation that was particularly evident in settlement types and burial customs. Notwithstanding some shared baselines, the morphological features of the pottery repertoire were also spatially and chronologically diverse.<sup>24</sup> Despite this heterogeneity, the ETC horizon featured a set of unifying principles that defined a sort of cultural 'package' whose elements recurred with impressive regularity across the entire ETC cultural area. In contrast with the stratified organization of nearby Uruk centers in Mesopotamia and the rank-based Maikop-Novosbodnaya cultures of the northern Caucasus,<sup>25</sup> ETC communities displayed traits of a more horizontal social organization, where status differentiation was less marked and, in any case, not legitimized by centralized public institutions. The settlement plans generally consisted of agglomerates of freestanding wattle-and-daub houses, all of similar size and without signs of specialization from one building to the next.

The household seems to have been the focus of most ETC activities as well as a set of ritual practices that mostly gravitated around hearths. Although house forms varied considerably across time and space in the ETC cultural area, hearths, both fixed and portable, represented a permanent feature that was invested with symbolic value. Made of clay, fixed hearths were circular, built into the floor, and often decorated with incisions and protrusions. These installations were often present alongside portable hearths and andirons that were

<sup>24</sup> Palumbi 2016.

<sup>25</sup> Anthony 2007:287-299.

made to carry or lift the sides of a container while cooking. Andirons were a hallmark of ETC assemblages and generally were decorated with zoomorphic or anthropomorphic motifs.<sup>26</sup> The conspicuous association with figurative elements indicates that the fixed hearth and andirons had symbolic value that extended far beyond their everyday use and connected them with the sacred role of fire as the place around which the life of a household gravitated. This idea is also conveyed by the many depositions of anthropomorphic or zoomorphic figurines and other objects around hearths.<sup>27</sup>

Ceramics play an important role in defining the standard ETC cultural package. New developments in the early ETC horizon comprised groups of darkcolored monochrome or mottled burnished ware. During the second stage of the ETC ceramic sequence, a new class of finely burnished wares emerged, characterized by the contrast between black outer surfaces and red inner surfaces of vessels. The red and black traditions of the ETC core area probably borrowed the bi-chromatic pattern from the Red and Black Burnished Ware (RBBW) of the Upper Euphrates region, which emerged slightly earlier. The main difference is that in the ETC horizon the red-and-black pattern was fixed. RBBW traditions, by contrast, show a regular alternation, with black applied in closed forms on the exterior and in open forms on the interior. Interestingly, there are good reasons to suppose that the RBBW emerged in the Upper Euphrates out of cultural contacts with north-central Anatolia, where this tradition was already present in the early fourth millennium.<sup>28</sup>

Much scholarly attention has been devoted in the last decades to understanding the dynamics behind the astounding expansion of the ETC horizon, which reached from the circum-Mesopotamian highlands to the southern Levant during the third millennium BCE.<sup>29</sup> Several models have been put forward in this regard, emphasizing various motors and modes of interaction, including trade, metallurgy, sociocultural emulation and, especially, migration. As already stressed above, ETC communities developed in the frame of a simpler social organization, lacking centralizing institutions. For this reason, top-down models such as those generally employed to explain other pre- or protohistoric phenomena of cultural expansion, such as the Uruk system, cannot be applied to the ETC case. However, it is also recognized that bottom-up dynamics and the material heterogeneity beyond the commonalities of the ETC horizon can be hardly integrated into a single paradigm of expansion. The ETC cultural

36

Smogorzewska 2004. 26

Sagona 2017:252, with references to previous literature. 27

Palumbi 2008a. See below. 28

Greenberg and Palumbi 2015. 29

package is never entirely replicated, nor is there a standard distribution of its elements. The stratigraphic superimposition of ETC cultural sequences on abandoned Uruk occupation levels in North-Western Iran (Godin Tepe IV:2) and the Upper Euphrates area (Arslantepe VIB1) suggests an intimate connection between the ETC expansion and the collapse of the Uruk system. Palumbi (2012) does not exclude a priori that population movements could have played a role in these processes. However, he considers this possibility in the frame of a more complex dialectic, nested upon long-term patterns of intense interaction between the centralized Uruk economies and ETC pastoral groups. This model hypothesizes that, around 3000 BCE, after the collapse of the Uruk complex, local communities reoriented themselves toward the flourishing ETC cultural sphere, which was seen as a new system of sociocultural integration that offered an alternative to the Uruk world. The ETC model was then reshaped into new forms through hybridization and commingling with non-ETC elements, thus giving way to new means of political negotiation and prestige acquisition. The so-called Royal Tomb of Arslantepe VIB1 is considered the best example of this process.30

In other contexts, however, a stronger case for a sustained movement of ETC people can be made. In the southern Levant, local offshoots of ETC cultural frameworks, manifested in the so-called Kirbet Kerak pottery and horseshoe-shaped andirons, were confined to the domestic sphere and have a patterned distribution, segregated from non-ETC contexts.<sup>31</sup> A 'pull' factor in this movement might be the availability of new markets, especially for metal trade, due to the vacuum left in this area by the contraction of Egyptian influence that was coeval with and in many respects parallel to the Uruk collapse in the north.<sup>32</sup>

Considering these dynamics: did the Anatolian peninsula interact with the ETC phenomenon and, if so, to what extent? Addressing this question with any confidence would require a degree of spatial and chronological detail on the LCh—EBA I–II transition that is still lacking. There are major gaps in the evidence from areas that might have constituted an interface between Anatolia and the Caucasus. For example, there is virtually no LCh and EBA I–II excavated and published site on the entire northern coast of Anatolia, apart from İkiztepe and Troy. Similarly, very few relevant sequences from central Anatolia have been thoroughly investigated and published, while most available publications are now several decades old.<sup>33</sup> Furthermore, LCh and EBA I–II cultural

<sup>30</sup> Greenberg and Palumbi 2015:120-121.

<sup>31</sup> Abay 2005; Greenberg 2007; Paz 2009; Wilkinson 2014: 309-314.

<sup>32</sup> Greenberg and Palumbi 2015.

<sup>33</sup> See, for example, von der Osten 1937, about Alişar Höyük; Arık 1937 and Koşay 1944 about

frameworks across Anatolia show a variety of site-specific local traditions that hinder the definition of overarching regional chronologies.

Be that as it may, the little available data suggests that Anatolia took part in a broad network of exchange during the LCh and EBA I-II that encompassed all of the area around the Black Sea, including the southern Caucasus.<sup>34</sup> Contacts with the Upper Euphrates and Uruk sphere were also likely in place. LCh finds from Camlibel Tarlası, near Boğazköy, suggest an engagement of this site in metal, jewelry, and textile production reaching well beyond local consumption needs and thus possibly bolstered by demands from eastern and south-eastern centralized economies.<sup>35</sup> The chemical composition of spearheads from Arslantepe VIA shows significant matches with copper deposits from central Anatolia and the Pontic region.<sup>36</sup> These hints overlay the trajectories of interaction that are chiefly evidenced by the RBBW with alternating red-and-black patterns. As mentioned above, this ceramic class probably made its way to Arslantepe and the Upper Euphrates through contacts with central Anatolia. RBBW features abundantly in the LCh deposits of Alişar Höyük, Çadır Höyük, and Alaca Höyük (Fig. 3.2), as well as in survey materials from the area of Kayseri.<sup>37</sup> Consonant with these patterns of exchange, elements of direct ETC derivation also seem to have reached central Anatolia. Fixed circular hearths and portable fire stands with close ETC parallels feature in the Kızılırmak bend.<sup>38</sup> ETC-style portable fire stands also spread to the Konya plain.<sup>39</sup> If these contacts with the ETC horizon existed, we can reasonably suppose that they involved some movement of people. Elements intimately connected with the ETC domestic sphere and its symbology, such as fixed and movable fire installations, might well have travelled to central Anatolia together with the carriers of the identities they embodied. However, the scale and impact of these contacts on central Anatolian communities remain difficult to assess.

Alaca Höyük. On the 'Royal Tombs' of Alaca Höyük, and their recent redating to the EBA I– II, see below.

<sup>34</sup> The so-called Circumpontic Metallurgical Province (see below). See Zimmermann 2007; Massa 2016:225–230.

<sup>35</sup> Schoop 2011b, 2014, and 2015.

<sup>36</sup> Hauptman et al. 2002.

<sup>37</sup> Mellaart 1963:201, 211–212; Palumbi 2008b; Sudo et al. 2017. Conversely, direct influence from ETC pottery traditions has been suggested in the so-called knobbed ware, which mainly features at Çadır (Steadman et al. 2007).

<sup>38</sup> Emre 1979:22, Pl. 111.1; Steadman et al. 2018.

<sup>39</sup> Bahar and Koçak 2004:71, Çizim 14. For overviews of the general distribution, see Rahmstorf 2010:273–277 and Massa 2016:491, fig. 7.44.

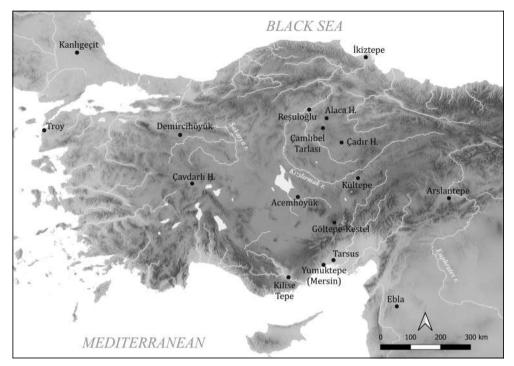


FIGURE 3.2 LCh. and EBA sites in Anatolia mentioned in the text

Some instructive hints in this respect may perhaps derive from the recent excavations at Çadır Höyük.<sup>40</sup> This small-mounded site yielded three relevant phases of occupation, dating from the beginning of the fourth to the early third millennium BCE. The first phase, corresponding to the Early Uruk in Upper Mesopotamia (ca. 3800–3600 BCE), features an agglomerate of small, semisubterranean structures and household contexts indicative of a village community with no apparent social stratification. In the second phase, however, which was contemporary with the Middle and early Late Uruk periods and the emergent phase of the ETC horizon (ca. 3600–3200 BCE), the settlement experienced a radical shift in habitation patterns and social organization. The uniform layout of domestic buildings characterizing the earlier phase was replaced by larger building complexes facing courtyards and streets. These structures have been termed, from east to west, the Non-Domestic Building, the Burnt House, and the Omphalos Building. Archaeologists interpret these changes in terms of an emergent social stratification and reconfiguration of the settlement toward

<sup>40</sup> Steadman et al. 2017; Steadman et al. 2018; Steadman et al. 2019.

a more complex organization. Traces of intense productive activities, likely involving textiles, abundant assemblages of obsidian and metals and the presence of foreign goods suggest that the Çadır community was somehow contributing to long-distance networks of exchange, possibly in response to market opportunities arising from the Uruk system in the southeast.<sup>41</sup> Ceramics produced during this phase include a substantial repertoire of local RBBW with the alternating color pattern.

The most noteworthy evidence from this phase at Çadır derives from the Omphalos Building. This was a square, mud-brick structure divided in its main phase into two rooms located in the western sector of the LCh trench. The largest room of this building, to the west, was crowded with ceramics that were perhaps positioned on shelves lining the walls. At its center, this room was furnished with a raised platform bearing a small firepit. A bench ran along the southern wall. A box sunken into the floor of the room contained a bull-headed ceramic object of quadrangular form with fine inlay and incised decoration. The Omphalos Building object repertoire also included a clay bull figurine, found on one of its inner floors, and a double-spiral copper pin, discovered just outside the building.

Archaeologists at Çadır emphasize evidence of contacts with the southern Caucasus, represented by the bull-headed ceramic object, which is reminiscent of ETC portable fire stands, and the double-spiral pin, crafted following ETC metallurgical traditions.<sup>42</sup> The general organization of the western room also recalls the symbolic system of ETC homes, in which the central fireplace is highlighted. The portable fire stand, bench, and bull figurine might strengthen the parallelism, insofar as they are common paraphernalia in ETC sacred spaces.<sup>43</sup> The Omphalos Building is non-domestic in character. Based on the presence of a potter's kiln at the northeastern corner of the building and the large quantity of ceramics found in the western room, archaeologists interpret this complex as a ceramic distribution facility or workshop.<sup>44</sup> However, given the presence of less mundane features, such as the bull-headed fire stand and the figurine, a function related to communal ceremonial activities associated with fire and burning cannot be excluded.

The evidence from Çadır, therefore, paves the way for the possibility that aspects reminiscent of an ETC identity were adopted in the Kızılırmak area and locally reinterpreted in new social forms. If this interpretation is correct, it is

<sup>41</sup> Steadman et al. 2019.

<sup>42</sup> Steadman et al. 2017:216; Steadman et al. 2018.

<sup>43</sup> Sagona 2017:248–250.

<sup>44</sup> Steadman et al. 2019:36.

possible that this process, implying a transfer of ideas and social beliefs rather than the mere circulation of objects, also involved the movement of ETC people to central Anatolia and their participation in indigenous social contexts.<sup>45</sup> Some caution in this respect is nonetheless required, insofar as the manifestation of ETC-style features at Çadır would precede by some centuries the chronological framework previously established for the ETC expansion, which was not thought to reach beyond the southern Caucasus and eastern Anatolia before the end of the fourth millennium BCE.

## 2.3 Indo-Europeans

The search for the Urheimat of the Indo-European languages and peoples has engaged scholars and intellectuals for over two centuries-since the acknowledgment of their common ancestry. The classical view, first proposed by Marija Gimbutas (1970), associates the spread of the Indo-Europeans with the diffusion across Eurasia of monumental barrow tombs, today called kurgans, that occurred between 4500 and 3000 BCE as the result of multiple migrations of people from the Pontic-Caspian steppes, located between modern Ukraine and the southern Urals (Fig. 3.1). The main pillars of this hypothesis are the numerous analogies between the Kurgan culture, which was largely centered on a pastoral economy enhanced by horse riding and the use of wagons, and the hypothetical Indo-European culture that has been reconstructed through the PIE proto-lexicon. According to Gimbutas' model, successive waves of migration, coupled with the military advantage offered by horse riding, would have allowed aggressive Indo-European pastoralists to prevail over indigenous 'Old European' agriculturalists, leading to the eventual success of Indo-European languages.

Anatolia has a unique place in the debate over the Indo-European *Urheimat.*<sup>46</sup> Traditionally, PA is considered to have separated early from the PIE family because of the features that distinguish it from related languages. While some aspects of this problem have been convincingly reviewed and revised in recent years,<sup>47</sup> a recurring problem is the absence, in Hittite, of some categories that emerge in other branches of the family. Some scholars interpret the peculiarities of Anatolian as a simplification of an earlier complexity that was retained by the other Indo-European languages (*Schwundhypothese*). Others maintain that PA records a pristine situation that evolved later into more com-

<sup>45</sup> For the possible relationships between the circulation of ideas and circulation of people, see Bevan 2007:21–23.

<sup>46</sup> See also Giusfredi and Matessi 2021.

<sup>47</sup> Melchert (forthcoming-a), with extensive references to previous scholarship.

plex systems (*Herkunfthypothese*).<sup>48</sup> Advocating the latter view, Forrer (1921) proposed that PA was a sister rather than daughter language of PIE and that PA and PIE branched from a common ancestor, later termed Indo-Hittite by Sturtevant.<sup>49</sup> Until recent re-evaluations,<sup>50</sup> this view was considered too maximalist and remained marginal in the mainstream linguistic debate. Conversely, the identification of Anatolia as a cradle for Indo-European cultural frameworks, more or less inspired by the Indo-Hittite hypothesis, gained much credit in the archaeological agenda and became very influential in the more general debate on Indo-European antiquities. The first move in this direction was made by Childe, who in 1950 abandoned his former support for a Pontic-Caspian Urheimat (1926), arguing instead for an Anatolian origin of the Indo-Europeans. However, it was Renfrew in the late 1980s who built a robust case for the Anatolian homeland hypothesis by proposing a correlation between the Indo-European expansion and the spread of farming in Europe.<sup>51</sup> According to this model, termed the 'language/ farming dispersal,' Pre-PIE or Indo-Hittite was first spoken among early Neolithic communities of south-central Anatolia around 7000 BCE.<sup>52</sup> A detachment of pioneer farmers then moved from that region to Greece and the Balkans, where PIE could have evolved to its 'classic' form independently from PA and then spread through subsequent waves of migration across the rest of Europe in tandem with farming technologies.53

The 'language/ farming dispersal' theory is attractive for its plain formulation as it is grounded in verifiable archaeological realities that are examined both in parallel with and independently of linguistic reconstructions. The mechanisms involved in the model are also quite simple as they require a single factor, the increase in productivity allowed by agriculture, to explain the main motors deemed necessary to large-scale language diffusion: the demographic growth of Indo-European communities to kickstart the migratory process and the acceptance of the 'superior' economic organization of Indo-Europeans and related sociocultural features, including language, by receptive populations of indigenous hunter-gatherers. However, the strong reliance on archaeological data alone also represents the main flaw in the construct, which fails to provide a satisfying link between the archaeological and linguistic evidence. In this

<sup>48</sup> See Cotticelli-Kurras 2009 and Pisaniello 2020:30–32 for more details on this debate.

<sup>49</sup> Sturtevant 1933.

<sup>50</sup> Carruba 2009; Kloekhorst 2016.

<sup>51</sup> Renfrew 1987.

<sup>52</sup> Renfrew 2000.

<sup>53</sup> For other views on the Indo-Europeanization of Anatolia, see below, §§ 2.3.1-2.

respect, Renfrew criticizes the methods of 'linguistic paleontology' but presents comparatively few positive clues in support of his model.

Renfrew's theory was not widely accepted by historical linguists. Most consider it unlikely that the strong similarities encountered among Indo-European languages could be preserved during the long period (ca. 5000 years) between the Neolithic and the earliest relevant attestations and then down to the latest attestations (first millennium CE), which would require an additional 3000 years of conservatism.<sup>54</sup> Moreover, a substantial vocabulary that was shared by several Indo-European languages, including Anatolian ones—such as, for example, the words for 'wool,' 'yoke,' and 'hitch-pole'—reflects technological innovations that occurred during the fourth and third millennia BCE and could hardly have been part of a Neolithic language.<sup>55</sup> For these and other reasons,<sup>56</sup> therefore, Renfrew's 'language/ farming dispersal' model will not be pursued further here.

In a recent, thorough synthesis, Anthony (2007) revisited and modified the Kurgan hypothesis, developing a more solid theoretical approach to migration processes (see above) and enriching the hypothesis with data deriving from his research on horse domestication in Eurasia.<sup>57</sup> The strong militarism of the Kurgan model as originally formalized by Gimbutas is now widely rejected and has been replaced by a case-by-case analysis of cultural interactions across Eurasia during the Neolithic and Late Bronze Age (ca. 6000–1500BCE) that takes into account the social and technological means available in the related contexts. Patchy evidence prevents us from following all of the multiple streams of migration and cultural encounters implied by Anthony's revised Kurgan model, which unavoidably makes many of his arguments highly speculative. Nonetheless, seen as a whole, this model seems to best match the reconstructed historico-linguistic scenario of the Indo-European expansion in both geographic and chronological terms.

Adjusted through Anthony's model, the hypothesis of a Pontic-Caspian *Urheimat* of Indo-Europeans seems, therefore, the most viable or, at any rate, the least problematic of those proposed so far. At this juncture, we are left with the question of how and when Indo-European language groups first entered the Anatolian peninsula. Unfortunately, based on the data presently available, archaeology seems ill-suited to provide a viable solution to this ques-

<sup>54</sup> Anthony 2007:75-81; Melchert 2011.

<sup>55</sup> Sherratt and Sherratt 1988; Darden 2001; Anthony 2007:75–81.

<sup>56</sup> For which see Giusfredi and Matessi 2021:28.

<sup>57</sup> E.g., Anthony 1991; see also Anthony and Brown 2003 and Anthony and Ringe 2015. For a critique, see the remarks by Frachetti 2011:202, with references to additional literature.

tion. Surprisingly, in fact, barring Renfrew's theory and a few other exceptions (see below), the Indo-European question has not received much attention in the research agenda of mainstream Anatolian archaeology. Due to our patchy knowledge of Anatolian prehistory, we are presently able to identify only few major cultural breaks from the ECh on, all of which are generally explained in terms of internal processes as opposed to swift large scale migration. Recent bioarchaeological research shows a general genetic continuity in Anatolian population groups from ca. 6500 to the end of the second millennium BCE.<sup>58</sup> This would require a scenario in which speakers of Indo-European languages entered Anatolia in small groups through osmotic processes and soon intermingled genetically with local non-Indo-European populations also adopting their material culture. Such a pattern would be difficult to identify through the archaeological record, if not altogether invisible.

Lacking or unaware of material evidence that would allow a systemic approach to the problem of Indo-Europeanisation in Anatolia and its trajectories, scholars have generally preferred to isolate individual features considered proxies for an 'Indo-European' material culture. This approach is most apparent in scholarly evaluations of the EBA cemetery Alaca Höyük in north-central Anatolia. This is a complex of fourteen shaft graves, roofed with timber beams, that has yielded an astonishing wealth of metal and other objects deposited as burial offerings.<sup>59</sup> Most graves contained adult individuals facing west in a flexed position. Others displayed secondary inhumations of articulated or disarticulated bodies. Substantial animal sacrifices accompanied the burials. Most notably, cattle hides were deposed in pairs on the top of the graves, resulting in skull-and-hoof patterns after the deterioration of the skins. The high symbolic value attached to cattle, as well as the grave architecture and rich paraphernalia, bear comparison with the kurgan burials of the Maikop culture in the northwest Caucasus and the Yamnaya horizon of the Russian steppe (Fig. 3.1). On this basis, in the classic version of the Kurgan model, Gimbutas (1970:181-182) proposed that the Alaca Höyük tombs and the similar complex of Horoztepe, ca. 170 km northeast of Alaca, were the work of Indo-European chiefs from the Caucasus. Bronze standards and stag and bull figurines, the most evocative finds in the Alaca Höyük metal assemblage, have been interpreted as fittings for wagons, whose traction could be symbolically represented by the paired cattle hides, hooves, and skulls. On this basis, Orthmann (1967) and others (e.g., Mansfeld 2001) drew parallels to the wagons interred in the

<sup>58</sup> Skourtanioti et al. 2020.

<sup>59</sup> Koşay 1944; Koşay and Akok 1966; Gürsan-Salzmann 1992.

second millennium BCE barrow burials at Trialeti in the Caucasus, where cattle pairs are also represented by skulls and hooves.

The main problem with these proposed parallels is chronological. The contextualization of the Alaca Höyük cemetery has long been at the center of scholarly debates, with arguments revolving around cross-dating comparisons and often unreliable stratigraphic data.<sup>60</sup> However, recent radiocarbon dates would bracket the foundation and use of the burials within the earlier phases of the Early Bronze Age, between 2800 and 2600 BCE.<sup>61</sup> If so, the Alaca Höyük cemetery would be several centuries younger than the Maikop kurgans, now firmly dated to around the mid-fourth millennium BCE and about one millennium older than the Trialeti complex.<sup>62</sup> The Yamnaya wagon graves of the Pontic-Caspian steppes might offer a closer chronological match (3400-2600 BCE; Anthony 2007:300–339), but cross-comparisons would be hazardous in the present lack of intermediate geographic links. This negative picture might change with future discoveries, for example on the Anatolian shores of the Black Sea. In any case, one should also bear in mind proposed comparisons with the wagon and oxen interment of the royal cemetery of Ur,63 which is relatively close to Alaca in both time and space, but cannot be attributed to Indo-Europeans.

Regardless of possible *comparanda*, the wagon burial argument can be misleading. Considering the good state of preservation of the wooden planks forming the roofs of the Alaca Höyük tombs, one would expect to find equally well-preserved wagon components included in the funerary equipment.<sup>64</sup> As Zimmermann argues, the interpretation of the highly elaborated bronze standards from Alaca as wagon fittings does not find support in contemporary or later figurative evidence from Anatolia. The ritual association with cattle does not set Alaca Höyük apart from coeval funerary contexts in Anatolia. Cattle hide patterns of skull-and-hooves feature in the EBA III funerary assemblage from Reşuloğlu, not far from Alaca Höyük, and whole bull carcasses were buried in pairs in the necropoleis of Demircihöyük (ca. 2700–2550 BCE) and Çavdarlı Höyük in central-west Anatolia (Fig. 3.2).<sup>65</sup> In neither case are cattle associated with evidence of vehicle transportation. Instead, the animal remains are inter-

<sup>60</sup> See the remarks by Özyar 1999.

<sup>61</sup> Yalçın 2011.

<sup>62</sup> Sagona 2017:332–338.

<sup>63</sup> Koşay in Atakuman 2008:226; Orthmann 1967:45–47.

<sup>64</sup> Zimmermann 2006/7:512–514. But see Bachhuber 2015:36–37 on objects from private collections said to have originated near Alaca Höyük.

<sup>65</sup> Massa 2014a.

preted as resulting from the consumption of funerary feasts celebrated in honor of high-status individuals. Some distant relations of Anatolian cattle burials with the sacrificial practices of the northern Pontic steppe or the Caucasus cannot be excluded, but these would be no more than vague reminiscences, locally reinterpreted within sets of regionally diverse traditions.

The trajectories of Indo-Europeanization in Anatolia are better analyzed as patterns of peer-to-peer interactions between adstrata that took place in the framework of durable contacts between different communities of speakers than as the top-down imposition of foreign cultural traditions over a preexisting substratum.<sup>66</sup> During much of the LCh and EBA, central, northern and western Anatolia participated in a wide network of exchange that joined these regions to the Carpatho-Balkan area, Russian steppe belt, and Caucasus. This network, termed the Circumpontic Metallurgical Province by the archaeologist Černyh, was a "system of rather closely interrelated centers of metalworking and metallurgy."67 In Anatolia, as elsewhere, Circumpontic connections are manifest in technological transfers, imported goods, and shared stylistic conventions. These connections encompassed metal products as well as other material categories, and, presumably, they also involved an equally intense circulation of people and ideas.<sup>68</sup> The sheer scale and the geography involved make this system of contacts the most promising scenario for the Indo-Europeanization of Anatolia, leading us to focus on two possible trajectories: one through the Caucasus and the other through the Balkans.

2.3.1 Indo-Europeans from the East? The Caucasian Trajectory

As discussed above, material cultural records from the Kızılırmak area and, perhaps, the south-central Anatolian plateau, provide evidence of contacts with the ECT horizons of the eastern branch of the Circumpontic network. There are clues, moreover, suggesting that at least some of these contacts may have entailed the long-term settlement of ETC people in central Anatolia. This, of course, does not mean per se that ETC people could exercise any form of linguistic pressure in Anatolia. One can nonetheless start from the assumption that this was the case to better evaluate the hypothesis.

A first step would be to ask whether the ETC groups settling in central Anatolia could have had substantial numbers of members who were carriers of Proto-Anatolian languages. Trying to define the ETC linguistic panorama in this perspective would be little more than an intellectual exercise. The renowned

<sup>66</sup> Steiner 1981; Klinger 1996:16–24; Bryce 2005:15–16.

<sup>67</sup> Černyh et al. 1992.

<sup>68</sup> Zimmermann 2007; Zimmermann 2009; Massa 2016:225–229.

linguistic fragmentation of Caucasia across historical eras discourages any speculation on the linguistic composition of the ETC communities. Kurgan cultural elements, perhaps brought by some PIE speakers, are known to have spread south of the Caucasus by the mid-fourth millennium and reached the lower Kura River and Lake Urmia.<sup>69</sup> These appear to be no more than sporadic interactions, as the areas involved were soon absorbed in the ETC cultural sphere. Nonetheless, we cannot exclude the possibility that immigrant PIE communities completely assimilated ETC lifestyles before moving elsewhere. This scenario would align well with the linguistic reconstruction by Gamkrelidze and Ivanov (1995), who argued for a strong early interference between PIE-PA, Proto-Kartvelian, and Mesopotamian languages (Sumerian and Akkadian). On this basis, they proposed that the *Urheimat* of PIE was located in the ETC cultural area. This construct, however, failed to convince most Indo-Europeanists and will not be pursued here.<sup>70</sup>

The hypothetical ETC presence within the Kızılırmak bend is at odds with the areal distribution of Indo-European Anatolian languages known from later sources and finds a closer geographical match with the Hattian geolinguistic milieu. Affiliations between Hattian and various Caucasian language families have been often advocated, although they are impossible to prove with the evidence currently available.<sup>71</sup> If we consider the ETC frameworks as material manifestations of mixed ethnolinguistic groups, including some Indo-Europeans, we can suppose that the Hattians and Proto-Anatolians cohabited before their respective settlements in Anatolia, at a minimum from the midfourth millennium BCE. This scenario might fit well with the case made by Goedegebuure (2008) for strong Hattian-Anatolian interference predating the Kārum period of the early second millennium BCE (see also Chapter 4). However, there is hardly a need to overstretch these contacts in time and space, for which third-millennium Anatolia might represent an equally suitable and even more realistic scenario.

The mismatch noted above between the ETC areal expansion and the known distribution of Indo-European languages can be observed beyond Anatolia. Armenian is the only Indo-European language known to have been spoken in Caucasia, but its late first attestation (first millennium AD) bars any serious attempt to associate it with prehistoric facies. The first historical sources so far available in the Caucasus date to the first millennium BCE and testify to the presence of Urartian, which is a non-Indo-European language close

<sup>69</sup> Anthony 2007:294–295, with references to additional literature.

<sup>70</sup> Steiner 1990:189–193; Melchert 2011:706.

<sup>71</sup> See the discussion in Simon 2012:222–259.

to Hurrian. Significantly, the ETC expansion in Upper Mesopotamia and the northern Levant corresponds well with the spread of Hurrian itself as it is known from second-millennium sources. Hurrian is first attested at Urkeš, in the Syrian Jazira, in the late third millennium, a few centuries later than the first local manifestations of the ETC horizon.<sup>72</sup> In contrast, only a few traces of Indo-European are attested the earliest textual sources available in the areas previously involved in the ETC phenomenon. Archi (2011) identifies some Anatolian personal names in Ebla texts and localizes them in the whereabouts of modern Gaziantep, not too far from historically known Luwian regions (e.g., Cilicia). However, the remaining regions with which Ebla was in contact, from the Khabur area south of Urkeš to the lower Orontes valley, display an overwhelming Semitic onomasticon and no trace whatsoever of Indo-European.<sup>73</sup>

To sum up, while there might be some archaeological evidence for an eastern trajectory of migrations in Anatolia, circumstantial linguistic evidence argues against the identification of Indo-European populations behind these movements. The most imposing obstacle in this respect is the lack of evidence of Indo-European speakers in the Caucasus before the 1st millennium CE. On the contrary, we can more confidently suppose an early Indo-Europeanization of the Balkan and Aegean area, due to the relatively early appearance therein of Mycenaean Greek in the mid-2nd millennium BCE, a few centuries later than Indo-European Anatolian languages. Therefore, the Balkans would appear as a more promising "reservoir" of Indo-European speakers that could have made their way into Anatolia at a given point in time. As we shall, see, however, the reality of this trajectory is not as straightforward on the basis of extant material data. Some degree of speculation is thus required in order to offer a positive archaeological interpretation that could match circumstantial geo-linguistic evidence.

#### 2.3.2 Indo-Europeans from the West? The Balkan Trajectory

Evaluations on the dynamics of LCh and EBA interactions between Anatolia and western cultural frameworks suffer from the same problems emphasized above (2.2.) in relation to the eastern trajectories: major gaps in the data in crucial interface zones (e.g., on the northern Anatolian coast) and elusive regional sequences. The evidence would nonetheless indicate that western influences from the Balkano-Pontic area were significant from at least the late

<sup>72</sup> Kelly-Buccellati 2004.

<sup>73</sup> Archi 1984; Archi 2013:76–77.

fourth millennium BCE, with possible roots in the fifth millennium based on recent results from the İnönü Cave, on the western Pontic shores of Anatolia.<sup>74</sup> Anthropomorphic funerary stelae not indigenous to contemporary Anatolia but showing close parallels with Yamnaya and Kemi-Oba horizons of the northern Caucasus and southern Russian steppes were found at Troy and along the Ionian coast.<sup>75</sup> Several sherds of Bulgarian-Ezero I-type (EBA) feature in survey collections from Paphlagonia and other sites in northwestern Anatolia.<sup>76</sup>

The LCh-EBA I cemetery of İkiztepe, on the Anatolian Black Sea coast (Fig. 3.2), features several bodies placed in a supine, extended position and sprinkled with ochre.<sup>77</sup> These customs are otherwise uncommon in Anatolia, if attested at all, but occur regularly in Sredny Stog and Yamnaya horizons of the western and northern Black Sea.<sup>78</sup> Moreover, based on strontium-isotope analysis, some individuals in the İkiztepe population recovered from the cemetery can be identified as immigrants, possibly along long-distance trajectories, although their exact provenance cannot be established with certainty.<sup>79</sup>

In eastern Thrace, the natural interface between the Balkans and Anatolia, data on the LCh and EBA that can complement mainland Anatolian frameworks are scanty and discontinuous, but the evidence available provides very interesting clues. From at least the late fourth millennium to the mid-third, regional assemblages display strong affinities with facies from Bulgaria and the Pontic steppe, including the presence of several burrow burials of the kurgan type. In contrast, influences from mainland Anatolia seem to have been limited to the shores of the Marmara Sea.<sup>80</sup>

The situation changed suddenly in the second half of the third millennium, as best exemplified by the well-published sequence of Kanlıgeçit, in inland Thrace (Fig. 3.2). This site yielded evidence of a sudden social transformation around the 25th century BCE from a small village community to a hierarchically organized settlement provided with monumental architecture and imposing defensive structures.<sup>81</sup> The phases preceding this transition (KG 4–3), dated

<sup>74</sup> Thissen 1993; Yalçın et al. 2021. On Chalcolithic maritime trade in the Circumpontic area, see Ivanova 2012. I am grateful with Michele Massa for pointing me out some of these references.

<sup>75</sup> Anthony 2007:336–339; Massa 2016:226 and fig. 7.41, with references to additional literature.

<sup>76</sup> Matthews 2007; Matthews and Glatz 2009a:85-87.

<sup>77</sup> Welton 2010:134-141.

<sup>78</sup> Anthony 2007; Massa 2016:226–227.

<sup>79</sup> Welton 2010:435-445.

<sup>80</sup> Özdoğan 2011:671, with references to additional literature.

<sup>81</sup> Özdoğan and Parzinger 2012.

ca. 2800–2400 BCE, display cultural assemblages largely compliant with contemporary 'Kurgan-horizons' (Yamnaya and Ezero), from handmade pottery to domestic architecture, as well as traces of horse domestication.<sup>82</sup> However, during the subsequent phases (KG 2–1; ca. 2400–2100), following the destruction of KG 3 settlement, a coherent EBA III Anatolian horizon suddenly appears, represented by a layout of megaron-type buildings almost replicating Troy IIc and typical Anatolian wheel-made pottery traditions.<sup>83</sup> These finds are thus best interpreted as evidence of a sudden northwestward expansion of Anatolian cultural models around the 25th century BCE that marked the emergence of a ruling elite that adopted an Anatolian lifestyle.

It is difficult to identify the mechanisms behind this radical shift, which can be attributed either to newcomers from Anatolia or local acceptance and emulation. Özdoğan and Parzinger (2012:273) point to a certain continuity of local pottery types alongside newly introduced Anatolian types in levels KG 1–2, which would suggest spontaneous acculturation by the indigenous communities rather than a radical ethnic or demographic shift. The same impression arises from continuous trends in the archaeozoological record, which are indicative of economy strategies that remained stable throughout the EBA.<sup>84</sup> The destruction of KG 3 was likely caused by internal processes since no signs of violent actions provoked by outsiders were found among the burnt debris.

By knitting this sparse evidence together, we can propose the following tentative reconstruction. Yamnaya and Ezero Kurgan horizons started moving to eastern Thrace around the mid/late-fourth millennium, accompanied by a broadly coherent cultural package identifiable by the early third millennium in the first phase at Kanlıgeçit. This development can be interpreted as the southern continuation of the sustained migratory waves that occurred in eastern Bulgaria and the lower Danube valley in the early fourth millennium, signaled by the increasing pressure of steppe traditions (Sredny-Stog, Suvorovo-Novadanilovka) on indigenous Chalcolithic frameworks (Karonovo VI, Tripolye B).<sup>85</sup> According to Anthony's model the peoples participating into these movements included speakers of Indo-European languages and, if so, the same would be true for the carriers of Kurgan-related cultures settling in Eastern Thrace.

Around the end of the fourth millennium, groups of east Thracian/Indo-Europeans also might have left their homeland, leapfrogging in various direc-

<sup>82</sup> Benecke 2002; Ozdoğan and Parzinger 2012:268–270; Massa 2016:225.

<sup>83</sup> Ozdoğan and Parzinger 2012:270–277; Massa 2016:226.

<sup>84</sup> Benecke in Ozdoğan and Parzinger 2012.

<sup>85</sup> Anthony 2007:225-262.

tions into Anatolia. The funerary assemblage of İkiztepe and other strands of Kurgan(-related) culture found in Anatolia may provide some clues that movements of this kind did in fact occur. Subsistence economies in Anatolia throughout the Bronze Age also saw an increasing focus on cattle.<sup>86</sup> This represented an invaluable source of meat food chiefly reserved for consumption in communal meals, a means that Anatolian urban elites employed for legitimating and accruing their power.<sup>87</sup> A strong focus on cattle is deemed the main contribution brought to Bronze Age European economies by *kurgan*(-related) immigrants, generally associated with the Indo-European expansion.<sup>88</sup> On account of present data, the possible pull factors triggering these possible movements can only be guessed. Generally speaking, a demand for manpower might have arisen from emerging urban centers and the growing ambitions of indigenous Anatolian elites, who strove to expand their wealth as well as the agrarian base of their power.

Although nothing so far seems to disprove the above scenario, the main obstacle to it is that there is virtually no evidence of Balkan influence in inner Anatolia beyond the Pontus mountains. Involvement in urban dialectics may have led east Thracian/Indo-European expats to integrate relatively quickly into Anatolian communities, inducing them to a relatively rapid adoption of indigenous customs. If so, the expansion of an Anatolian material cultural package toward eastern Thrace, testified by the assemblages of phase KG 2 at Kanlıgeçit, can perhaps be explained as the cumulative result of return streams of migrants who had undergone a full process of "Anatolianization". In turn, such return streams could have allowed migrants to maintain and reinforce kin relations in their homeland communities and could even have fueled chain migrations along the same Thraco-Anatolian trajectories. Steiner (1981) suggested that Anatolian languages had already differentiated among themselves in the Balkan-Thrace area by roughly the first half of the third millennium. Yakubovich (2009:9-11), argued against this hypothesis, noting that "the Anatolian toponymic substratum is confined to the territory of Asia Minor and ... we do not have any positive arguments for the presence of an Anatolian substrate in Europe" (11). He nonetheless supported the idea of a non-Indo-European, Balkan substratum in Anatolian, reflected in the toponymic endings in -(a)nda and -(a)ssa, which are parallel to  $-(\iota)\nu\theta_0$  and  $-(\alpha)\sigma\sigma_0$  in Greek. These clues would support a linguistic scenario broadly compatible with the archaeological reconstruction proposed here.

<sup>86</sup> Arbuckle 2014.

<sup>87</sup> Bachhuber 2015:130–149.

<sup>88</sup> Anthony 2007.

If we accept the above mechanisms of migration, the key question remains as to how did the vernacular of—likely few—migrants eventually become the dominant language across a large extent of Anatolia. Generally speaking, we can reasonably propose that the Indo-Europeanization of Anatolia could be facilitated by osmosis: through the presence of a significant Indo-European/Anatolian component in the Thraco-Balkan area that could channel fresh cultural energies toward Anatolia. Such osmosis could be enhanced by the involvement of migrant groups as trading partners and interstitial brokers along exchange routes, that had an important axis precisely between south-southeastern Anatolia and the Balkans (e.g., the so-called "Great Caravan Route"; see § 3 below). Over the long period, osmotic *cultural* pressure might have turned into *demographic* pressure.

Earlier beliefs that Hittite was an official scribal language used by narrow groups who ruled a largely non-Hittite/non-Indo-European, that is, Hattian, people have been discarded by most linguists. Several morphological changes in Hittite suggest that it continued to be a lively language down to the end of the Late Bronze Age (LBA). This would be typical of a spoken rather than purely scribal language.<sup>89</sup> Elements of strong interference from Indo-European Anatolian languages to Hattian require a scenario where speakers of the former already represented numerically significant communities in Anatolia several centuries before the beginning of the Old Hittite Kingdom, that is, by the early second millennium BCE.<sup>90</sup> Before the introduction of mass media and the organization of national educational systems, the language(s) of a ruling class could hardly spread among a wider population of allophones except by suppression, strong ideological/religious motivation, or top-down acculturation. Since these possibilities are extremely unlikely in a prehistoric environment such as that analyzed here, we should probably assume some form of demographic pressure by speakers of Indo-European Anatolian languages.

In some of his most influential works, James Mellaart (1958; 1963) identified a major break in Anatolian cultural traditions around 2300 to 2000 BCE that was marked by destruction events at major urban sites (e.g., Troy II). This transition was coupled with large-scale settlement abandonment and the widespread expansion of red slip wheel-made wares. Mellaart (1981) interpreted these shifts in the light of a massive invasion by aggressive Luwians coming from the Balkans, who caused social unrest at major centers and at the same time assimilated the sophisticated urban culture represented at Troy

<sup>89</sup> See Melchert 2003:12–13.

<sup>90</sup> Goedegebuure 2008.

II. Later studies have confirmed the basic datasets underlying this perspective. Destruction events bracketed between 2250 and 1950 BCE are now evidenced in excavated sequences all across the peninsula.<sup>91</sup> Moreover, most survey and excavation records reveal a significant drop in settlement numbers and largescale abandonment of sites dating from around the same period.<sup>92</sup> Nevertheless, the ethnolinguistic interpretation proposed by Mellaart has been thoroughly dismissed. Critics have emphasized the broad continuity in the material record of the late third millennium, which is hardly compatible with a mass migration of foreign populations. Moreover, despite the significant clustering of destruction events toward the end of the third millennium, a trend of increasing organized violence across Anatolia had developed at least by the fourth millennium BCE.93 Red slip wheel-made wares had been introduced around ca. 2400 BCE, some generations before widespread destruction events occurred, and spread in a westward rather than eastward trajectory.94 Processual and post-processual evaluations, therefore, tend to stress internal processes of social transformation that were impacted by the growing centralization of resources, changing dynamics of interregional trade, and intensifying conflict among urban centers.95

Paleo-environmental records across the Mediterranean area also point to a swift climatic change toward drier conditions, the so-called '4.2 ka event,' that resulted in a sequence of severe droughts documented between ca. 2300 and 2000 BCE.<sup>96</sup> Mirrors of the 4.2 ka event in Mesopotamia and Syria are deemed the principal cause of the collapse of the Akkadian empire and find an archaeological correlate in widespread violence, major settlement shifts, and the transition of many sedentary communities to seminomadic pastoralism.<sup>97</sup> Environmental proxies for the 4.2 ka event have now been identified in Anatolia also and are therefore tentatively connected with the archaeological record for the late third millennium, which evidences a situation comparable overall to that in coeval Mesopotamia and Syria.<sup>98</sup>

In the light of the migration processes argued for above, we can combine the different strands of evidence for the late third millennium in Anatolia

<sup>91</sup> Massa 2014b.

<sup>92</sup> Bachhuber 2015:19–21 (with table 2), 46; Massa 2014b:110–111, figs. 5–7.

<sup>93</sup> Selover 2015; see also Massa 2014b, fig. 4.

<sup>94</sup> Türkteki 2013; Massa 2016:148-152.

<sup>95</sup> Bachhuber 2013; 2015; Selover 2015.

<sup>96</sup> Bini et al. 2019.

<sup>97</sup> Weiss et al. 1993; Wossink 2009; Kuzucuoğlu 2011.

<sup>98</sup> Massa 2014b.

organically, inclusive of possible language-change dynamics. However outdated it might sound, Mellaart's pan-migrationist view finds some support in the linguistic evidence for a substantial presence of Indo-European Anatolianspeaking populations by the early second millennium BCE. Nonetheless, the situation was far more complex and nuanced than Mellaart supposed. Despite social unrest, the final third millennium did not represent a complete cultural rupture from previous facies. Many urban centers, at least in the central plateau,<sup>99</sup> quickly re-emerged after their destruction, often recovering their previous complex infrastructures, including administrative buildings and imposing fortifications. In general, wheel-made ceramic traditions show a continuous stylistic development down to the second millennium, despite important regional innovations. Notwithstanding major shifts in trajectories, interregional trade networks also continued, reaching a climax in the Kārum system of the Old Assyrian period.<sup>100</sup> Reflecting on societal collapse, Norman Yoffee (2009) argues that a relatively quick regeneration of traditions and social organizations after major outbreaks could be enhanced by resilient interstitial stakeholders, who, having risen to the top ranks of the social hierarchy after the demise of their former patrons, could introduce crucial innovations on the foreground of a general socio-cultural continuity. Following this model, it is possible, although not provable, that Indo-European Anatolian expat groups already partnering with EBA I-II urban elites, for example acting as trading brokers, profited from the late 3rd millennium upheavals to elevate their condition and, eventually in some cases, gain power. From this higher position, Indo-European Anatolians might have attracted in their circles other people from within the networks to which they had the easiest access: most likely, other Indo-European Anatolian groups moving along the Thraco-Anatolian trajectory. This would represent a best scenario to argue for a demographically more significant second phase of infiltration of Indo-Europeans from eastern Thrace toward the late third millennium BCE that followed the streams of chain migration established in the earlier phase. However substantial, this population movement would be virtually invisible in the archaeological record because it would have involved areas that were already sharing the same urban culture since the westward 'Anatolization' process of the mid-third millennium.

<sup>99</sup> Bachhuber 2015:33.

<sup>100</sup> Massa and Palmisano 2018.

### 3 Metallurgy and Areal Interactions in Early Bronze Age Anatolia

Anatolia is blessed with a mineral-rich landscape that has offered multiple attractive venues for extractive industries from the Neolithic to the present day. Several obsidian sources, such as Göllü Dağ in Cappadocia, supplied circulation networks extending across the eastern Mediterranean from the Epipaleolithic to the mid-second millennium.<sup>101</sup> As obsidian production began to decline, a flourishing metal industry was already emerging, fed by the rich polymetallic deposits occurring across the Anatolian highlands, including gold, silver, copper, and lead. The most extensive deposits were located in the Taurus-Antitaurus ranges, along the Pontic belt, and in the Troad. Taking advantage of these resources, prehistoric Anatolian communities developed some of the earliest complex pyrometallurgical industries, which reached their apex in the late fourth and third millennia BCE. A combination of rarity, sporadic geographical distribution, and aesthetic and functional qualities gave metals formidable social value, to the point that they became catalysts for economic and political competition. Former assumptions identified increasing demand from the emerging centralized economies of the Mesopotamian lowlands as the main incentive for the development of Anatolian metallurgy.<sup>102</sup> However, it has become clear that metal production was first and foremost a response to localized demand within Anatolia, which in turn had a major impact on longdistance exchange networks.<sup>103</sup>

Since the early Neolithic (ninth to eighth millennia BCE), native copper minerals were worked to obtain ornamental objects, which were then used locally or circulated along long-distance exchange networks that were already well developed (thanks, in particular, to the obsidian trade). The evolution of metallurgy in subsequent centuries led over the sixth and fifth millennia BCE to an increasing specialization of production, especially in lowland agricultural niches close to highland extractive centers such as Cilicia and the Amuq.<sup>104</sup> By the LCh a range of metallurgical activities, from smelting to alloying and casting, are attested at several sites. Excavations at Çamlıbel Tarlası, near Boğazköy (Fig. 3.2), brought to light the vestiges of a small Chalcolithic hamlet (ca. 3590– 3470 cal. BCE) that probably owed its existence mainly to the presence of cop-

<sup>101</sup> Sagona and Zimansky 2009:69-74.

<sup>102</sup> E.g., Childe 1930.

<sup>103</sup> For recent overviews of prehistoric Anatolian metallurgy, see Muhly 2011 and Lehner and Yener 2014.

<sup>104</sup> Yener et al. 1996; Yalçın 2000.

per ores in nearby outcrops.<sup>105</sup> The presence of metallurgical activities onsite was signaled by pyrotechnological installations, tools, and several copper slags in various phases of the settlement. Notwithstanding these finds, Çamlıbel Tarlası cannot be characterized as a specialized metallurgical center as other features suggest that the local community engaged in a wide range of craft activities, including textile manufacture and the chipped stone industry. Yet the sheer scale of craft production far exceeded the subsistence needs of the local population, which might suggest that the site had a primary role in extensive trading networks (see above).

Several important metallurgical technologies emerged in the EBA and were accompanied by a novel organization of metal procurement and circulation processes. First, the production of copper-tin alloys (i.e., tin bronze) became widespread. In Anatolia, tin bronzes made their earliest appearance in Cilicia and the Amuq in the late fourth millennium BCE and steadily expanded to the rest of the peninsula from the 27th century onward.<sup>106</sup> A second, highly important innovation was the emergence of specialized metallurgical settlements that functioned as second-tier processing sites in association with mining complexes. Thanks to these facilities, ores could be smelted close to extractive sites and circulated from thence in more finished forms. Evidence for this organization mainly derives from the site of Göltepe in the Antitaurus and the associated mining complex of Kestel, which was located 2 km away (Fig. 3.2).<sup>107</sup>

The development of the EBA settlement at Göltepe can be followed across three occupational layers (IV–II) whose absolute chronology is confirmed by radiometric dates.<sup>108</sup> The earliest phases (IV–III), covering the LCh to EBA II (ca. 4400–2400), feature a modest architecture of ovoidal pit houses with wattle-and-daub superstructures. In the third phase (II), corresponding to the EBA III occupation (ca. 2400–1900), the architectural layout of the settlement was aggrandized through the construction of larger, above-surface structures accommodated on terraces and the erection of a circuit wall provided with an entrance gate. Significantly, the vestiges of this latter phase include a limited, but eclectic array of ceramic imports from areas ranging from western Anatolia to Syria.<sup>109</sup> The surfaces of all three phases were littered with vestiges of intensive metallurgical activities, including large pyrotechnical installations, crucibles, molds, slags, ore debris, and crushing tools.

<sup>105</sup> Schoop 2015.

<sup>106</sup> Lehner and Yener 2014:544-545; Massa 2016:191-192.

<sup>107</sup> Yener 2000; Yener 2021.

<sup>108</sup> Yener 2021:23-73.

<sup>109</sup> Hacar et al. in Yener 2021:81-82.

The associated mine of Kestel consisted of a series of tunnels whose excavation revealed metallurgical debris, stone tools, and a substantial amount of EBA pottery.<sup>110</sup> Several radiocarbon dates confirm that mining activities at Kestel were contemporary with the EBA occupation at Göltepe. Archaeometallurgical data show that the main focus of the Göltepe-Kestel complex was the procurement of tin, which was very rare in Anatolia and elsewhere in the Near East.<sup>111</sup> This finding raised some concerns in the light of later Old Assyrian evidence suggesting that the Anatolian bronze industry depended on large volumes of tin imported by Assyrian merchants.<sup>112</sup> Subsequent analyses, however, have confirmed the early data.<sup>113</sup> Moreover, the Hisarcık mine near Kayseri has supplied further evidence for the existence of EBA and MBA tin extraction industries in Anatolia.<sup>114</sup>

The new organization of the metal industry signaled by the Göltepe-Kestel complex and other sites<sup>115</sup> evidences the emergence of novel cooperation between urban centers and their hinterland. Mining and primary metal procurement were seasonal activities reserved for the late spring and summer when access to upland mining sites was not blocked by snow or poor weather. However, the same season was crucial for most of the productive activities in the lowlands, chiefly farming. Yener (2000:83-84) drew on modern ethnographic examples to propose a convincing correlation between the seasonal mining industry and vertical transhumance: while on their summer pastures in the uplands, herders could simultaneously work as miners at nearby extraction sites. This mining-herding symbiosis might well be reflected in faunal assemblages at Göltepe.<sup>116</sup> At the end of the mining season/upland transhumance, the herders would have returned to lowland settlements together with their raw metal products. The latter could then be included in the wider exchange circuit. At least initially, this cooperation likely had an impact on local lowland-upland dialectics, but might have expanded later to involve more distant communities. At Göltepe, this expansive phase might be evidenced by the architectural aggrandizement and ceramic imports of period 11.117

<sup>110</sup> Yener 2000:71–98.

<sup>111</sup> Yener and Vandiver 1993a.

<sup>112</sup> Muhly 1993; Yener and Vandiver 1993b.

<sup>113</sup> E.g., Özbal 2009; Lehner et al. 2009.

<sup>114</sup> Yalçın and Özbal 2009.

<sup>115</sup> E.g., Derektuğun, on the lower Kızılırmak (Yalçın and Maass 2013). For a recent overview of EBA metallurgical complexes, see Massa 2016:174–178.

<sup>116</sup> Gilbert et al. in Yener 2021:160.

<sup>117</sup> Bachhuber 2015:42.

The workings and extent of exchange networks regionally tied to Göltepe-Kestel can be best understood by examining the production and circulation of the so-called Anatolian Metallic Ware (hereafter AMW). This is an almost standardized ceramic ware class, characterized by a broadly homogeneous manufacturing technique and a unique repertoire of shapes. AMW vessels, all handmade, feature thin, hard walls and well-fired homogeneous clays that produce a distinctive clinky sound when struck (hence the word 'metallic' in their name).<sup>118</sup> A substantial subclass of AMW displays distinctive motifs painted in dark colors, lug handles, and other decorative appliques.<sup>119</sup> AMW seems to have a main chronological focus in the EBA I–II, although at Göltepe and elsewhere its use continued well into the EBA III.

Archeometric studies suggest a close relationship between AMW and metal production, especially because of the shared *chaînes opératoires* and knowhow required for both industrial processes.<sup>120</sup> Moreover, the chemical composition of the clays suggests that AMW was produced in only a few manufacturing centers,<sup>121</sup> which aligns well with the sporadic distribution of metallurgical sites. The mining complex of Göltepe-Kestel yielded the most substantial assemblage of AMW known to derive from a single site to date, and thus represents a further testimony of the proposed linkage between AMW and metal industry.<sup>122</sup>

Consistent with the upland-lowland dynamics outlined above, AMW had a wide circulation among lowland urban centers that seem to have participated in the same metal exchange circuit. This ware prominently features in Cilicia, namely, at Tarsus, Yumuktepe, and Kilise Tepe (Fig. 3.2), and in surface collections from other sites in the Göksu valley.<sup>123</sup> Another major pole of AMW distribution was the south-central plateau, where AMW features in EBA surface collections and the stratified contexts of closely connected sites across the Bor-Ereğli and Konya plains.<sup>124</sup> The northern limits of the AMW network were at Acemhöyük (levels VIII–XII) and Kültepe (mound level 12) (Fig. 3.2).<sup>125</sup> One specimen of AMW reached as far west as Troy (I) as an import and is probably indicative of a supraregional network of interactions

<sup>118</sup> The AMW definition was first introduced by Mellaart (1963:228–229, figs. 14–17).

<sup>119</sup> Hacar 2017.

<sup>120</sup> Friedman 2000.

<sup>121</sup> Gait et al. 2018.

<sup>122</sup> Hacar 2017; Hacar et al. in Yener 2021:79-80.

<sup>123</sup> See the literature cited by Hacar (2017:22, fn. 6) as well as French 1965:183–184 (Göksu valley); Symington 2007:297–298; Şerifoğlu 2019:74, fig. 10 (Kilise Tepe).

<sup>124</sup> Mellaart 1963:228–229; Bahar and Koçak 2004:68–69; Highcock and Matessi 2021.

<sup>125</sup> Öztan 1989; Kamış 2017:168–169 (Acemhöyük); Ozgüç 1986:39, fig. 3–21 (Kültepe).

that overlapped the local network.<sup>126</sup> In this light, it is quite significant that not a single sherd of AMW was retrieved in major EBA sites of the Kızılırmak bend and Phrygian highlands of central-west Anatolia. It seems, therefore, that Cilicia and the south-central plateau cooperated tightly in a system of cultural interactions during the EBA I–II and that they somehow communicated with northwestern Anatolia but were largely independent of the northern plateau.

As demonstrated, for example, by the complex obsidian exchange, Anatolia was deeply involved in long-distance interactions well before the EBA. Yet the beginning of the third millennium represents a turning point. These interactions reached a scale and intensity never seen before, certainly prompted in part by the metallurgical revolution described above. Often cited in this regard is the tradition preserved in a later text known as the *šar tamhari* (King of Battle), which relates to an expedition conducted by the Akkadian king Sargon (ca. 2300 BCE) against the Anatolian city of Purušhanda in support of a delegation of Akkadian merchants oppressed by the local ruler (see also Chapter 4, § 4.1). This account is certainly fictional as it manipulates past events through worldviews that did not belong to the period in which it is allegedly set. Yet it has been noted that the King of Battle situates in a legendary scenario interactions that were certainly at play during the third millennium.<sup>127</sup>

Multiple elements would suggest that contacts with Mesopotamia and the Levant were present in Anatolia by the beginning of the third millennium BCE. In particular, metal objects with clear parallels in Cilicia and Syria and a bulla impressed with a Mesopotamian seal were found in EBA I–II assemblages at Demircihöyük in northwestern Anatolia.<sup>128</sup> These contacts intensified and expanded in later centuries, reaching an apex in the second half of the third millennium (EBA III). During this period, finished goods of Syro-Mesopotamian derivation, chiefly a class of fine-ware perfume flasks called Syrian bottles, spread across Anatolia and made their way up to the Troad and into the Balkans.<sup>129</sup> Conversely, Aegean and western Anatolian drinking sets, represented by the *depas* and two-handled tankard types, spread south-eastward, reaching Cilicia, the northern Levant, and the upper Euphrates.<sup>130</sup> The distinctive shape of an Aegean/western Anatolian tankard even features in the booty

<sup>126</sup> Blegen 1950:170, fig. 250.7.

<sup>127</sup> Osborne 2018.

<sup>128</sup> Massa et al. 2017.

<sup>129</sup> Efe 2007; Massa and Palmisano 2018:75-76.

<sup>130</sup> Efe 2007.

carried by war captives who are represented on an unprovenanced Akkadian stele recovered in southern Iraq.<sup>131</sup>

Although several corridors must have been involved in these long-distance interactions, major trunks have been identified in the route systems known as the Great Caravan Route and the Anatolian Trade Network.<sup>132</sup> Leading from the Syro-Cilician area and the Euphrates, these route systems mainly transited through the southern plateau and the Konya plain, thence branching westward toward the Aegean and northwestward to Thracia and the Troad. Significantly, these were also the primary trajectories followed by a coherent ceramic culture that spread across Anatolia, prompted by the diffusion of the technology of the potter's wheel ca. 2400 BCE.<sup>133</sup> Even more than the circulation of finished goods, technological transfers of this kind are likely to occur along well-beaten tracks of continuous contact and are therefore indicative of sustained networks of interaction and exchange. Again, the inner bend of the Kızılırmak was only marginally touched by the Great Caravan Route and the Anatolian Trade Network and also seems to have been a late entrant onto the circuit of wheel-made ceramics, which are not attested there before the 21st century BCE.<sup>134</sup> Therefore, inner Anatolian circuits of exchange during the EBA III continued to operate along broadly the same patterns as those implicated in the EBA I-II distribution of AMW, although embedded in wider trade networks. Significantly, as we shall see in the next chapter, the existence of two distinct socioeconomic networks, serving northern and southern Anatolia, respectively, was not limited to the third millennium but continued into the early second millennium in the frame of commercial competition between Old Assyrian and Syro-Babylonian trading systems.

#### 4 Concluding Remarks

The fourth and third millennia BCE were a period of expanding interactions chiefly fuelled by an intensification and systematization of metal industry. In this expanding world, Anatolian communities increasingly participated into exchange networks ranging from the Circumpontic region, to the Aegean and the lower Mesopotamian alluvium. In Anatolia itself, exchange was seemingly organized in several interlocking circuits that, on a long-term perspective,

<sup>131</sup> Mellink 1963:102, no. 4.

<sup>132</sup> According to Efe 2007 and Şahoğlu 2005, respectively.

<sup>133</sup> Türkteki 2014; Massa 2016:146–156.

<sup>134</sup> Massa 2016:151.

defined southern and western frameworks broadly distinct from northern ones, gravitating around the Kızılırmak area. The channels opened by interregional interactions also involved the in- and outflow of people that variably impacted on the Anatolian cultural makeup. Patterns of contact with Caucasian cultural horizons, possibly also involving migratory movements, left a footprint on the archaeological record, but their effects can hardly be traced on the linguistic corpus available in the second millennium. Viceversa, the entrance of Indo-Europeans in Anatolia can only be argued from the later attestation of daugher Anatolian languages but did not leave a neatly traceable proof in the material cultural evidence. This chapter discussed the different cases for the two possible access trajectories of Indo-European speakers, from either the Caucasus or the Balkans, eventually proposing positive arguments for the latter route, supported by known geographical linguistic frameworks. It is also argued that the

widespread diffusion of Indo-European Anatolian languages might have been ultimately determined by the upheavals that marked the late third millennium.

# Society, Culture, and Early Language Contact in Middle Bronze Age Anatolia (Ca. 1950–1650 BCE)

A. Matessi and F. Giusfredi

## 1 Introduction

In the most optimistic accounts, Anatolian 'history' is made to begin in the Middle Bronze Age (hereafter MBA) and treated as a prologue to Hittite history (e.g., Bryce 2005:21-40), a western offshoot of Mesopotamian history (e.g., Veenhof 2017a), or an independent historical context (e.g., Larsen 2015). This is the period when written sources-the markers of 'history' against an illiterate 'prehistory'—are for the first time produced and circulated among Anatolian urban centers in the frame of the Old Assyrian Kārum period (1950–1750 BCE). The Old Assyrian texts represent an invaluable source of information not only on the activities of Assyrian merchants, their relations with their homeland, and the itineraries they followed but also on the indigenous environment(s) in which they moved and interacted (see also Chapter 4). Nonetheless, the characterization of the MBA as a historical period is mostly a matter of spatiotemporal perspective that ultimately depends on our objectives. It is obvious in an Assyro-centric or Mesopotamo-centric historical framework. It is understandable in any attempt to find the roots of social institutions and ideological constructs that will inform the following centuries of the central Anatolian society that we call Hittite. However, the relevance of the Old Assyrian textual evidence must be briefly contextualized and its limits emphasized before fully considering the regional and interregional interactions involving Anatolia and their possible impact on the local sociolinguistic sphere.

Almost all the textual documentation on the Kārum period derives from the cuneiform tablets discovered at the site of Kültepe, known as Kaneš in Assyrian, and Neša in later Hittite sources (Fig. 4.1).<sup>1</sup> This site includes a ca. 24hasized mound, hosting the local royal palace, and a lower settlement, called the  $k\bar{a}rum$  (port or trading post), where the Assyrian merchants resided. The private archives of the  $k\bar{a}rum$  yielded about 22,400 tablets, and forty additional

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<sup>1</sup> As proposed by Yakubovich (2010:2 fn. 1), the toponyms Kaneš and Neša could be etymologically related as two different variants of a form *\*Knes*.

tablets have been found on the mound. From this large corpus, we understand that the Old Assyrian trade network was an imposing infrastructure, involving a large part of central and eastern Anatolia. At the apex of the Old Assyrian trade, there were, besides Kaneš, about other twenty major stations classified as  $k\bar{a}r\bar{u}m$ , as well as almost as many minor ones, known as *wabartum*. Some of these stations (e.g., Hattuš, later Hattuša) have been explored archaeologically, yet the total textual evidence they produced, some hundred tablets, is dwarfed by the huge corpus found at Kültepe.

This concentration of most of the textual sources in a single center is coupled with a marked chronological unbalance. The vast majority of the Kültepe texts are from level II (ca. 1950–1836 BCE) of the *kārum*, while only about four hundred were found in the subsequent level, Ib (ca. 1833–1710? BCE). To the latter we may add most of the tablets found outside Kültepe. The latest *kārum* level (Ia; ca. 1710?–1685 BCE), which possibly stretched to the very beginning of the Hittite period (Kulakoğlu 2014), did not yield any textual evidence. Besides the stratigraphic distribution, the frequencies of attested dates, provided through the eponym (*līmum*) system in use in Assyrian chanceries, would indicate that most of the tablets were produced over a mere 40 to 50 years, corresponding to the first half of the 19th century BCE (Barjamovic et al. 2012:53–80, with references to additional literature).

In summary, available textual documentation for MBA Anatolia, despite relating to a vast area of central Anatolia, was mostly produced at a single site, Kaneš, during a very short time span. For linguistic purposes, the documents have further limitations in that they are codified in a language foreign to Anatolia, namely, the Old Assyrian dialect of Akkadian (hereafter: OA), and exclusively concern economic or legal matters. These factors are consequential for the vocabulary employed. Proper names, a few borrowings, and evidence for linguistic interference provide invaluable information on the linguistic substrata with which Assyrian merchants interacted. These data, however, can be hardly projected beyond Kaneš, or the Kızılırmak area at best.

Considering linguistic interactions as part of a broader set of cultural contacts allows us to introduce archaeological evidence into the picture. Our position in this respect, however, is just slightly better in terms of the spatiotemporal coverage of the evidence. Ironically, archaeological information is most abundant in central Anatolia, which is also the area more or less directly documented by the *kārum* texts. Important ancillary data also derive from Cilicia and the Konya plain, but entire patches of land, especially in the west, have been poorly explored if not ignored altogether relative to MBA frameworks.<sup>2</sup>

<sup>2</sup> It is symptomatic of the state of the art that some of the most recent overviews of Anato-

# 2 The Old Assyrian Merchants and Their Interactions with Anatolians

The Old Assyrian trade network in Anatolia was part of a large commercial enterprise financially supported by central institutions, namely, the palace and temples, as well as influential households residing in the Assyrian capital Aššur. The economic backbone of this organization is well known: Assyrians mainly exported tin and textiles to Anatolia, returning home with large volumes of silver and, to a lesser extent, gold (Fig. 4.1). Aššur functioned as a clearinghouse, insofar as neither of the two exported products was produced in the Assyrian homeland. Textiles were acquired from Babylonian merchants, and tin was likely imported to Assyria from the Iranian plateau, possibly in exchange for (part of) the silver and gold obtained in Anatolia. Therefore, unlike previous systems, such as those used in the Uruk and Ur III, the Old Assyrian trade was not aimed at channeling resources into a core area but was mainly a profitoriented enterprise in which silver and gold functioned as proto-currencies that were (re)invested in one or the other market. Kings and temple institutions in Aššur could participate as investors in commercial activities and, in any case, extracted revenues from them through taxes imposed on the merchants. But the Assyrian trade can hardly be reduced to a state-sponsored initiative as it involved a variety of investors, including prominent citizens and households who seem to have pursued private interests.

Although the trading season only occupied the warmest part of the year, from late spring to early autumn, Assyrian merchants often resided in Anatolia all year long or even permanently, commissioning others to travel back and forth between Aššur and Kaneš. The Assyrians in Anatolia, therefore, formed a socially coherent community of expats, conscious of its 'otherness' and retaining strong bonds with Aššur, always called 'the City' (*ālum*). The main governmental institutions of the City were faithfully reproduced in the *kārum*. The merchants worshipped Assyrian gods and swore official oaths before the sacred dagger of the Assyrian supreme god, Aššur. Multiple texts attest to the presence in Anatolia of Assyrian cultic personnel assigned to temples dedicated to Aššur, Ištar, and other Assyrian deities (Highcock 2017, with references to additional literature). The use of Assyrian cuneiform as an essential means of communication required the establishment of scribal schools in the *kārum*.<sup>3</sup>

lian pre-Hellenistic civilizations (Sagona and Zimansky 2009; Steadman and McMahon 2011) almost completely ignore Western Anatolia in their respective sections on the Middle Bronze Age.

<sup>3</sup> Michel 2008.

Although the merchants kept their 'Assyrianess' lively through practices, institutions, and religious beliefs, they were deeply integrated into Anatolian society. Although terms such as 'colony,' as a translation for *kārum*, and 'Old Assyrian Colony period' are still widely used, the idea of a top-down imposition of Assyrian sovereignty over indigenous Anatolian communities is now unanimously discredited. The trade organization was based on peer-to-peer negotiations, among different trading stakeholders and between merchants and local rulers, wherein all parties acknowledged each other in search of mutual benefits. Relations were juridically regulated by treaties, whereby Anatolian rulers committed themselves to keeping routes safe in exchange for a share of trade profits that was extracted through taxes and tolls on incoming goods.

It is commonplace to say that without their cuneiform tablets, the Assyrians would be barely recognizable in the material record. The main commodities imported to Anatolia from Assyria, that is tin, and textiles, are no longer visible or preserved. The  $k\bar{a}rum$  hosted a substantial number of Anatolians together with Assyrians, yet all of the houses hitherto excavated at Kaneš as well as at other sites where Assyrians traders had a presence conform to Anatolian building traditions irrespective of the ethnolinguistic affiliation of their occupants.<sup>4</sup> Also, the ceramics and other small finds belong to local types.

Old Assyrian language and script are the clearest evidence of an Assyrian presence at Kaneš. These were chiefly used in communications among merchants. As we shall discuss later, some Anatolians were familiar with Old Assyrian cuneiform, and the number of Anatolians involved in record keeping steadily increased between Kārum II and Ib.<sup>5</sup> To the later period also belong a number of records written in Old Assyrian by local kings, including the famous letter sent by Anum-hirbe of Ma'ama to Waršama of Kaneš (Balkan 1957) and the recently discovered letter written by Wiušti of Hattuš (KBo 71.81). Despite this, the available evidence suggests that cuneiform remained a foreign feature that was never fully assimilated by the local population throughout the Old Assyrian period.<sup>6</sup>

Apart from the tablets themselves and some seal impressions (see below), very little that can be acknowledged as genuinely 'Assyrian' has been identified so far in artifact assemblages. In more general terms, the sphere of interactions between the foreign and indigenous groups has been conceptualized as a 'middle ground' on which respective identities were juxtaposed and rene-

<sup>4</sup> But see Heffron 2016 for the domestic stelae hosted in some *kārum* houses, which have been tentatively linked to Assyrian forms of the ancestor's cult.

<sup>5</sup> Michel 2011a; Waal 2012:288–289.

<sup>6</sup> Cf. van den Hout 2020:24-37.

gotiated. As Lumsden explained, the Assyro-Anatolian middle ground is "not a process of acculturation, of one culture becoming more like the other, but of a more nuanced form of encounter in the 'in-between' space of the middle ground, which results in something completely new."<sup>7</sup> A well-known textual example for this kind of cultural negotiation was an appeal made by the merchant's guild for the release of a colleague (called, as usual, 'a brother'), who was imprisoned by the royal couple of an unnamed Anatolian polity in relation to an affair of espionage.<sup>8</sup> The rulers who were addressed were begged to let the poor man plead his innocence 'before the sword of Aššur,' according to the Assyrian custom, or perform a river ordeal like a native (*ana id lilīk kīma* DUMU *ālika*, literally, 'to go to the river like one of your citizens [referring to the royal couple]').<sup>9</sup>

The middle ground finds a precise material correlation in patterns of hybridization that are best exemplified in glyptic traditions. According to a longheld typological classification, MBA seals/impressions present in Anatolia are arranged in four groups or styles: Old Assyrian, Anatolian, Old Babylonian, and Old Syrian. The archives of the Kaneš *kārum* show a preponderance of the first two styles, which have often been equated with the ethnicity of their owners. The situation, however, is now understood to be more complex. Hybridized middle-ground styles, in which Anatolian motives were assembled in an Assyrian or Mesopotamian matrix or vice versa, have been identified. Like Anatolianstyle seals, these were produced by local workshops and, as far as we can judge from the attested owners' names, they were used by both Assyrians and Anatolians.<sup>10</sup>

Middle-ground negotiations involving trade stakeholders and local authorities, as well as the hybridization of glyptic styles, belong to the public domain of commercial interactions. However, the prolonged stays of Assyrian merchants in Anatolia inevitably resulted in a more private form of cross-cultural integration, that is, interethnic marriages. Most commonly, Assyrian merchants contracted second marriages in Anatolia with indigenous women. Over time,

<sup>7</sup> Lumsden 2008:32. Lumsden borrowed the concept of the 'middle ground' from Richard White's study of Franco-Algonquinian interactions in the Great Lakes region during the 19th century (White 1991). For further elaborations, see Larsen and Lassen 2014, Heffron 2017, and Highcock 2017.

<sup>8</sup> Kt 93/k 145 and Kt n/k 504. See Michel and Garelli 1996, Günbattı 2001, and Larsen and Lassen 2014:176.

<sup>9</sup> From this text we incidentally infer that the river ordeal, although very common in Lower Mesopotamia (cf. § 123 of Hammurapi's Laws), was alien to Old Assyrian juridical practices. In contrast, this practice is well attested in Hittite texts (cf. *hapā pai-*: HED H:114).

<sup>10</sup> Larsen and Lassen 2014.

as communities became more mixed and Assyrians a permanent presence, marriages between Anatolian men and women of Assyrian descent are also attested.<sup>11</sup> The Old Assyrian marriage contract allowed bigamy, provided that the two wives did not enjoy the same status and did not live in the same place. As a rule, the first marriage granted the wife the status of *aššātum*, 'main wife,' while the second wife was called *amtum*—literally, 'female slave.' The distinction seems to have been a matter of temporal order, irrespective of ethnicity. Therefore, during the first generation, we mostly see Anatolian *amtum* wives as opposed to Assyrian *aššatum*, that is, the wives that the merchants had left in Aššur when moving to Anatolia. The opposite situation (Anatolian *aššatum* vs. Assyrian *amtum*) became more common during later generations.<sup>12</sup>

The seemingly derogatory term *amtum* derives from the Mesopotamian practice of acquiring female slaves to employ as surrogate mothers in case of anticipated childlessness. However, this is hardly a role that fit the Anatolian *amtum*, who were not slaves and seem to have enjoyed rights broadly comparable with those of *aššātum* wives. Heffron (2017) considers the *amtum* marriage as a form of middle ground negotiation between the trade diaspora and local communities seeking mutual advantages in close cross-cultural ties. The amtum-aššatum semantic shift is thus explained as a case of cross-cultural misunderstanding, whereby classifications compliant with the Assyrian marriage laws were reformulated and reshuffled into a new form acceptable to both parties in the mixed community abroad. This is possible if we observe that Anatolian women may have had a different, less degrading understanding of the slave-wife status than the Assyrians did. The evidence would suggest that marriages between free and unfree in central Anatolian common law entailed conditions not very dissimilar to those expected from fully free marriages. Purely Anatolian couples of the Kārum period practiced a community of property in which wealth was equally split between the partners in case of divorce.<sup>13</sup> According to the later Hittite Laws (§§ 31 and 33), this rule also applied to cases of divorce between free men (LÚ EL-LUM) and slave women (GÉME).<sup>14</sup>

<sup>11</sup> Larsen and Lassen 2014:177–178.

<sup>12</sup> Over time, the boundaries between aššūtum and amūtum seem to have grown fuzzier. Barjamovic et al. 2012 mention amtum wifes who were later referred to as aššūtum. Other cases (see Michel 2008:214) attest an undifferentiated use of aššatum and amtum, either by mistake or intentionally. On mixed families in Anatolian kūrum society, see Michel 2020:444–445.

<sup>13</sup> Stol 2016:217–219; Heffron 2017:73–74; Michel 2020:85–87.

<sup>14</sup> Haase 1993; Hoffner 1997:40-42.

## 3 The Peoples and Languages of Anatolia during the Old Assyrian Period

From the description proposed in the previous paragraphs, it is evident that the type of society the *kārum* documents describe is a mixed one, with traces of a diachronic evolution that seems to have modified the relationship between the Assyrians and locals. However, what remains unclear and to some extent debated in trying to describe the cultural, social, and sociolinguistic strata of the population of Anatolia in the Kārum era is the composition of the local populations with which the Assyrians merged. When, as in this case, the material culture does not provide solid hints for a fine-grained differentiation, the procedure most commonly used to attempt such an assessment is an analysis of the linguistic profile of the people mentioned in the texts. Exemplifying this process is Gernot Wilhelm's influential article 'Hurrians in Kanesh' (2008), in which, in the absence of other types of data, Hurrians are recognized based on the fact that they bore Hurrian names. Of course, this approach is not unproblematic. A traditional approach to reconstructing the cultural geography of the early phases of the Anatolian area that took into consideration its linguistic history would be based, at least in part, on speculation about the so-called Indo-European migrations. This, when combined with the archaeological evidence for the prehistorical age, could result in a dangerous attempt to match the main Indo-European and non-Indo-European components with given material cultures.<sup>15</sup>

Speculations on the original Indo-European culture, when they are pushed too far, tend to produce poor models, especially when one tries to use them to describe the roots of the situation attested in later historical times. While the common genealogical origin of the Indo-European languages is certain, the earliest phases of the separation of the individual languages from the *Stammbaum* are lost in the fogs of pre- and protohistory and, by the time the linguistic communities were settled into areas (e.g., Anatolia, Greece, Italy, Iran, and India, to mention some of the earliest ones), the coexistence and cohabitation with local(?) pre-Indo-European communities such as the Hattians in Anatolia, Minoans in the Aegean, Elymians in Sicily, Elamites in the West of Iran, and possibly the Indus Valley civilizations in northwest India) had been established for long enough to make it virtually impossible for us to distinguish between original Indo-European and non-Indo-European cultural components.

<sup>15</sup> Cf. Giusfredi and Matessi 2021 for a discussion of these problems.

Liverani (1988:314) described general similarity in the historical contexts of the introduction of Indo-European linguistic (and demographic?) elements in a way that does not imply long-distance migrations and applies to other apparent cultural turn-overs (think, for instance, of the emergence of the Akkadian and Amorite elements in Early Bronze Age Mesopotamia or the West Semitic elements in the Levant during the Iron Age):

Quel che sembra comunque accettabile, nella ricerca di un collegamento [...] è che la crisi delle culture urbanizzate dell'Antico Bronzo, pur avvenuta per motivi di dinamica interna, abbia aperto [...] dei 'vuoti' demografici e politici, che sono stati occupati da genti contigue che per modo di vita e tipologia economica erano pronte e adatte a subentrare nello sfruttamento di certe risorse e di certe aree.<sup>16</sup>

In general, when dealing with the problem of describing the type of multiculturalism and multilingualism of the Anatolian region in the Middle Bronze Age, the most appropriate approach consists in working with the available evidence only, refraining from any attempts at reconstructing former non-documentable processes.

The virtual impossibility of distinguishing Indo-European from previous(?), indigenous(?) elements is also encountered in examining the historical corpora from the later and properly Hittite phase. In particular, Klinger (1996:4) pointed out the enormous importance of the Hattian component in the culture of the Hittite kingdom, which results in mixed and entangled social, cultural, and religious facies. Although, as previously stated, the historical processes that turned Old Assyrian Anatolia into the Old Hittite kingdom are still partly obscure, it is important to observe that the intense degree of multiculturalism that makes Late Bronze Age Hatti look like a melting pot of Luwian, Hattian, Hurrian, and Mesopotamian cultural features seems to be consistent with the similarly mixed situation that emerges from the Old Assyrian documents. In other words, the Hurrian and Luwian cultures and literature during the xv and early XIV century pre-imperial ages did not penetrate a consistent and monolithic 'Hittite Anatolia' but rather represented a new wave of multiculturality in an environment that was already the complex result of *longue durée* interferences.

<sup>16 &</sup>quot;What seems, however, acceptable, in the search for a connection [...] is that the crisis of the urbanized cultures of the Early Bronze Age, even though it happened for internal reasons, opened [...] demographic and political 'gaps' that were filled by neighboring peoples who were, on the basis of their lifestyles and economic typology, ready and able to begin exploiting specific resources and areas." (Translation F. Giusfredi)

The main pieces of evidence emerging from the large corpus of cuneiform economic and legal documents found in Kültepe that may help describe the Middle Bronze Age social and sociolinguistic situation are:

- 1. The existence of the designation *nuwā'um*, which was employed by the Assyrians to indicate the local populations and may have related to the designation of a specific nisba;
- 2. Anatolian or otherwise 'local' anthroponyms and toponyms, some of them associated with people who owned archives;
- 3. Lexical items that allow for the identification of cultural and social features, including some that are directly or indirectly related to the local administration and polities;
- 4. Grammatical mistakes in texts composed by scribes who were not Akkadian speakers (especially in archives owned by or related to Anatolians, only a part of which, unfortunately, has been published).

The first point in the list is only indirectly a matter of linguistic analysis, and should, in our opinion, be approached from several angles. Assyrians referred to locals with the noun nuwā'um. Goedegebuure (2008, based only in part on a hypothesis by Carruba 1992) proposed that the word was an Anatolian loan that referred to the Luwians (luwiya), suggesting Hurrian mediation to account for unexpected phonetic features such as the initial consonant (/n/ instead of /l/, which does not occur word-initially in Hurrian), and providing an insightful, albeit speculative, historical justification for this path of diffusion of the word. Goedegebuure's proposal may be correct. While the cases of l/n alternation, already listed by Carruba 1992, are not many, it is not true that the phenomenon would be "awkward" (as claimed by Kloekhorst 2019:45), because it would depend on specific features of Hurrian phonotactics. As for the historical settings Goedegebuure (2008) does not claim the word was originally created in Kaneš to refer to local Luwian speakers (pace Kloekhorst 2019:45-46). Nonetheless, the hypothesis is far from being proved. If the word needs to be explained in terms of contact, instead, an alternative explanation may exist that could make the diffusion more linear. As the population of Kaneš was, in all likelihood, mostly Hittite, it is conceivable that the word *luwiya*- was employed in the area by the Hittites to refer to the west Anatolian 'strangers'; this could relate to the existence of Western trading routes connected to the kārum system via the common gateway of Purušhanda.<sup>17</sup> The Assyrians may therefore have borrowed the word and extended the use of this designation of foreigners

<sup>17</sup> The collocation of Purušhanda is still debated, but its role in the Assyrian network is certain. However, see below, § 4, for the geographical context of Anatolia in the Kārum period.

to all local non-Assyrian peoples, including the Hittites themselves. A meaning of 'stranger'—more generic than 'Luwian'—for the borrowed word would also better explain why in later phases, when the Anatolian model word was no longer recognized by the Hittites, the Hittite correspondence in the list MSL XII 206, 8f. is in fact *dampupi-*, which, with Soysal (2006:131), apparently had also the meaning 'stranger, foreigner' beside the standard one, which is normally given as 'unskilled, untrained'. Both this and Goedegebuure's solution, however, would fail to account for the large diffusion of the word *nuwa'um* outside of the Assyrian of Anatolia, which makes a local borrowing less likely. Therefore, one should certainly consider also the possibility that the word *nuwa'um* was merely an Assyrian onomatopoeic (if not etymologically Semitic, cf., e.g., Akkadian *nawûm*, 'to become wild') designation of 'strangers', similar, in its origin and function, to the Greek designation for 'barbars'. All things considered, Kloekhorst (2019:46) is certainly right when he highlights that the word has no specific ethnolinguistic connotation.

Moving to the other points in the list above, Anatolian personal names, lexical loans, and morphological adaptations of non-Akkadian words were identified early in the study of Hittite. In the 1950s, just a few decades after Hittite was deciphered, Bilgic (1954) examined these features in a long article that was a milestone in the study of the kārum texts. Bilgiç identified over 60 foreign words and 17 uncertain ones in Old Assyrian. In the following decades, these figures changed, and some of Bilgiç's interpretations can be challenged, especially because of the mixed methodology he employed. He analyzed some words as Indo-European based on true Hittite or Luwian comparanda, but above other interpretations on *reconstructa* that must be approached with caution. For instance, the connection between the kamsu textile and the Latin camisia (Bilgiç 1954:71, mistakenly: camisa) is hardly credible. In other instances, words listed by Bilgiç appear to be almost certainly non-Assyrian but do not admit an Indo-European or Anatolian interpretation. As was highlighted in studies published in the decades that followed (cf. Dercksen 2007, with references), most non-Assyrian words that can be analyzed as Anatolian and Indo-European seem to be analyzable as Hittite, with only very few cases of Luwian loans. As will be discussed later in this chapter, the situation that emerges for personal names is comparable: there is a fairly large set of non-Assyrian names in the kārum onomasticon but within this set, the subgroup of Hittite names is large, whereas Luwian names are at best a small minority.

Borrowings on the lexical level and mixed onomastics hint at an area of intensive and stable contact but do not prove it. Lexical exchange is far from uncommon even between languages that are in loose or indirect contact with each other, and personal names do not necessarily reflect the synchronic cultural background of an area and demography. Luckily, however, other types of interference exist that are much more telling for the linguistic profile of the local population of Old Assyrian Anatolia (or, at least, for the linguistic profile of its scribes). Grammatical mistakes that may depend on interference occur in some documents, especially in those from archives that belonged to individuals who bore Anatolian names. Some of these errors, as will be discussed later, can be regarded as depending on the native language of the scribes, who must have been non-Assyrian and, in all likelihood, were Anatolians in an Indo-European sense.

#### 3.1 Hittites in the Kārum Period Society

As has been noted in earlier studies (Bilgiç 1954; Schwemer 2005/2006:221–224; Dercksen 2004, 2007; Michel 2011a), Hittite linguistic evidence is not negligible in the *kārum* documents. A very large number of Anatolian personal names (recently collected by Kloekhorst in his 2019 monograph) are undoubtedly Hittite. This scenario is hardly surprising given the geographical collocation of the Anatolian sites that returned the highest amount of Old Assyrian documentation: Kaneš (Kültepe) was located in the core area of the future Hittite kingdom (between the middle course of the Kızılırmak River and northern Cappadocia) and was one of the military targets in the narrative of Anitta's military successes (see Chapter 5, § 2). Of course, one should keep in mind that the situation may have been different in the westernmost areas of the Old Assyrian network if they were inhabited by Luwians at this stage—here, however, it is important to reiterate the need for caution in the discussion of reconstructed pre- and protohistorical scenarios.

The relationships between the Assyrian traders and the local population emerge clearly from the sources. As Veenhof (2008) and Michel (2014a; 2014b: 115) pointed out, at the level of administration the traders paid taxes to the local authorities and Anatolian rulers of the cities that hosted the markets. Anatolian names, however, which are sometimes connected to specific archives owned by local families, indicate that indigenous people were parties involved in the economic and juridical transactions, although the role of the *tamkārum* trader was typically held by Assyrians (so that the indication, rather generic in Mesopotamia, referred to a specific social class of non-Anatolians in the *kārum*; cf. Dercksen 2004b:238). The central office of the *bit kārim*, which represented the Aššur offices and the Assyrian traders before the local authorities and supervised taxation and finances from the Assyrian side, was managed and manned, at least for the most part, by Assyrian officials. However, some institutions mentioned in the texts are referred to by terms that appear to be Hittite (or Anatolian) loanwords in the Akkadian of the *kārum*. A very well-known example is the still elusive noun *tuzzinnum*, which contains the rather typical morphological addition of the nasal suffix *-nnum* and was probably formed on the Hittite *i*-stem noun *tuzzi*, which consistently has the meaning 'army' in later texts from the archives of Hattuša. The exact meaning of the loan *tuzzinnum* in Old Assyrian is uncertain. Although earlier assumed to be the title of an official, it more likely designates a group of people and/or a type of estate or field or a type of civil or military service.<sup>18</sup> Other examples include the name of a form, service, or duty, the *arhalum*, of uncertain but possibly Anatolian etymology (a connection with the Hittite *irha-/arha-*, 'limit, boundary,' is not unconceivable) and *ubadinnum*, 'land grant (vel sim.),' possibly ultimately Luwian (see below  $\S 3.2$ ).<sup>19</sup>

Loanwords, however, are not limited to the names of institutions, and while some are easily traced back to a specific substrate, others are more difficult to analyze (cf. also below § 3.4.1). As for grammatical interference, a similar issue arises: while some grammatical mistakes in the *kārum* texts look like the results of non-native command of the Akkadian language, establishing the native linguistic profile of the scribes who made them is no simple task, so a discussion of this aspect will be also made below (§ 4.1), after having introduced other local cultural and linguistic strata that interacted with the superimposed Mesopotamian one.

#### 3.2 Non-Hittite Anatolians: Luwians and the People of Pala

Although Kaneš, which is the most reliable and significant object of analysis for the Kārum period, should be regarded as a Hittite (or rather Nesic) principality and town, other Anatolian elements are attested in the cuneiform documentation. As for the direct attestations, we may cautiously limit ourselves to Anatolian lexical items that entered the administrative lexicon of the 'colonies.' Two such items, *targumannum* and *ubadinnum*, were adapted from Luwian beyond any reasonable doubt (see Simon 2020e for an updated and thorough discussion). *Targumannum* has long been recognized (Starke 1993) as meaning 'interpreter' or 'translator' and deriving from the Luwian verb *tarkummiya*- (attested in KUB 35.107). The Iron Age professional title *tarkumami*- was a participle of the verb or possibly a reanalyzed form that was the result of a circular loan from Akkadian. *Ubadinnum*, was a type of royal grant issued on behalf of the local Anatolian court.<sup>20</sup> These Anatolian lexical traces, while small in number,

<sup>18</sup> Cf. Dercksen 2002, Dercksen 2004a, Dercksen 2005, Vernet Pons and Vernet Pons 2019, and Giusfredi 2020a, with references to previous literature.

<sup>19</sup> See Dercksen 2004a for a complete discussion of these terms, including the linguistically dubious form *unuššu*, on which see below, § 3.4.1.

<sup>20</sup> Dercksen 2004a:150–154; Goedegebuure 2008:172.

testify to the involvement of the Luwian cultural component in the redefinition of society during the Old Assyrian phase. Therefore, Kloekhorst's (2019) observation of the overwhelming presence of Hittite onomastics in Kaneš and the absence of clearly Luwian personal names must, if correct-but see the discussion below-be interpreted as the reflex of a local situation of the Cappadocian city whose name the Hittites adopted for their vernacular (*nešili*). This, however, does not change the fact that cultural and linguistic superposition, adstrata, and interferences had been at work for a long time in the Anatolian society in which the Assyrians planted the seed of their trading network. Furthermore, as was detailed by Giusfredi (2020b), Kloekhorst (2019) overemphasized the way the Hittite onomastic material outnumbers the Luwian forms in the Kaneš data by rejecting some pieces of evidence presented, for instance, by Yakubovich (2010:211ff.). While it is true that the Hittite forms are overwhelmingly more numerous than the Luwian ones, as extensively discussed and argued in Giusfredi (2020b), we maintain that most of the ones formerly recognized as Luwian should be still analyzed as such, and the minor phonographic inconsistencies do not undernine the solidity of the matches.

According to the interpretation proposed in Giusfredi (2020b), there are only three names, among those that were described as Luwian thalleged Luwian names from Kaneš that do present serious issues. The first is Kulzia (*ku-ulzi-a*): if the Luwian word *gulz*- were obliterated following Waal's (2014) proposal to interpret the former *gulz/š*- words as logographic GUL-writings, this name would probably be erased from the list of the Luwian OA anthroponyms.<sup>21</sup> The second is Punamuwatti- (*pu-na-mu-a-ti*). In this case, Kloekhorst (2019:60) states that the *-ati* suffix is unexplained. However, nothing in the text that contains it, WAG 48–1464, indicates that the figure was male; if Punamuwattiwas a woman's name, it could have been identical to the Hieroglyphic Luwian Panamuwatti- (BOYBEYPINARI 1&2 §§1, 9, 17, 19; on the alternation Pana°/ Puna° in some Iron Age names, cf. Giusfredi and Pisaniello 2020), or at least comparable to female names ending in *-atti*- (e.g., BONUS*-ti*- in Karkemiš, Panamuwattis, possibly *Tuwa*-FEMINA*-ti* in BOR 7).<sup>22</sup> The third problematic name is the much-debated *mu-a-na-ni*, the name of a woman, which, if ana-

<sup>21</sup> Waal's 2014 analysis is not universally accepted but, at best, debated. The matter seems to be undecidable and therefore the name Kulzia should be considered doubtful but still possibly Luwian.

Note, however, that -atti- male names also exist, e.g., Tuwatti-, a tabalite king of the Iron Age (quoted in many texts from the Kululu area, such as KULULU 1, §§1, 7, 11, 13, 15, ÇİFT-LİK §§1, 2, 5, 11, 15; KAYSERI §19; TOPADA §1; MALATYA 6; KIRŞEHİR §§1, 2), so there is no reason to find the suffix surprising in a Luwian name.

lyzed as a Luwian compound, seems to contain the noun *nani*- (brother). Two explanations proposed so far (Yakubovich 2010:18; Zehnder 2010:36) are: 1) *nani*- was still a gender-independent designation and the natural feminine *nanašri*- was a later formation, or 2) the compound was semantically exocentric and meant something like 'having a powerful brother.' However, it is possible to propose a simpler explanation. The sequence *na-ni* in the Old Assyrian graphemics may have also been used to notate the Luwian *nanniya*- (master, lord, mistress, or lady), which was gender-indifferent until the full Iron Age when it is still used as an attribute to the female goddess Kubaba (e.g., KARKEMIŠ A18e § 6; A23 § 3). The name, normalized as *Muwananni*-, would pose no formal problems.<sup>23</sup> All in all, Luwian names *did* exist in Kaneš. They were far less common than Hittite names in the corpus but not almost absent as argued by Kloekhorst argues.

As for the other non-Hittite Anatolian element, the Palaic, the data from the Old Assyrian period are virtually non-existent. Palaic words or names in the corpus may have gone unrecognized because of the lack of unquestionably recognizable morphs and because the Palaic homeland was located in the north, in a very peripheral position with respect to the core area of the Assyrian network as we know it today. A few exceptions exist and have been pointed out by Goedegebuure (2008:170-171). The first is a possible case of phonological interference, consisting of the use of the  $WA_a$  and  $WU_u$  signs to render fricative labial consonants in loans. The second example of a possible contact-induced shift in Palaic that may have depended on Hattian was proposed by Goedegebuure: the presence of the assimilation of the nasal element /n/ to /m/ before a labial stop. A third possible example of alleged interference between Hattian and Palaic does not pertain to phonetics but rather dwells in the more delicate field of morphosyntax. It involves the existence of a clitic contrastive marker, -pi (BI), which exists in Hattian and also in Palaic.<sup>24</sup> The other languages of the Anatolian branch have different markers: -(m)a) in Hittite and -pa in Luwian.<sup>25</sup> All of these hypotheses relate to changes that would have occurred in the Old Assyrian age but are based on later data. They will be discussed in Chapter 12 (§ 2.1).

The limited number of Palaic texts and the virtual absence of Palaic material in the texts from the Old Assyrian phase prevent any further investigation. The role of Palaic remained extremely modest and peripheral even during the

<sup>23</sup> For further discussion, see also Giusfredi 2020b.

<sup>24</sup> See Carruba 1970:67, for occurrences and meaning.

<sup>25</sup> On the Hittite -(m)a, cf. GrHL:305–399. On the Luwian -pa, cf. Giusfredi 2020c:173–175.

centuries in which the main archives of the Hittite kingdom were active, which might indicate that the significance of the culture of Pala in the Anatolian melting pot was moderate and isolated compared with the influence of Hittite and Luwian.

## 3.3 Non-Anatolian Groups: Hattians and Hurrians

Besides the Anatolian material, and excluding the significant number of personal names that currently cannot be ascribed to a known linguistic tradition, a few anthroponyms found in Old Assyrian in Anatolia can be analyzed as belonging to the two main non-Anatolian vernaculars we have identified: Hurrian and Hattian. Hurrian names are not numerous in the texts published so far (Wilhelm 2008; Kloekhorst 2019:65), but some exist. It may thus be interesting to consider the role of Hurrians in the society of the  $k\bar{a}rum$ —for instance, the case of Nanip-LUGAL in TC I 33 (translation by F. Giusfredi):

[Thus speaks Aš]šur-Ṭab: say [to Niw]arhšušar, Kani, Mannum-balum-Aššur, and Innaya: (concerning) my tablet, open the container and retrieve the tablet about the half mina of silver and the debt interest of Kani, son of Nanip-LUGAL. Give Kani the tablet, then seal (again) the container and entrust it to Niwarhšušar.

An observation is in order. Some names are easily recognizable as Hurrian but others may be difficult to recognize. For example, Kani, the son of Nanip-LUGAL, may have had a Hurrian name, too, but there are no obvious ways to prove that his name is also Hurrian. This means that the Hurrian presence in kārum society may have been stronger than we would think if we considered only clearly recognizable Hurrian morphs. The integration of Hurrian people would not be surprising. The number of Hurrians involved in the kārum economy cannot be accurately measured, however, and they may have been little more than a significant minority, even in the southeastern part of the network of which Kaneš was one of the main gateways. Furthermore, given the strong cultural and territorial contiguity of the Assyrian world and the North Mesopotamian core area of the Hurrian civilization, it is very difficult to establish whether the presence of Hurrians was due to a previous settlement in the area or, as seems far more likely, they arrived with the Assyrians, following the trading network. Nor are very many definitively Hattian names attested, already identified by Garelli (1963). But even limiting oneself to the names that present a decent Hattian morphology (e.g., the -il final morpheme, regularly rendered with the sign IL<sub>5</sub> in the local syllabary), the examples show a full involvement of the Hattian people in the economy. In TC 111 97, Mr. Kazhanuil  $(k\dot{a}-az-ha-nu-il_5)$  is in charge of carrying and possibly guarding 10 minas of fine copper; in TC 111 158 Mr. Kitukail  $(ki-t\dot{u}_3-k\dot{a}_3-il_5)$  carries fine clothes. As is also the case with Hurrian, some Hattian names may be unrecognizable based on our current formal knowledge of the language. A Hattian-sounding Mr. Aniškipil  $(a-ni-i\dot{s}-ki-pi-il_5)$  is the father of Mr. [A?]naraniki ([a]-na-ra-ni-ki) in TC 111 191, 33, and the name of the latter does not strike us as recognizably Hattian. Of course, a father with a Hattian name might have had a son with a non-Hattian name for many reasons: multiple onomastics existed in many interface areas of antiquity, and the linguistic profile of one parent might have prevailed in mixed families. It is impossible to exclude the possibility that Hattian names are more numerous in the corpus than we can recognize.

Our ability to safely identify both the Hurrian and the Hattian anthroponyms in the Old Assyrian corpus is seriously limited. This is only partly due to our incomplete knowledge of both languages. The Old Assyrian simplified and graphemically approximative syllabary is a poor system for writing even the peripheral variety of Akkadian employed at the  $k\bar{a}rum$ ; when phonetic and morphological adaptations of foreign names come into play, even segments from well-known languages (such as Luwian) may be difficult to identify.

## 3.4 Phenomena of Language Interference during the Old Assyrian Phase

Onomastics may point to the linguistic pedigree of families within a group but does so in a rather indirect fashion. From the personal names in Kaneš, we learn that many non-Akkadian individuals connected to the  $k\bar{a}rum$  were Hittites; Luwians, Hattians, and Hurrians also existed but seem to have been a minority. The Old Assyrian corpus, however, can provide further data on the relationships between the different groups. Furthermore, speculations have been made in the literature about possible cases of interference between local languages and groups that go well beyond the level of immediate interactions that can be spotted in the Assyrian texts. It is necessary to evaluate the data and hypotheses to weigh such general interpretations.

## 3.4.1 Lexical Interference

Interference between languages can be divided into two main categories: lexical interference and grammatical interference. The intensity of each type may depend on several factors, mostly the degree of compenetration of the groups of speakers within a mixed society and the functional efficiency and prestige of each language. Lexical interference from the local languages or other minority languages is attested in the Old Assyrian corpus and is not limited to documents coming from archives owned by Anatolian or otherwise non-Akkadian people. Loanwords are generally easy to identify despite the suboptimal graphemics of the Old Assyrian cuneiform, which does not mark double consonants.<sup>26</sup> Adaptation often involved the addition of a nominal morpheme *-Vnn-* to the theme of the model word. For instance, the Hittite *tuzzi-* produced *tuzzinnum* (a group of people and possibly a type of estate),<sup>27</sup> and the Luwian *ubadi-* produced *ubadinnum* (a type of service or estate).<sup>28</sup> This theme extension may have originated inside Anatolian (Marazzi 2010) or could have been an Akkadian phenomenon (Giusfredi 2020a). Other idiosyncrasies involved the rendering of vowels, in particular the transformation of graphic [a] in [u] in interconsonantal contexts—for example, the Hittite *haluga-* (message) > Old Assyrian *hulugannum* (generally analyzed as Hittite, but possibly Luwian according to Vernet Pons 2014) or the Hittite *išparuzzi-* (beam or bar) > Old Assyrian *ispuruzzinnum*; these, however, may reflect Hittite-internal phenomena as hypothesized by Kloekhorst (2008; cf. also Dercksen 2007) and by Simon (2020d, who prefers to see an /a/: /o/ allophony).

As emerges quite clearly from the previous scholarship,<sup>29</sup> the majority of the admittedly few assured loanwords seem to come from Hittite.<sup>30</sup> Hittite loans are mostly words for realia or otherwise concrete terms, with *tuzzinnum* being a partial exception. Another alleged 'abstract' term, *ishiulanu*, has been shown to mean not 'treaty' but 'belt' (Simon 2015), thus reducing the number of abstract administrative terms to the sole case of *tuzzinnum*.<sup>31</sup>

Luwian loans are rare but include the designation of the 'interpreter,' *targu-mannu* (from the *tarkummi-* 'turn'), and the aforementioned *ubadinnu*, both referring to social categories rather than objects or commodities. The number of Hurrian words is similarly limited, with *unuššu* (obligation) being at least dubious and based on a remote comparison to Alalah and Ugarit Hurrian.<sup>32</sup> The title *alahhinnu* ('overseer,' vel sim., based on our research representing

<sup>26</sup> For an introduction to Old Assyrian grammar and graphemics, see Kouwenberg 2017a.

<sup>27</sup> Cf. Dercksen 2004a; Giusfredi 2020a.

<sup>28</sup> Cf. Dercksen 2004a.

<sup>29</sup> For example, the seminal work by Bilgiç 1954 and, more recently, Dercksen 2004a, Schwemer 2005/2006, and Marazzi 2010.

<sup>30</sup> For a different view, cf. Vernet Pons 2014, who suggested that a Luwian origin may be assumed in additional cases.

<sup>31</sup> However, one should remember that it has been sensibly hypothesized that a number of Assyrian titles unique to the Old Assyrian corpus from Anatolia may be translations of local Anatolian designations (Michel 2011b:323).

<sup>32</sup> Cf. Dercksen 2004a:140–141. On *unuttu* in the Ugaritic texts, see van Soldt 2010:97, with references to previous scholarship. For the evidence from Alalah, see von Dassow 2008:162– 163.

almost two thirds of the occurrences of alleged Hurrian loans in the corpus, with abstract *alahhinnutum* indicating an office assigned by the local prince in Neşr. C1; Veenhof 1989:518), the *šinahilum* (another title with abstract *šinahilutum*, also assigned by the prince), and *uruzannu* (feminine in the only clear occurrence in CT III 131, a type of table) remain the few assured cases however, as these terms also occurs in other Akkadian corpora of the Middle Bronze Age and of later phases,<sup>33</sup> and since Hurrians and Assyrians both originated from Northern Mesopotamia where they co-existed for a long time, the innovation must not necessarily have occurred in the Anatolian *kārum*-society.

#### 3.4.2 Grammatical Interference

Besides loans, cases of grammatical interference have been identified, generally in archives that belonged or probably belonged to Anatolians. These have been studied by Dercksen (2007) and Michel (2011a) and, along with some uncertainties with the use of cuneiform, include the mistaken use of grammatical gender in nouns and verbs, as well as the use of Hittite morphological endings in Akkadian context.

Mistaken gender within nominal phrases usually involves the use of the wrong possessive pronoun as in the following example:

TC 111 214a Šašalika (wife of *Ni-ki-li-et*) ... ašar libbi=šu (expected: libbi=ša) illak "Šašalika [...] may go where (s)he wants"

Here the expected form of the feminine possessive is replaced by the masculine. Confusion in the use of Akkadian pronominal elements continued to exist in the later cuneiform production of the Hittite royal archives, so this type of mistake is not exclusively attested in the Old Assyrian production. However, it is quite likely that in both scenarios non-native command of Akkadian by the scribes played a role.

See Dercksen 2007:37–38. Other possible loans listed there are: *uthurum*, a mark or sign, mostly used in idiomatic expression in contracts, the of which etymology is doubtful and which may be connected to a word attested in Mari (*at-har*<sup>1</sup>; see Birot 1933:49; on the unlikelihood of a connection to Hattian *uthuru* see Dercksen 2004c); *purulli*, an official, whose etymology appears very tentative and which would also not be exclusive to *kārum* Akkadian; the problematic hapax *aštapiru* and the *apšuhu* knife which, if originally Hurrian, would be the only term in this list who is currently unattested in Akkadian corpora outside Kaneš. Not listed by Dercksen is the form *matlišhum* or *matlihšum*, presented as Hurrian by Lewy (1956:32), but for which no Hurrian comparanda actually exist. On Hurrian in the Old Assyrian corpus, see now also Giusfredi (forthcoming-c).

As for mistaken gender marking on the verbal inflection, a good example is the following, already offered by Michel (2011a):

# Kt c/k 1637, 6–13 Tepulka u Šuppianika DUMU.MUNUS((.MEŠ))<sup>34</sup>Kunuwan izuzzū=ma (expected: tazuzzā) bētam rebētam Šuppianika ilqe (expected: talqe) bētam šaniam Tepulka talqe

"Tepulka and Šuppianika, daughter(s) of Kunuwan, share (the inherited estate): Šuppianika took the house (in/with) the square, Tepulka took the other house"<sup>35</sup>

Here, not only the masculine is used for the feminine, but this happens in two of the three inflected verbs, with the third being correctly inflected as a feminine third-person singular preterite. Ms. Tepulka is treated as a masculine complement with respect to the verb  $z\hat{a}zu$  and a feminine complement with respect to the verb  $leq\hat{u}$ , indicating that the scribe was confusing the forms rather than the referents. As neither Luwian nor Hittite distinguish between masculine and feminine and both lack gender marking on the verb, there seems to be no reason to doubt that the etiology of the mistake was the use of Akkadian as an imperfectly mastered second language.<sup>36</sup> Other mistakes, such as the omission of conjunctions or the confusion of singular or plural, are not specific to the linguistic identity of the author of the texts and may be attributed to second-language competence only when they occur in tablets that belonged with certainty to Anatolian archives.<sup>37</sup>

The other type of morphological interference, thoroughly discussed by Kloekorst (2019:50-53, with extensive references), is repredented by the use of Anatolian grammatical ending attached to personal names. The examples presented by Kloekhorst are quite compelling and include direct cases but also

<sup>34</sup> Contrary to the claim by Michel 2011a, the lack of the logographic plural was not necessarily a grammatical mistake. It could be merely as a sign of poor command of the logographic inventory.

<sup>35</sup> Cf. Albayrak 2005:101.

<sup>36</sup> Kloekhorst's observation (2019:49) that Hattian should not be the model language for this mistake is an important remark. However, while it is true that grammatical gender agreement seems to exist in Hattian nominal morphology and the possessive prefixing system (cf. Simon 2012:100–108, 129–130 for a critical discussion), the typical Semitic marking of gender on the verbal inflection would have been as exotic for a Hattian speaker as it was for a Hittite or Luwian one.

For a critical discussion of the mistakes found in the Old Assyrian texts, see also Kloekhorst 2019:47–53.

genitives (KIŠIB *tù-ut-hi-li-áš* 'seal of Tuthaliya') and datives (*a-na la-ka-ni* 'to Lakani') employed in fitting morphosyntactic positions. More debatable is the problem of alleged grammatical endings attached to unclear foreign words (Kloekhorst 2019:52–53): since the forms have no etymology, it is impossible to establish whether the final part corresponded, indeed, to a Hittite inflectional ending.

## 3.5 Middle Bronze Age Central Anatolia as a Scenario of Interference between Local Languages

The mixed onomastics and interference phenomena that emerge in the Old Assyrian corpus indicate a situation in which local speakers of Anatolian languages (and possibly to a minor extent, Hattians and Hurrians) were integrated into the *kārum* society. Linguistic interference involving Assyrian is not, however, the only type of interference that we can reconstruct, even though Assyrian and Assyrian-related evidence play a crucial role in the age under discussion. Indeed, in an inspired 2008 paper, Goedegebuure hypothesized that the linguistic typology of Hattian and some hints deriving from Middle Bronze Age toponomastics point to the existence of a mixed society involving sociolinguistic interference between Hattian and an Indo-European language before the penetration of the Assyrian element. The crucial early toponomastic data are the early thematization of the Hattian toponym Hattuš as Hattuša in the Mari letter M.8426+9046 (Klinger 1996:88 and Ziegler 1996:480)<sup>38</sup> and the presence of the (probably) Anatolian toponym A(m)kuwa instead of the Hattian Hanikka (Klinger 1996:190–191).

It would be much too daring to call this type of evidence conclusive, but it certainly does point to a scenario of wide contacts. However, the superposition of Indo-European languages and Hattian, with a substrate-superstrate scenario, is not proven by these data. Interaction in interface areas is sufficient to produce vernacular adaptations, resulting in multiple competing designations for given towns or cities.

Structurally, Goedegebuure (2008) identified a number of typological peculiarities of Hattian that do not follow the standard implicational universals, which would be the result of a shift induced in Hattian by intensive contacts with an Indo-European population. Most of these features involve the syntactic typology of the language, which is generally reconstructed as VO, but contains

The second case mentioned by Goedegebuure is less significant: in KTK 10 (Larsen 1972: 100–101) the form  $Ha-t\dot{u}\cdot\check{s}[a]-i-a[m]$  may well be built on an *a*-themed toponym, as per Hecker 1968, but the adjectival formation could be analogical or depend on a Semitic thematization.

a number of patterns that accord instead with an OV language. As the model is based on the Hattian texts from the Hittite archives, it will be discussed in Chapter 9. For the purposes of the present chapter, it suffices to say that if the analysis is correct, it points to a phase of cultural and linguistic contact that would correspond roughly to the Middle Bronze Age.

A further case of contact between Hattian and the Indo-European languages of Anatolia, which would have taken place very early and has reflexes in the onomastics of the Old Assyrian corpus, may be represented by the -šara compounds of Hittite (and the equivalent -ašri compounds of Luwian) building a natural gender morph that did not become a grammatical category.<sup>39</sup> If induced as a calque on the agglutinative Hattian morphological minimal pairs of the type *katte* (king): *kattah* (queen), peculiar compounds such as the Hittite haššušara- 'queen' (from haššu 'king') and the Luwian nanašri- 'sister' (from nana- 'brother') would have been generated before the kārum because the morphs are already present in the Kaneš corpus of personal names (Kloekhorst 2019:54-57). Therefore, even if a precise identification of the specific Anatolian language that was in contact with Hattian will not be attempted here (Goedegebuure makes a case for Luwian, or Proto-Luwian, but Palaic is also a reasonable candidate, and Hittite is not out of the question either), and no precise substrate-superstrate relationship can be described for such an early and opaque historical period,<sup>40</sup> there is no reason to refuse the sensible idea that different linguistic and cultural components were in contact in Anatolia during a pre- and protohistorical phase.

Before the cultural colonization of Anatolia by the Assyrians, central Anatolia appears to have been inhabited by populations with different languages that were probably involved in complex sociolinguistic interactions. However, a more fine-grained description of the mechanics of the superposition (if any) of the Indo-European and non-Indo-European components can only be speculative. That the Hattians and Anatolians were in a hierarchic relationship with respect to social, economic, and/ or linguistic prestige is very possible, but the exact roles are not easily reconstructible and one cannot exclude the possibility that different equilibria were reached in different areas of central Anatolia. The limited quantity of Hattian loans in Hittite in the Late Bronze Age may indicate

<sup>39</sup> Cf. Giusfredi and Pisaniello 2020.

<sup>40</sup> It is a fact, however, that grammatical interference in Goedegebuure's model is unidirectional, which would make of Hittite the substrate language. This is consistent with the prestige loans that entered Hittite, but it is surprising that the Hittite language, if it functioned as a substrate, only received the less than 30 loanwords that are attested in the Hittite archives.

that Hattian did not lend many lexical elements, which is typical of a substratum, but the possible extension of typological features from Hittite to Hattian speaks against a higher prestige for Hittite, as this is a trait typical of substrata. In sum, the aporetic aspects of these problems may have resulted from the involvement of non-Hittite Anatolian groups in the protohistorical contacts, which would make the evidence from Late Bronze Age Hatti an unsuitable heuristic tool for the earlier phases of the Middle Bronze Age.

In the Old Assyrian age proper, the  $k\bar{a}rum$  society was certainly mixed and complex, with different cultures and languages coexisting and orbiting around the Assyrian-driven trade economy. The trade involved Hittites and Luwians, as well as a minority of Hattians and possibly some Hurrians. The apparent dominance of Hittite onomastic elements over the other three recognizable components is certainly due to the geographical collocation of Kaneš; in other areas of the trading network, the weight of the demographic components may have been different. To better support this diversified scenario, it is now necessary to describe the context of the Assyrian network in terms of historical geography.

#### 4 The Geography and Scope of Old Assyrian Trade

The *kārum* and *wabartum* making up the Old Assyrian network were all associated with indigenous urban centers whose names, in most cases, broadly correspond to toponyms attested in later Hittite texts. Despite ongoing debates on individual localizations, the comparison between the two geographic corpora permits a fair reconstruction of the scope of the Old Assyrian trade (Fig. 4.1). The caravans started from Aššur and made a long journey to reach the Euphrates at Hahhu. Thence they proceeded to Kaneš across the Antitaurus in the Maraş-Elbistan area. Kaneš served as the hub for caravans departing on several routes that led across Anatolia in an area extending from the Taurus to the Pontus and the Black Sea, and from the Phrygian highlands to the northern Konya plain.<sup>41</sup>

As mentioned above, investments in tin and textiles imported from Mesopotamia to Kaneš produced a return in silver and gold that was eventually shipped to Aššur. But that constituted only the main trunk of a complex endeavor that involved intermediate local circuits focusing on other commodities and models of exchange (Fig. 4.1). A key node in the Anatolian network north and west

<sup>41</sup> Forlanini 2008; Barjamovic 2008 and 2011.

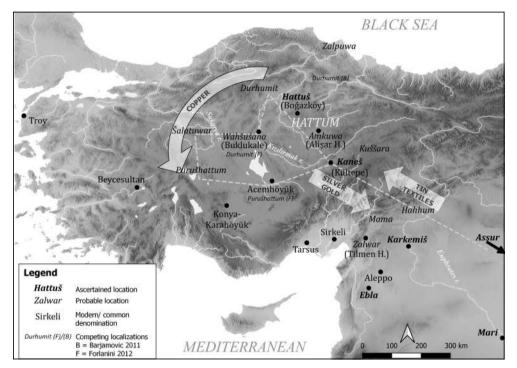


FIGURE 4.1 Map of MBA Anatolia, with the main trajectories of Old Assyrian trade (dashed line) and key places mentioned in the text

of Kaneš was the *kārum* of Durhumit (the Hittite Durmitta), a regional market where specialized Assyrian firms traded large quantities of tin, wool, and textiles in exchange for copper. It has been argued that Durhumit was a major hub for the collection of copper shipments from a network that controlled the copper-rich ores of the Pontic area.

Suggested localizations for Durhumit/Durmitta range across the whole Kızılırmak bend, from the eastern sector (between Sivas and the upper Delice basin), to the north (between Zile and Merzifon), and from the southwest (at or around Büklükale in Kırıkkale province) to the northwest (the mid-lower Kızılırmak around Çankırı).<sup>42</sup> The last proposal seems the most reasonable on account of the arguments recently advanced by Kryszeń (2016:343–387). In this geographic collocation (Fig. 4.1), the role of Durhumit/Durmitta as an important gateway for the Old Assyrian copper trade, and later for Hittite engagements with the Kaška and the northwestern peripheries, makes much more

<sup>42</sup> See Kryszeń 2016:344, map 9, and Corti 2017a:232, with references to the literature.

sense. The Çankırı area, in fact, is connected to the east and southeast through the Çorum and Delice Çay basins and the north, west, and south through the Çankırı and Kızılırmak valleys.

The copper trade fuelled by the *kārum* of Durhumit did not have an endpoint in the Assyrian market itself as the copper purchased was immediately reinvested in other Anatolian circuits to increase bargaining power over the silver trade.<sup>43</sup> The main target of the copper circuit was the city and *kārum* of Purušhattum (in Hittite, Purušhanda, Paršuhanda, or Parašhunta). This centre was long identified with Acemhöyük (Fig. 4.1), an excavated site in Cappadocia that yielded the vestiges of a prosperous MBA settlement that was intensively frequented by Assyrian merchants and entertained contacts with Old Syrian centers.<sup>44</sup> In recent years, however, Barjamovic advocated a more westerly localization that would seem more attractive or at least closer to a realistic scenario (Barjamovic 2011:357-378).45 Barjamovic also argued that Purušhattum was an interstitial market of the Old Assyrian trade, lying at the juncture of multiple systems of exchange. In fact, transactions attested in Purušhattum suggest that this city was responsible for the inflow in Assyrian markets of huge quantities of silver and gold acquired from a network beyond the reach of Old Assyrian merchants. In exchange, the Assyrians could allow imports of equally large amounts of copper acquired in Durhumit into Purušhattum and allied networks. This evidence, in addition to fluctuations in prices conducive to a market economy of investment and profit, suggests that Purušhattum was, like Aššur, a gateway of commerce straddling multiple exchange networks (Barjamovic 2011:372-375). It seems clear, therefore, that Kaneš, Durhumit, and Purušhattum represented nodes in a sort of tripartite system that was meant to support the Old Assyrian network in Anatolia and in turn connect it with other circuits of exchange.

This organization of the Old Assyrian trade seems to have changed in the last phase documented by Old Assyrian sources, which corresponds to the

<sup>43</sup> On the copper trade in Old Assyrian Anatolia, see Dercksen 1996.

<sup>44</sup> Özgüç 1966; Del Monte and Tischler 1978:323–324, s.v. 'Purušhanta'; Del Monte 1992:128, s.v. 'Purušhanta'; Kawakami 2006. For an alternative localization near Konya (more precisely, at Konya-Karahöyük), see Bilgiç 1945–1951:20; Alp 1994, and the arguments raised against it by Forlanini (2008:66).

<sup>45</sup> Pace Forlanini (2008:65–67; 2012), Barjamovic's reconstruction fits well with the Hittite evidence. In the Great Prayer of Muwattalli II (CTH 381), Purušhanda is grouped with Ušša, Mount Huwatnuwanda, and the Hulaya River land in the paragraph devoted to the cults of the Lower Land, a region broadly corresponding to Classical Lycaonia (§ 43; ii 38–40). This areal framework accords better with Barjamovic's proposal than the traditional Cappadocian localization of Purušhanda at Acemhöyük.

Kārum Ib level at Kaneš.<sup>46</sup> Exchange during this period seems to have increasingly focused on local circuits in copper and wool, with a more limited inflow of tin and textile from Assyria. Likely related to this development was the growing number of Assyrians residing permanently in Anatolia (*wašbūtum*). At this stage, they became a group of their own, distinct from the Assyrians involved in the overland trade. Based on textual attestations of toponyms, scholars have also argued for a general contraction of the Kārum Ib network, especially its western branches. The relative paucity of Kārum Ib records, compared with those available for the previous generation, and the growing number of toponym attestations in this period, including a mention of Purušhattum (Kt 90/k 359), suggest caution against too pessimistic interpretations, which might be biased by the scattered nature of the findings. The apparent marginalization of western nodes can nonetheless be contrasted with the increasing importance of the Kızılırmak area and the eastern branches of the Old Assyrian trade (e.g., in Ma'ama, in northern Syria). This is perhaps linked with the coeval expansion of Syrian markets, chiefly Mari, which could have created new opportunities in this direction.

## 4.1 The Significance of Purušhattum in the Political and Cultural Landscape of Second Millennium Anatolia

In addition to its prominent role in the Old Assyrian commercial landscape, Purušhattum/Purušhanda held a special place in the political and cultural map of second-millennium BCE Anatolia. The  $k\bar{a}rum$  of Purušhattum likely responded to a different taxation system as to those applying to Kaneš and the other  $kar\bar{u}$  of the Kızılırmak area, and texts also seem to refer to separate metrological standards.<sup>47</sup> This might indicate that Purušhattum participated in a socioeconomic network largely independently of the core area of the Old Assyrian network.

Politically, Purušhattum is notably the only center known to have been ruled by a 'great king' (*ruba'um rabium*) during the Kārum II period. This would suggest that Purušhattum enjoyed a hegemonic status at an early stage. A reduction of Assyrian activity at Purušhattum during Kārum Ib would be indicated by the poor representation of this city in the Kültepe texts dating to this period, in which it is mentioned only once. This does not mean that the city ceased to exist, nor that it lost its political independence. According to the Anitta Text, composed during the Hittite period but relating to events of the Kārum Ib

<sup>46</sup> Barjamovic et al. 2012:73–80.

<sup>47</sup> Dercksen 2004b:140–144; Barjamovic 2011:375–376.

period (CTH 1), Anitta met a 'Man of Purušhanda' (LÚ <sup>URU</sup>Purušhanda; ii 73– 79) after carving out a vast domain across central Anatolia, based at Kaneš.<sup>48</sup> Despite Anitta's initial aggressive approach, there is no explicit mention of a war between him and the Purušhandean. Instead, the latter presented Anitta with royal insigna (an iron scepter and an iron throne), an act that most scholars interpret as a spontaneous submission.<sup>49</sup> Drawing on parallels with coeval Mesopotamian alliance protocols, Dercksen (2010) suggests on the contrary that the Man of Purušhanda presented gifts to Anitta as a ruler of equal rank.<sup>50</sup> If so, the Anitta Text would attest to a balanced competition between Kaneš and Purušhattum/Purušhanda during Kārum Ib.

We do not know what happened during the documentary gap of Kārum Ia, but Purušhanda would resurface again in Hittite texts referring to the Old Kingdom, at times as a prominent subordinate client or as a rival of the Hittite kings residing in Hattuša. By the late 16th century BCE, Purušhanda was definitively integrated into the Hittite kingdom as part of the storehouse system established by Telipinu in his edict and, about, one century later became part of the Lower Land province.<sup>51</sup>

The political prestige of Purušhanda is even projected back to the late third millennium by the epic of the King of Battle (*šar tamhāri*), which depicts the king of Purušhanda Nur-dahhi as the main opponent of Sargon of Akkad. According to this account, Sargon mounted a far-reaching campaign against the Anatolian city to avenge the mistreatment meted out to Akkadian merchants who had been dispatched there (Goodnick Westenholz 1997:102–139; Archi 2000). The text of the *šar tamhāri* is preserved in several versions, the oldest of which, in Hittite (CTH 310), was likely composed no earlier than the 15th century BCE.<sup>52</sup> No reflection of a campaign in central Anatolia is preserved in Old Akkadian records (2350–2200 BCE). Another Sargonic legend reported in an OA text from Kültepe involves several Anatolian toponyms, including Kaneš and Hattum, but contains no reference to Purušhattum.<sup>53</sup> Scholars generally agree that the *šar tamhāri* was a fictional story, in which various traditions were pulled together and readapted in a composition vaguely inspired by the

<sup>48</sup> Neu 1974:14–15; Carruba 2003:50–53, with further references.

<sup>49</sup> E.g., Neu 1974:35; Carruba 2003:128; Bryce 2005:39. According to Forlanini (2008:52), "the king of Purushanda, although militarily weaker than Anitta, still enjoyed great prestige among Anatolian rulers."

<sup>50</sup> For similar views, see Güterbock 1938:139 and Steiner 1984:64.

<sup>51</sup> Matessi 2016.

<sup>52</sup> Rieken 2001.

<sup>53</sup> Günbattı 1997.

commercial realities of late-third and early second-millennium BCE Anatolia (Chapter 3).<sup>54</sup> It has been noted that the Hittite version of the *šar tamhāri*, like all the others, seems to sympathize with Sargon, showing no 'Anatolian' solidarity for the Purušhandean.<sup>55</sup> This is not surprising in light of the fact that Sargon represented a model in Old Hittite ideologies of kingship. The *šar tamhāri* can thus be envisioned as a literary expedient composed and manipulated to represent the Anatolian tensions and conflicts of the early second millennium BCE.<sup>56</sup>

Based on the LBA evidence on the Lower Land, we can assume that Luwian was the dominant language spoken in the territory of Purušhattum/Purušhanda during the second millennium BCE. Yakubovich (2010:245–247) and, especially, Forlanini (2017b:136) even interpret the kingdom and territory of Purušhanda as a forerunner of Luwiya, attested in a few paragraphs of the OH versions of the Hittite Laws vis-à-vis the land of Hatti (Laws §§ 5:19–21, 23; Chapter 5, § 3). In this regard, we should bear in mind that in the OA and Hittite texts, Purušhattum/Purušhanda had a very specific meaning, chiefly denoting a *kārum* or a political/administrative division relating to the eponymous center and its territorial domain (however large it was at any point in time). In contrast, Luwiya was a vaguer geographical reference in the only text where it is found, i.e., the Hittite Laws (Chapter 5, § 3).

There are a few OA attestations in which Purušhattum seems to play a role akin to Luwiya, appearing in contrastive juxtaposition with Hattum in formulaic expressions like 'be it in Hattum or Purušhattum' (*lu ina Hatim lu ina Burušhatim*). Barjamovic (2011:57) takes them to reflect a general bipartition in the 'mental map' of central Anatolia and lists a total of five occurrences of this expression.<sup>57</sup> This evidence per se is quite narrow, but the parallelism proposed between Hattum-Purušhattum, on the one hand, and Hatti-Luwiya, on the other, is far from compelling in any case.<sup>58</sup> The pair Hatti-Luwiya has its vantage point in one of the two elements (i.e., Hatti) and thus reflects an inside (Hatti)—outside (Luwiya) separation between two regions (Chapter 5, § 3). Conversely, the pair Hattum-Purušhattum in OA sources always refers to an unnamed third point in between, namely Kaneš. The impression is that Hattum and Purušhattum defined not two separate regions but rather two opposite

<sup>54</sup> Van de Mieroop 2000; Archi 2000; Torri 2009; Bachvarova 2016:166–198; Osborne 2018.

<sup>55</sup> Van de Mieroop 2000:158–159.

<sup>56</sup> Torri 2009.

<sup>57</sup> See also Barjamovic 2021:129 Table 1.

<sup>58</sup> The same holds true for the parallel that Barjamovic makes with the Hittite Empire division of Anatolia in Upper Land, Lower Land and Hatti.

poles of a geographic continuum, as a shorthand for the whole extent of the Old Assyrian network that gravitated around Kaneš.

At this juncture, some observations on the toponym Hattum are in order to better contextualize the opposition with Purušhattum. They will also shed light on the possible origins and semantic shifts of the name that would be later used to denominate the core region of the Hittite domain (KUR <sup>URU</sup>HATTI) and would become the root of the Hittite designation for the Hattian language (<sup>(URU)</sup>hattili-).

### 4.2 Hattum and Hattuš

In OA sources Hattum consistently appears in contexts suggesting that it was a geographic region rather than a city,<sup>59</sup> neither an  $\bar{a}lum$  nor  $k\bar{a}rum$  named after Hattum is ever attested. This would be at odds with the Old Assyrian custom of referring to the lands  $(m\bar{a}t\bar{u})$  involved in the Anatolian network by the name of a major seat of the local ruler and/or of a commercial station (e.g., māt Wahšušana; māt Purušhattim, etc.). In all likelihood, Hattum is etymologically related to Hatti, the later core territory of the Hittite domain that occupied the Kızılırmak basin.<sup>60</sup> The correspondence seems to work, at least in part, from a geographical perspective too. The OA evidence would place Hattum to the north of Kaneš, excluding Kaneš, Wahšušana, Wašhaniya, and Purušhattum from its south and western limits. The eastern and northern limits of Hattum are more elusive and, therefore, subject to differing scholarly interpretations. Nashef (1976) considered that Hattum included the later hometown of Anitta and Hattušili I, Kuššar, but the evidence in this regard is debatable and derived from a single text.<sup>61</sup> Be that as it may, Hattum was certainly distinct from Luhuzattiya, Hurama, Tegarama, and the other stations east of Kaneš.<sup>62</sup> This would further constrain Hattum within broadly the same geographic region later occupied by Hatti, that is, within the bend of the Kızılırmak River (Fig. 4.1).

<sup>59</sup> Barjamovic 2011:154.

<sup>60</sup> Weeden 2011:246.

<sup>61</sup> ICK 1,1. According to this text and other documents in the same dossier (Landsberger 1950b), a partnership bought 15 1/2 shekels of *amūtum*-metal in Hattum and, in Luhuzattiya, entrusted them to Šahaya, who carried them to Hurama. In Kaneš, Šahaya cheated the investor by falsely claiming that he had settled a debt to the palace in Kuššar for the trade partnership. Whether real or not, the debt contracted in Kuššar might have derived from a loan received by the partnership en route to Hattum, irrespective of where the *amūtum*-metal was purchased. The validity of Nashef's proposal is also disputed by Dercksen 2001, 58. See also Barjamovic 2011:159.

<sup>62</sup> Barjamovic 2011:158ff.

A core issue concerns the political status of Hattum during the Kārum period—in particular, its relationships with Hattuš. Lewy (1950) considered the two geographical entities to be mere synonyms for the city and land, thus projecting back to the Kārum period the equation of Hatti with Hattuša that informed Hittite geographic conceptions.<sup>63</sup> Landsberger (1950a–b) instead contended that Hattuš was only the city and Hattum indicated a larger regional unit. Finally, Dercksen (2001:59) interpreted Hattum in a narrower sense as an equivalent of the otherwise unattested expression \**māt Hattuš*. If any one-to-one association between Hattuš and Hattum existed, as a cityterritory dichotomy or synonymic pair, one would expect a closer match between the respective regional interactions attested in OA sources. Yet the analysis carried out by Barjamovic shows very little correlation. Hattuš participated in a local cluster, featuring as a main partner Šinahuttum. This city, however, never appears in the Hattum cluster of commercial relationships.<sup>64</sup> Conversely, major centers such as Wahšušana and Hurama figure prominently in relationship to Hattum, but do not appear in the Hattuš cluster.<sup>65</sup>

We should also refrain from anachronistically retrojecting a hegemonic role that Hattuš(a) did not acquire until later stages in its history. Based on the few available references, Hattuš does not seem to have been a particularly prominent political player beyond its area during the early phase of the Old Assyrian trade (Kārum II).<sup>66</sup> In this period, Hattuš was only one among many other city-states in the Kızılırmak area. Independent local rulers are attested at Tawiniya, Amkuwa, and Šinahuttum, all situated quite close to Hattuš. Perhaps Hattuš increased its influence later, during Kārum Ib, as might be suggested by Anitta's insistence on the conflict with the local king Piušti, the destruction of Hattuš, and the curse placed on the city. In the Anitta Text, known to us as a Hittite composition, Piušti is styled as 'king of Hatti/Hattuša' (LUGAL <sup>URU</sup>HATTI</sup>), as usual in the Hittite form of the title. However, in the newly discovered OA letter KBo 71.78, this same king, if identical with Wiušti, claims kingship in Hattuš (r[uba'um] ša' Hattuš), not in Hattum, which is consistent with the known Old Assyrian political landscape.<sup>67</sup>

The overall impression is that the place-name Hattum did not have a specific geopolitical meaning but rather indicated a vaguer geographic region composed of multiple territorial realities, including Hattuš and other city-states of

<sup>63</sup> On Hatti and Hattuša, see, most recently, Kryszeń 2017.

<sup>64</sup> Barjamovic 2011:292–293.

<sup>65</sup> Barjamovic 2011:155–156.

<sup>66</sup> Otten 1957; Barjamovic 2011:294–295.

<sup>67</sup> Schwemer and Barjamovic in Schachner 2019:85–89.

the Kızılırmak bend. This is also supported by the association between Hattum and loose expressions like *libbi mātim* 'heartland' that seems to emerge from some OA sources.<sup>68</sup> As mentioned above (§ 4.1), when contrasted with Purušhattum, Hattum was a shorthand for the northeastern pole of the kārum network. Yet Hattum had also a very distinct place within the Old Assyrian mental map, especially when contrasted with the land of Kaneš. Symbolically, Hattum and Kaneš appear one after the other among the entities confronted by Sargon of Akkad in the OA Sargonic legend Kt j/k 97.69 A factual distinction between them is found in the well-known judicial statement Kt 87/k 275 that prohibits the selling of a female slave in the city and land of Kaneš but not in Hattum or the *mātum* (*šumma ana Hattim lū ana mātim*).<sup>70</sup> A sort of ideal division is thus made between (the land of) Kaneš and Hattum, and both are separated from 'the land,' which refers here to the rest of Anatolia.<sup>71</sup> In conclusion, Hattum was not a political entity on its own but was nonetheless a geographical reference in the Old Assyrian mental map of Anatolia, acquiring different meanings depending on the context. More specifically, it indicated a general region within the Kızılırmak bend as distinct from Kaneš and the rest of Anatolia.

This is at least the likely perception that foreign Assyrian merchants had of Hattum in their dictionary of the Anatolian space. In trying to define Hattum from an emic Anatolian perspective, however, we face a different set of considerations. Assyrians tended to readapt local place-names to their own language and script, and these mostly reappeared in later Hittite sources as variants that were only slightly different (e.g., Amkuwa/Ankuwa, Šinahuttum/Šanahuitta, etc.). There is no reason to doubt that the name Hattum also originated from local Anatolian designations. Kryszeń (2017:219) proposed that it was derived from a stem, \*hat(t)-, which would be shared by at least two other toponyms within the same area, Hattuš and Hatten. The same stem also recurs in the Hittite designation of the Hattian language, *hattili*-, and the Akkadian form *HATTI*, whether directly derived from OA Hattum or not. Since any specific political

<sup>68</sup> Barjamovic 2011:158–159. But see Kt 92/k 105, 9: *libbi mātim ša Ḫattim*, indicating that the 'heartland' could (also) refer to just part of Hattum (Dercksen 2001:58). Landsberger (1950b) argued for an equivalence: Hattum = *libbi mātim* = *mātum*, with the meaning 'countryside.' The term *mātum*, however, is now understood to refer either to specific territories (Veenhof and Eidem 2008:174) or to Anatolia in general (sometimes even in contrast with Hattum: see below) as opposed to the City (*ālum*), i.e., Aššur (Larsen 1976:250; Barjamovic 2011:162; and Barjamovic 2021:129).

<sup>69</sup> Günbattı 1997; van der Mieroop 2000:145 ff.

<sup>70</sup> Hecker 1997:165–167; Veenhof 2008:18.

<sup>71</sup> Barjamovic 2011:161–162.

meaning is excluded for Hattum, it is possible that this term derived from an ethnonym employed by Anatolians in the early second millennium BCE, presumably with reference to the Hattians.

To be sure, this should not be interpreted too strictly from a linguistic point of view. There is no implication that all of Hattum was inhabited by Hattians, nor that Hattian speakers constituted the totality or even the majority of the population of Hattum in the early second millennium BCE. Significantly, a town already attested in OA sources that was probably situated not far from Hattuša bore a good Hittite name: Šuppiluliya. Am/nkuwa was also located in Hattum and held an important role in Hattian cultic milieus. Yet the very name of the city most employed in both OA and Hittite sources is a Hittite version of the Hattian toponym Hanikka. A long list of inhabitants of Amkuwa, reported in an OA letter from Alişar Höyük (OIP 27, 49a+b), includes several names of Hittite etymology such as Šuppunuman and Šuppunahšu. The region of Hattum, therefore, appears as a mixed Hittite-Hattian linguistic context quite early in the second millennium BCE and certainly before the rise of the Hittite kingdom. In this light, Hattum might only be intended as the 'land of the Hattians' in a broader sense, that is, as a region where Hattian was a recognizable feature of the local cultural and linguistic landscape.

### 5 The Late Kārum Period and the Anitta Text (CTH 1)

The bulk of the Old Assyrian sources relate to the Kārum II period, roughly corresponding to the late 20th and 19th century BCE. Based on the eponym lists, the destruction of Kārum II at Kaneš can be situated around 1830 BCE.<sup>72</sup> A documentary hiatus of about a decade followed, perhaps due to a temporary retreat of Assyrian merchants from the colony, together with their archives.<sup>73</sup> During the subsequent Kārum Ib period, the Kaneš colony was resettled and the Assyrian archives became active again, although far less so than before. Notwithstanding their small number (about 500), the Kārum Ib texts offer some rare glimpses into Anatolian historical facts, sometimes with a specificity unseen in the previous period. In particular, for the first time, several Kanešean kings and their highest officers come to be known by name. These details have been gleaned most often from notarization formulas in legal transactions, the so-called *iqqāti* documents.<sup>74</sup> Through comparison with other

<sup>72</sup> Veenhof 2003.

<sup>73</sup> On this problem, see Barjamovic et al. 2012:64–73.

<sup>74</sup> Forlanini 2004a; Kryszat 2008a–b.

available sources, these attestations allow the reconstruction of a dynastic sequence that is likely complete for the Kārum Ib period at Kaneš: Hurmeli (?), Harpatiwa, Inar, Waršama (Inar's son), Pithana, Anitta (Pithana's son), and Zuzu.

An important historical source for the Kārum Ib period is the famous letter sent by Anum-hirbe of Ma'ama to King Waršama of Kaneš, written in Old Assyrian cuneiform and found in the so-called Waršama palace on the Kültepe mound.<sup>75</sup> This text relates to a diplomatic crisis between the two kings that was triggered by one of Waršama's vassals, the ruler of Taišama. This personage is accused of having promoted unlawful alliances and raided Ma'ama's territory, taking advantage of Anum-hirbe's temporary weakness after a recent defeat. Taišama's behavior is compared by antithesis to that of Anum-hirbe's vassal state Šibuha, which never harmed Kaneš. The political geography reflected by this situation was radically different from that which was portrayed in the previous generation of OA sources. During the Kārum 11 period Assyrian merchants mostly moved in a landscape of small city-states that occasionally formed loose coalitions, whereas Anum-hirbe's letter reveals a system of larger hegemonic formations that projected their power over one or more client states.<sup>76</sup> This process of territorial integration is somehow mirrored in coeval Mesopotamia by the more ambitious expansionistic projects attempted by Šamši-Addu in the north and, later, Hammurapi and his successors in Babylonia. In the case of Ma'ama and Kaneš the scale was certainly smaller, but still impressive relative to the Anatolian scenario. At Mari and in later Hittite historical legends, the same Anum-hirbe is attested as the king of both Zalwar and Haššu. This information, in addition to a much later mention of Anum-hirbe's monument on Mount Atalur that was reported in the annals of Salmanassar III, argue that Anum-hirbe's domain should be localized in the Antitaurus area, between the Kara Su River valley and modern Maraş (Fig. 4.1).<sup>77</sup> If so, regardless of the positions of Taišama and Šibuha, which cannot be ascertained, the hegemonic spheres of Ma'ama and Kaneš must have been quite large, perhaps encompassing on one side or the other such major centers as Šalahšuwa or Luhuzattiya.<sup>78</sup> Incidentally, Anum-hirbe also informs us of an earlier war conducted by Waršama's father Inar against the land of Haršamna, which probably

<sup>75</sup> Kt g/t 35. See Balkan 1957; Michel 2001:no. 62.

<sup>76</sup> Klinger 2014.

<sup>77</sup> Miller 2001.

<sup>78</sup> Barjamovic (2011:191) presents independent evidence for the possible absorption of Šalahšuwa under Kaneš rule during Kārum Ib. Mentions of Luhuzattiya completely cease after Kārum II, perhaps, but not necessarily, suggesting that this city had lost its independence.

lay at a short distance from Kaneš.<sup>79</sup> Anum-hirbe and his deeds had a later echo in Hittite scribal circles, as Hittite historical legends mentioning this king in connection with the cities of Zalwar and Haššu are preserved in a few fragmentary tablets (CTH 2).<sup>80</sup>

The most important historical source about the Kārum Ib period is preserved in a Hittite account of military deeds (CTH 1) that is told in the first person by Anitta, son of Pithana.<sup>81</sup> According to this text, Anitta and Pithana, natives of the city of Kuššar, conquered Kaneš (spelled Neša), and Pithana sat on its throne after overturning the local ruler. After succeeding his father, Anitta used Kaneš as a power base to launch military campaigns over a vast area that comprised the Kızılırmak bend and the territory of Zalpuwa, on the Black Sea. After prevailing over the latter, Anitta took its king, Huzziya, to Kaneš as a hostage, together with a statue of the Kanešean Sun god, that a former king of Zalpuwa named Uhna had abducted as booty. Within the Kızıl Irmak bend, a major rival defeated by Anitta was Piušti, the king of Hattuša (LUGAL <sup>URU</sup>HATTI). Hattuša was taken by night, destroyed, cursed, and made symbolically unproductive by sowing weeds on its terrain. In a second phase of expansion, Anitta, now claiming the status of 'great king' (LUGAL GAL), concentrated his efforts on the western side of the Kızılırmak, finding strong opposition from the 'Man (LÚ) of Šalatiwara.' This ruler eventually crossed the river Hulanna and unsuccessfully besieged Kaneš. A brief excursus on Anitta's building and hunting activities is inserted in the account of these events. Finally, Anitta turned to Purušhanda, whose ruler is presented again as a 'Man.' This time, however, the conflict was resolved peacefully, as the Man of Purušhanda acknowledged Anitta's power and became his ally.82

The Anitta Text would thus convey the memory of an attempt at constructing a hegemonic polity in central Anatolia at a point predating the expansion of Hattušili I. The composition is preserved in several manuscripts composed in Hittite during the Hittite period (KBo 3.22, OH/OS, is the oldest), but it likely reflects, at least in part, authentic accounts dating back to the Old Assyrian period. Indeed, were it a tradition invented from scratch for the sake of Hittite propaganda, it would be unclear how to fit it with the extant evidence.<sup>83</sup> Clear analogies might have sparked the interest of Hittite governing elites in transmitting the Anitta text: both Anitta and the founder of the Hittite king-

<sup>79</sup> Forlanini 2004a:370.

<sup>80</sup> Miller 2001.

<sup>81</sup> Neu 1974; Carruba 2003.

<sup>82</sup> Or subject, according to earlier interpretations. See above, § 4.2.

<sup>83</sup> Wilhelmi 2016:232. Pace Glatz 2020:61–62.

dom, Hattušili I, were from Kuššar and founded successful regimes elsewhere. Departures, however, are equally evident and can hardly be reconciled with Hittite ideological narratives. The passage on the curse of Hattuša, already present in the OH/OS manuscript, is the clearest example: what is the political gist of it for a Hittite subject, considering that Hattuša was the Hittite capital from Hattušili I on? Hattušili I not only founded his kingdom in the city that Anitta had destroyed and cursed but proudly took his name from it, imitated by at least one successor (Hattušili III).

The historicity of Anitta and his father Pithana as pre-Hittite Anatolian rulers is confirmed by independent evidence, as are some individual details of the Anitta Text. A sequence of two kings named Pithana and Anitta is attested at Kaneš during the Kārum Ib period. Related sources include a series of *iqqāti* documents, some drawn up under the supervision of Pithana and/or Anitta, and a bronze spearhead marked as belonging to 'the palace of Anitta, king' (É.GAL <sup>m</sup>*A*-*ni*-*ta ru-ba-im*). Other *iqqāti* documents attest Anitta's kingship at Amkuwa, confirming his hegemonic rule over more than one urban center of the Kızılırmak area.<sup>84</sup> In one of these documents (OIP 27 49a/b), Anitta bears the OA title of 'great king' (*ruba'um rabûm*), that matches the title LUGAL GAL that he claimed in his text (KBo 3.22 obv. 41).

A *ruba'um* named Wiušti, likely identical with the Piušti mentioned in the Anitta Text, ruled at Hattuš during the Kārum Ib period as is attested by the OA letter KBo 71.81.<sup>85</sup> This letter was found in a storage room of an administrative building located in the *kārum* quarter of Boğazköy-Hattuša. The eponym date of another OA document found nearby (KBo 71.95) provides a terminus *post quem* for the destruction layer sealing this building of 1748 BCE,<sup>86</sup> which is compatible with the supposed date of Anitta's destruction of Hattuša (ca. 1730 BCE).<sup>87</sup> In sum, there are no reasons to be too skeptical about the historicity of the political scenario depicted in the Anitta Text.

The question remains of how the memory of Anitta's deeds reached the Hittite court and was then transmitted during the Hittite period. The Anitta Text appears to be a compilation that drew on multiple sources. A boundary between at least two different original archetypes is found in KBo 3.22 obv. 33–35, in which Anitta concludes an account of the wars against Neša, Zalpuwa, Hattuša, and other localities with this statement:

<sup>84</sup> On the *iqqāti* documents of Pithana and Anitta, see Kryszat 2008a.

<sup>85</sup> Schwemer and Barjamovic in Schachner 2019:85–89.

<sup>86</sup> Schwemer and Barjamovic in Schachner 2019:46–47.

<sup>87</sup> Kryszat 2008b:207; Barjamovic et al. 2012:39.

These words [...] from a tablet at my gate. In the future may no one destroy this tablet. Whoever destroys it, let him be an enemy of Neša

Since this formula would be out of place in the middle of a coherent composition, it is generally interpreted as the concluding paragraph of a separate inscription dedicated by Anitta himself, presumably on the gate of his palace or a city gate at Kaneš. Most scholars, therefore, maintain that this was an original inscription of Anitta that was later blended with another account of his exploits (ll. 36–79) to form the Anitta Text as we know it.<sup>88</sup> As others propose, however, the Anitta Text might have had a more complex redactional history, originating from the combination and further manipulation of three or possibly even more original sources.<sup>89</sup>

Closely connected with the issue of transmission is the question of the language in which the Anitta Text was originally composed, which is part of a broader debate over the early stages of Hittite literacy. Apart from very few outliers in forms of Akkadian possibly linked with Syrian or other Mesopotamian circles (see below), all known records of the Kārum period were produced using the OA script and language. Old Assyrian was not only used by both Assyrian and Anatolian merchants but also was the official language of Anatolian chanceries, as exemplified by the  $iqq\bar{a}ti$  documents and letters treated above. Therefore, most scholars assume that the inscription 'of the gate' referred to in ll. 33–35 and the other source(s) conflated in the Anitta Text, were first recorded in Old Assyrian Akkadian and then translated into Hittite.<sup>90</sup> The later step would have occurred sometime during the Hittite period, that is, the time when the earliest known records written in Hittite were composed.

This appears to be the most reasonable scenario, judging from the evidence available so far. Although not conclusive, some positive evidence in the narrative suggests a phase of elaboration of the text within an Akkadian scribal environment.<sup>91</sup> The emphasis on building activities and the motif of the hunting king was not part of the usual Hittite apologetic repertoire, at least until the Late Empire period, but better matches Mesopotamian traditions.<sup>92</sup> To this observation, one may add Dercksen's (2010) proposed comparison between the

<sup>88</sup> Güterbock 1938; Carruba 2003; Archi 2015.

<sup>89</sup> Steiner 1984; Giusfredi 2019.

<sup>90</sup> Güterbock 1938; Carruba 2003:13–15; Archi 2015. Contra Neu 1974; Kloekhorst and Waal 2019, who argue for a Hittite primary composition.

<sup>91</sup> Goetze 1957:92; Archi 2015:4.

<sup>92</sup> But see Ünal 2016, who analyzed the hunt scene within an Anatolian cultural framework, proposing that it was somehow functional in religious processions similar to those attested during the Hittite KI.LAM festival.

is suggested more directly by the geography of Anitta's actions, which relates to a map of Anatolia probably more familiar to Old Assyrian merchants than Hittite scribes. Šalatiwara, in particular, was a prominent node in the Old Assyrian network and well attested in the related corpus (cf. OA Šalatuwar). By contrast, this toponym is almost absent in the Hittite corpus, and the few attestations outside the Anitta Text are also suspected to stem from a knowledge of Old Assyrian compositions.<sup>93</sup> These texts and other sporadic sources, including the Anum-hirbe legends mentioned above, prove that Hittite scribes had an access to Old Assyrian material, perhaps including narratives of Anitta's deeds.<sup>94</sup>

In his edition of the Anitta Text, Neu (1974) rejected the hypothesis of a translation from Old Assyrian sources, finding no sign of interference with Old Assyrian in the vocabulary and grammar of the text. He argued therefore that Anitta had the account of his deeds written directly in Hittite, that is, nešili, the native language of the inhabitants of Kaneš. Considering the lack of secure traces of record keeping in Hittite before Hattušili I, Neu's reconstruction did not receive wide acceptance. In a recent article, Kloekhorst and Waal (2019) discuss a group of "cushion-shaped" tablets written in Hittite, including the earliest known witness of the Anitta Text (KBo 3.22; OH/OS), arguing that they were composed outside Hattuša, before the Hittite Old Kingdom. Although this is theoretically possible, there is no fundament in the suggestion of the two authors that these tablets date to the Kārum Ib period.<sup>95</sup> More realistically, we can suppose that Hittite narrative styles and forms, after reaching a mature stage, influenced the translation of the Anitta Text to the point of masking any legacy of Old Assyrian. Moreover, it is theoretically possible, although not provable, that, during the transmission of the Anitta Text, OA material concerning Anitta was knitted

<sup>93</sup> There are only two other Hittite sources that mention Šalatiwara: KBo 4.13 and KBo 27.31. The former is a cult list of places that, according to Forlanini (2007), amply draws from archaic and, possibly, even Old Assyrian sources. The fragment of a ritual text KBo 27.31 is a clear reminiscence of the Old Assyrian period, mentioning the merchants of Kaneš and Šalatiwara, and even the *ummeānum*-men! See Ünal 1995:276; Forlanini 2008:60, fn. 14; and Barjamovic 2011:356.

<sup>94</sup> Ünal 1995.

<sup>95</sup> As Kloekhorst and Waal acknowledge, KBo 3.22 and the other "cushion-shaped" tablets display the typical Old Script ductus of Syrian origin, not the Old Assyrian one. The few texts with an atypical ductus found in the Kārum Ib archives of Kaneš (see below, § 6) were all seemingly composed outside Anatolia, and thus are hardly proof that Anatolian chanceries of the Kārum Ib period may have adopted non-Assyrian scribal habits for their official documentation. For a critical assessment of Kloekhorst and Waal's proposal, see also Klinger 2022;312–326.

together with other sources written (or orally transmitted?) in other languages. This would have introduced further distancing from the language of any original sources.

The last king known at Kaneš is Zuzu, estimated to have succeeded Anitta around 1725 BCE and ruled until the end of the 18th century.<sup>96</sup> The last dated text from Kültepe was produced around 1710 BCE. Sometime after this date the settlement of Kārum Ib came to an end for unclear reasons. During the following occupation phase, Kārum Ia, which may have lasted until the rise of the early Hittite kingdom, Kültepe was much reduced in size and did not yield any texts. After this phase, the settlement was abandoned until the Iron Age, perhaps due to permanent flooding caused by a rise in the water table.<sup>97</sup> Elsewhere—at Acemhöyük and Konya-Karahöyük-the last Kārum-period settlements were violently destroyed sometime during the 18th century. This would signal an intensification of political competition and warfare that would accord well with Anitta's account. As mentioned above, the Kārum-period settlement of Hattuš(a) was also destroyed around 1730 BCE, likely due to Anitta's conquest. Giving credit to Anitta's claims to have cursed the city and banned resettlement, scholars have long assumed that Hattuš(a) was abandoned for some generations after its destruction. Recent investigations, however, reveal that the *kārum* area was immediately resettled, albeit in a more haphazard fashion, in the so-called Zwischenphase, radiocarbon dated after 1720 BCE.98

#### 6 Non-Old Assyrian Commercial Networks

As already stressed (§ 1), the textual evidence does not permit tracking sociocultural developments in a pan-Anatolian perspective as the  $k\bar{a}rum$  network only occupied the eastern and central part of the peninsula. However, it is clear that the Assyrians were not alone in the commercial landscape of the Near East but part of a wider system of interlocking networks that connected central Asia with southeastern Europe.<sup>99</sup> In this context, Aššur was just one among several hotspots in Near Eastern trade, others being in Lower Mesopotamia

<sup>96</sup> Zuzu is only attested in Kültepe *iqqāti* documents, in which it is mentioned once as *ruba'um*, once as *ruba'um rabûm* and once, enigmatically, as *ruba'um rabûm* of the otherwise unknown town of Alahzina. See Kryszat 2008a:164–165; Barjamovic et al. 2012:39–40.

<sup>97</sup> Kulakoğlu 2014:88–92.

<sup>98</sup> Schachner 2021:10–14, 21–24.

<sup>99</sup> Barjamovic 2018; Massa and Palmisano 2018.

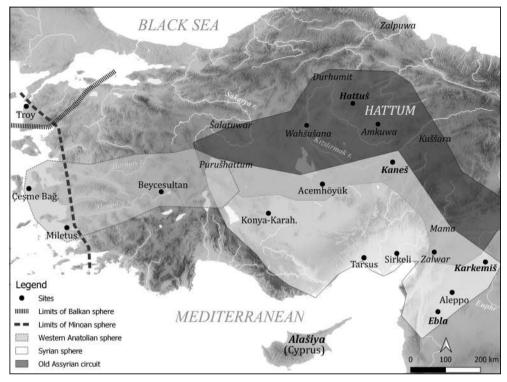


FIGURE 4.2 Old Assyrian and other main competing commercial spheres argued in the text

(Sippar), the middle Euphrates (Mari and Karkemiš), the Levant (Ebla, Aleppo, and Ugarit), and the Aegean (Minoan Crete). Likewise, there is reason to think that several interacting circuits or commercial spheres operated within Anatolia (Fig. 4.2).

Available textual evidence for non-Old Assyrian trading activities in Anatolia is scanty but probably represents the tip of the iceberg of a larger corpus now lost or still buried in undiscovered archives. Some OA texts inform us about contacts with Ebla, whose merchants were involved in the Anatolian copper trade.<sup>100</sup> In addition, an interesting small group of texts from Kaneš displays linguistic and paleographical features foreign to OA traditions, which can be linked to non-Assyrian scribal environments in north Syria and Upper Mesopotamia.<sup>101</sup> Within this outlier group, the letter Kt k/k 4, sent by a certain Ehli-Addu to an Unap-Še—both Hurrian names—concerns affairs taking

<sup>100</sup> Bilgiç 1992; Barjamovic 2011:8.

<sup>101</sup> Hecker 1996; Michel 2010.

place in Tunip (northern Levant), and closes with a list of 'witnesses of the city of Haššu' (*šibū ša ālim Hašši*), located in the vicinity of Maraş or Gaziantep.<sup>102</sup> Neither Tunip nor Haššu were involved in the Old Assyrian trade. Finally, an oftcited OA text warns an Anatolian ruler against dealing with 'Akkadian'—that is, Babylonian—merchants,<sup>103</sup> whose likely presence in Anatolia is attested by the diffusion of Old Babylonian-style seals and impressions.<sup>104</sup>

Relations between Mari and Anatolia are also documented.<sup>105</sup> The Mari letter T.135 attests exchanges with Purušhattum during the reign of Yahdun-Lim, contemporary with the Kārum 11 period at Kaneš, and, probably somewhat later, a sealing belonging to a daughter of Yahdun-Lim reached the Sarıkaya palace at Acemhöyük.<sup>106</sup> Contacts continued during the reign of Šamši-Addu, a period when the activities of the Old Assyrian caravan enterprises are poorly documented. Several sealings of this king or his officials feature in the Sarıkaya archives at Acemhöyük and lie at the core of ongoing debates on Bronze Age chronology.

A key port of entry into Anatolia from the Middle Euphrates and the Jazira was the city and kingdom of Karkemiš (Gaziantep province). The best documented king of Karkemiš during the MBA is Aplahanda, who sent sealed goods to the palace of Acemhöyük. Control of western trading routes via Karkemiš likely was a main motivation for the expansionist policies of Šamši-Addu, who subjugated Aplahanda, perhaps together with the countries of Haššu and Uršu, and tried to establish diplomatic relationships with Zalwar, generally identified with Tilmen Höyük in the Amanus region (Fig. 4.1).<sup>107</sup> After the death of Šamši-Addu, when the Old Assyrian trade restarted in Kārum Ib, Aplahanda regained his independence in Karkemiš, as did Zimri-Lim in Mari. In this period, a trade-oriented partnership between Mari and Karkemiš thrived. The respective chanceries corresponded on commercial matters, including shipments of goods from Kaneš, Hattuš, and even as far west as Šalatuwar. However, some records unveil Mari's efforts to establish a direct commercial link to Anatolia that would bypass Karkemiš.<sup>108</sup> These attempts entailed engaging in direct competition with Assyrian merchants or, alternatively, seeking their complic-

<sup>102</sup> Wilhelm 2008. On the geography of Haššu, see Cohen 2017:297–298, with references to further literature.

<sup>103</sup> Ceçen and Hecker 1995.

<sup>104</sup> Kozal 2006:134-143, 146-153; Palmisano 2018:69-83, fig. 4.32.

<sup>105</sup> Durand 2001; Charpin 2008.

<sup>106</sup> Özgüç 2015:no. 10, fig. 40; Veenhof 2017b:254.

<sup>107</sup> Ziegler 2009. On Zalwar and Tilmen Höyük, see Miller 2001; Barjamovic 2011:114–115; Marchesi 2013; and Cohen 2017:297.

<sup>108</sup> Charpin 2008:106-107.

ity. Some Mari letters bear witness to a proposal for a marriage alliance that was advanced by an Assyrian merchant residing at Kaneš and addressed to the chief of Mariote merchants, Iddin-Numušda, alias Iddiyatum.<sup>109</sup>

These few hints concur with the OA sources in depicting the involvement of Anatolia in a diverse landscape of competing commercial agencies that operated across partially overlapping spheres of interest. Compared with the directional caravan trade documented by the OA sources, the little information available on Syrian enterprises seems to reflect more flexible and indirect patterns of trade that relied on the mediation of multiple, independent interstitial markets. The OA ban on Babylonian merchants mentioned above, as well as similar attested territorial restrictions,<sup>110</sup> have been used to argue that relationships between the different networks responded to mercantilistic logic and were aimed at the creation of areal monopolies.<sup>111</sup> Nonetheless, the fact that limitations had to be imposed through specific regulations may suggest that the markets involved in these circuits had normal aspirations to attract an array of firms aiming to increase demand. This would be conducive to the development of permeable boundaries between different circuits-a situation that, for example, is apparent in the strong spatial overlap and stylistic interpenetration of the Anatolian, Old Assyrian, Old Babylonian and Old Syrian glyptic styles.112

Archaeological evidence complements textual sources in suggesting multiple intersecting channels of exchange between Anatolia, Syria, Mesopotamia, and the Aegean, which unfolded in part along trajectories already established in the EBA.<sup>113</sup> Notwithstanding differing historic-geographic views, scholars agree that the Old Assyrian network only marginally touched upon areas south of the Tuz Gölü and did not extend west beyond the Sakarya river basin. Significantly, this areal extent bypassed several regions known for their relevance in interregional connectivity throughout the Bronze Age. The most striking case is Cilicia, which was a well-known natural passage and had been one of the main gateways in overland connections between central Anatolia and the Levant since early prehistory.<sup>114</sup> Convincing evidence points to Cilician involvement

- 113 Peyronel 2017; Massa and Palmisano 2018.
- 114 Renfrew et al. 1966.

<sup>109</sup> Durand 2001.

<sup>110</sup> Cf. Guichard 2008.

<sup>111</sup> Barjamovic 2011:8.

<sup>112</sup> For the areal distribution, see Kozal 2006:134–143, 146–153; and, with somewhat different results, Palmisano 2018:69–83, fig. 4.32. It should be noted that no strict correlation existed between sealing traditions and the ethnicity of their owners. For example, Assyrians are attested who used Old Babylonian- or Old Syrian-style seals (Topçuoğlu 2014).

in one or more non-Assyrian networks. As mentioned above, Zalwar/Tilmen Höyük, at the eastern entrance of Cilicia, was a key node in commercial and political interactions with Mesopotamia and the northern Levant. Tending to confirm this picture are the Old Syrian-style sealings with inscriptions in OB ductus that have been found on this site, seemingly attached to exchanged goods.<sup>115</sup> Tilmen lay close to the Amanian Gates (nowadays the Bahçe Pass) that gave access to Plain Cilicia and controlled traffic in this direction. In Cilicia, MBA evidence from Sirkeli comprises a number of finds testifying to contacts with northwest Syrian centers, as well as an imposing upper- and lower-town complex that was comparable in size to the citadel and kārum compounds found at Old Assyrian trading posts.<sup>116</sup> Cylinder seals conforming to MBA northwest Syrian traditions have been found at Tatarlı Höyük,<sup>117</sup> and Tarsus has yielded an Old Babylonian seal.<sup>118</sup>

The clearest testimony of a material-cultural convergence between Cilicia and its eastern neighbors during the MBA is represented by the so-called Syro-Cilician, or Amuq-Cilician, ware. Named after its main distribution and production area, which straddled the Amanus Mountains, this is a class of both wheeland handmade ceramics characterized by distinctive matte-painted decorations that include geometric, floral, or zoomorphic motifs.<sup>119</sup> While this ware was found in Mesopotamia and through the Levant down to Egypt, it is the main diagnostic feature of MBA ceramic traditions in Plain Cilicia.<sup>120</sup>

Cilicia was well connected with central Anatolia through a circuit that interlocked with the Old Assyrian network. Stamp seals and impressions following native central Anatolian traditions featured at Sirkeli and Tilmen Höyük and found their way to Ebla and Tell Bi'a in Syria.<sup>121</sup> Crescent-shaped loom weights, typically used for weaving in central Anatolia, were also common in Cilicia.<sup>122</sup> Additionally, this region might have acted as a channel for the diffusion of Old Syrian- and Old Babylonian glyptic traditions to the north and west.<sup>123</sup> Syro-Cilician ware imports crossed the Taurus, reaching the Central Plateau.<sup>124</sup>

- 116 Elsen-Novák and Novák 2020.
- 117 Girginer and Collon 2014.
- 118 Goldman 1956:230 ff., fig. 393, no. 28.35810; Palmisano 2018:72-74.
- 119 Bulu 2017; Bagh 2003.
- 120 Jean 2010:229-232.
- 121 Hrouda 1997; Marchetti 2011:80-81, 94-95, fig. 4.32; Palmisano 2018:74.
- 122 Ahrens 2019, with references to further literature.
- 123 Barjamovic 2019:76; Palmisano 2018:72–74.
- 124 Bulu 2017:104.

<sup>115</sup> Marchesi 2013.

Due to its central position and rich settlement history, the Konya Plain must have been another major area of interaction during the MBA.<sup>125</sup> This region was only marginally involved in the Assyrian trade through the *wabartum* of Uš(š)a, which is, however, poorly attested in OA sources.<sup>126</sup> The published archaeological record for the MBA in the Konya Plains, almost exclusively limited to the glyptic corpus excavated at Konya-Karahöyük, offers some supplementary material.<sup>127</sup> According to Barjamovic (2019:75), the main commercial partner of the inhabitants of the Konya Plain could have been Ebla, a hypothesis supported by the finding of several Old Syrian-style cylinder seals and impressions at Konya-Karahöyük. If so, the Konya Plain would have been closely tied with Cilicia, possibly along trajectories of contact developed in the EBA (Chapter 3).

Western Anatolia was also involved in exchange circuits that interacted at various levels with the Old Assyrian and other networks. Use of Aegean weighting systems is documented at Kültepe and further south and east, at Ebla and in Upper Mesopotamia. This would point to a local adaptation or acquaintance and close interactions with western mercantile practices, likely through both maritime and overland routes.<sup>128</sup> Archaeological evidence for the early second millennium in the whole region west of the Kızılırmak bend is scattered and problematic. Coupled with the almost complete lack of relevant textual information, this situation allows for only a vague assessment of possible trajectories of contact in the area.<sup>129</sup> Sandwiched as it is between two major catalysts of scholarly attentions, namely, the proto-Hittite and Minoan core regions, western Anatolia has not been seen until recently as a subject in its own right as far as the second millennium is concerned. It is symptomatic of this state of the art that only a few sites have been excavated and even fewer fully published, and that the great majority are located in the coastal areas under strong Aegean influence. The major excavation carried out in the 1950s at Beycesultan, in the upper Meander, was chiefly aimed at investigating Arzawa, a composite political entity best known as a rival of the Hittite kingdom. Comparatively little has been published and little is known about the second millennium BCE in the inland intermediate areas of western Anatolia.<sup>130</sup>

<sup>125</sup> Massa et al. 2020; Barjamovic 2019.

<sup>126</sup> Barjamovic 2011:335-336, 370-372; Barjamovic and Gander 2015.

<sup>127</sup> Alp 1968. Some scholars identify Konya-Karahöyük with Ušša: see Forlanini 1998:226; Barjamovic and Gander 2015:507. But see also Forlanini 2008:67 for a proposed localization in the environs of Kadınhanı, northwest of Konya.

<sup>128</sup> Palmisano 2018:54–56; Massa and Palmisano 2018.

<sup>129</sup> For an up-to-date overview, see Pavúk and Horejs 2018:458–459, and the references therein.

<sup>130</sup> The excavations recently started at Kaymakçı, in the Marmara Lake basin of the middle

Chronological uncertainties further contribute to the general fuzziness, interfering with attempts to correlate materials from different sites in broader regional and supraregional perspectives. The two stratigraphic pillars for the second millennium sequence, Troy and Beycesultan, are located some 500 km apart and belong to distinct cultural horizons. At Troy, the MBA has long been a sort of phantom, squeezed between settlements VI and VII, which are assigned to the LBA, and settlement v, which is often considered an appendix to the cultural developments of the EBA. Recent chronological reassessments, however, squarely bracket Troy v between the 20th and the mid-18th centuries BCE, that is, within a span broadly parallel to Kārum II to Ib in central Anatolia.<sup>131</sup>

In the large, two-mounded site of Beycesultan, early excavations by Seton Lloyd and James Mellaart exposed two levels (V–IV) assigned to the MBA chiefly through relative dating and associations with historical events.<sup>132</sup> The main feature of level v is the Burnt Palace, an imposing building with an area of over 4.5 km<sup>2</sup> and multiple rooms organized around a main courtyard. After the violent destruction of this building, the area was occupied by squatters in level IV. Mellaart associates this transition with the conflict between Hattušili I and Arzawa that he dates to 1750 BCE following the now abandoned High Chronology. The next level, III, featuring another institutional edifice, the Little Palace, was dated to the LBA (15th-13th centuries BCE), primarily based on the finding of a fragment of a Mycenaean LH IIIA/B stirrup jar, "embedded in a platform of Late Beycesultan III date."<sup>133</sup> Various scholars argued for an earlier dating of Beycesultan level III considering some ceramic similarities with Kārum Ib 'Old Hittite' traditions from central Anatolia.<sup>134</sup> The excavations restarted in 2007 under the direction of Esref Abay produced a revised stratigraphic sequence supported by absolute radiometric dates that confirm this early date or perhaps argue for an even earlier dating.<sup>135</sup> In this updated framework, the MBA occupation(s) at Beycesultan includes levels v, IV, and III, covering the 19th to the late 18th century BCE.<sup>136</sup> The single Mycenaean sherd is hardly significant in the face of the recent more solid evidence: it should probably be interpreted

Gediz River valley, promise to provide important data that could begin to fill this gap (Roosevelt et al. 2018).

<sup>131</sup> Blum 2012; Pavúk 2015.

<sup>132</sup> Lloyd and Mellaart 1962.

<sup>133</sup> Mellaart and Murray 1995:93.

<sup>134</sup> E.g., Mellink 1967. See the reply to this and other critics in Mellaart 1970.

<sup>135</sup> Dedeoğlu and Abay 2014.

<sup>136</sup> In the new stratigraphy, level 111 is renamed level 6, and levels 1V and V are split into levels 7 to 8 and 9 to 10, respectively.

as an intrusion from later layers. Based on comparisons with Troy v, Beycesultan levels VII to VI likely date from the early MBA, around the 20th century  $_{
m BCE.^{137}}$ 

Notwithstanding stratigraphic shifts, the cultural frameworks in Troy v developed without major breaks from the local traditions of the late third millennium BCE (Troy IV). Red Cross Bowls, a class of carinated bowls so-called for their distinctive decoration, constitute the only remarkable innovation, and provide an interesting anchor point for connections with Anatolian contexts farther east.<sup>138</sup> Close comparanda for this ceramic class are found from northwest Anatolia to the Kızılırmak bend, including Kültepe (Kārum IV-III) and southeastern Anatolia. However, while Red Cross Bowls are found throughout the MBA sequence at Troy, elsewhere this ceramic is conspicuously limited to early MBA or transitional EBA-MBA contexts. Particularly close matches are found in Cilicia, specifically in Mersin XIb, Tarsus EBA 111-MBA Transitional, and Kilise Tepe Vf-e.<sup>139</sup> At Beycesultan Red Cross Bowls are abundant in levels VII to VI but absent in later MBA deposits.<sup>140</sup> This pattern seems to indicate that, early in the second millennium BCE, contacts with western Anatolia continued along overland routes broadly consistent with the Great Caravan Route evidenced for the EBA III (see Chapter 3), having a main axis between Cilicia and the Troad. The later retreat of Red Cross Bowls traditions within Troy v might indicate a shift toward other trajectories during subsequent phases of the MBA, but the locations of those hypothetical trajectories remain undetermined.

Kārum-style and early LBA traditions would find a northwestern limit at Gordion, where MBA layers have been investigated in test pits under Megaron 10 and 12 and the so-called Hittite Cemetery.<sup>141</sup> Many have also pointed to an influence of Kārum-style traditions in the ceramic production of Beycesultan v to IV, allegedly manifested in pitchers with pronounced beak spouts, basket-handled jars, trefoil jugs, teapots, and carinated bowls.<sup>142</sup> Mellaart insists that these shared traits have a common areal heritage in EBA III wheel-made pottery horizons rather than developing out of synchronic interregional contacts.<sup>143</sup> However, closer—if still tenuous—interactions with central Anatolia are unani-

<sup>137</sup> Pavúk 2015; Blum 2016.

<sup>138</sup> Blum 2016.

<sup>139</sup> Blum 2016:97, with references to earlier literature; Şerifoğlu 2019:77-80.

<sup>140</sup> Lloyd and Mellaart 1962:259.

<sup>141</sup> Gunter 1991 and 2006.

<sup>142</sup> E.g., Mellink 1967:8; Gunter 2006:355.

<sup>143</sup> Mellaart 1970:58-62.

mously identified in Beycesultan III assemblages and are now understood to reflect the late MBA phases on the site.<sup>144</sup>

The complex architectural layout of the institutional buildings uncovered at Beycesultan levels v to III, with their annexed storage facilities, points to a centralized socioeconomic organization not dissimilar from those observed at Kültepe and other *kārum* sites. Likewise, the participation of the MBA Beycesultan community in commercial activities probably was a catalyst for the wealth accumulation necessary to sustain this complex organization. Cultural influences associated with Beycesultan MBA horizons traveled along the Meander and Hermos valleys (e.g., Aphrodisias), reaching the coast at Miletus, Liman Tepe, and Panaztepe.<sup>145</sup> Here the overland routes met maritime networks, chiefly signaled by Minoan(-style) artifacts.

The sites of Miletus, Çeşme-Bağlarası, and Iasos of Caria likely hosted Minoan settlements, and Minoan imports feature in all of the MBA assemblages along the Aegean coast from Knidos to Troy.<sup>146</sup> No trace of direct Minoan influx has yet been found further inland. However, Aegean trade with central Anatolia, albeit mediated by interstitial markets, is evidenced by the distribution of Aegean weighting systems that was mentioned above. At this juncture, it is also worth mentioning a single Anatolian-style stamp seal impression found in an MBA deposit at Phaistos in Crete that has close comparanda at Konya-Karahöyük.<sup>147</sup>

For the 19th to 17th centuries BCE, cuneiform sources from Mari, Alalah, and Babylon bear the earliest textual evidence for the overseas exportation of metals, chiefly copper, from Cyprus (ancient Alašiya).<sup>148</sup> Significantly, these references concur with the archaeological record to show an increasing involvement of Cyprus in Near Eastern trading networks during the MBA. Exotica imported or showing influences from the Levant, Egypt, and Anatolia increased during this period on the island, reciprocated by a widespread distribution of Cypriot exports, chiefly ceramics, across the eastern Mediterranean.<sup>149</sup> This exchange was accompanied by a boost in metal production on Cyprus, likely in response to external demand.<sup>150</sup>

<sup>144</sup> Mellaart 1970:62-65; MacSweeney 2010.

<sup>145</sup> Joukowsky 1986; Günel 1999a–b; Kozal 2017:30.

<sup>146</sup> Mee 1978.

<sup>147</sup> Cline 1991:133.

<sup>148</sup> Knapp 2008:307–308. In Anatolia, the first mention of Cyprus occurs in the abovementioned OA Sargonic legend Kt j/k 97 (l. 53), in a reference to a type of textile head covering.

<sup>149</sup> Knapp 2018:98.

<sup>150</sup> Keswani 2005; Knapp 2012.

In Anatolia Middle Cypriot White Painted III–IV vessels have been recovered in a Kārum Ib context at Kültepe and at another unspecified location in the Kayseri region. In contrast with later periods, no MBA Cypriot influx is found in Cilicia, barring a single White Painted III–IV style sherd from an unclear chronological context at Sirkeli Höyük. Therefore, Cypriot contacts probably reached central Anatolia through Syrian mediation and then spread overland across the Antitaurus.<sup>151</sup> One way or another, the availability of Cypriot copper in Anatolia may have diminished the purchasing power of the Pontic copper that had hitherto dominated the Old Assyrian markets and, from thence, other interlocking circuits.<sup>152</sup>

152 Barjavomic 2011:374.

<sup>151</sup> Kozal 2017:88–89, 94.

# History, Society, and Culture in Anatolia and Neighboring Regions during the Hittite Period (Ca. 1650–1190 BCE)

A. Matessi

#### 1 Introduction

The Hittite period (ca. 1650–1190 BCE), corresponding to the Late Bronze Age (LBA) in conventional archaeological periodization, is the best-documented phase of the second millennium BCE in Anatolia and by far the richest in terms of local textual sources before the Classical age. To this period also dates the earliest and most extensive corpus of Anatolian languages: three Indo-European (Hittite, Luwian, and Palaic) and one non-Indo-European (Hattian). Other four extra-Anatolian languages feature in the Hittite archives: Akkadian, Hurrian, Sumerian, and, to a very minor extent, Indo-Aryan. The remaining chapters of this volume will be devoted to analyzing the complex interactions occurring across time and space in this polyglot environment and the traces these languages left in each linguistic corpus. This chapter aims to open this discussion by offering a coherent historical introduction, which outlines the social and cultural contexts and political landscapes onto which mapping patterns of linguistic interference.

Earlier conventions, still followed by Horst Klengel in his authoritative handbook (1999), have tended to split Hittite history in three major phases, with an Old and a New Kingdom separated by an intermediate phase (Middle Kingdom). Scholars, however, have become increasingly dissatisfied with this periodization, considering it unsuitable for highlighting the main political, social, and cultural transformations that shaped Hittite society.<sup>1</sup> Indeed, this tripartition was motivated chiefly by the availability of textual evidence rather than reconstructed historical transitions. The Middle Kingdom was thus the label assigned to the 'dark age' incurring between Telipinu and Šuppiluliuma I, covering the 15th century BCE, as opposed to the better documented Old and New Kingdom phases.<sup>2</sup> Confusion was further augmented by the conflation of this

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<sup>1</sup> See especially Archi 2003.

<sup>2</sup> Garelli 1969:140.

historical periodization with the tripartite system still largely employed in the study of Hittite cuneiform paleography and language (Old Script/Hittite, Middle Script/Hittite, and New Script/Hittite; see Chapter 6, § 2.2).

To deal with these problems, a simpler system, based on a bipartite subdivision into Old Kingdom and Empire periods, was proposed by Garelli (1969) and Gurney (1973a:235)<sup>3</sup> and then followed by many others, especially in the Anglophone tradition. First and foremost, this was the periodization used by Trevor Bryce in his authoritative overview of Hittite history (2005). In this periodization, the duration of the Old Kingdom was stretched to include the successors of Telipinu up to the accession of Tuthaliya I, which occurred around the late 15th century. Tuthaliya I's reign would thus mark the inauguration of the new 'imperial' phase that lasted until the abandonment of Hattuša and the demise of its hegemonic rule in Anatolia and Syria with the last known king, Šuppiluliuma II. Significantly, this reframing came with the realization that several innovations ascribed to the 'Middle Hittite' linguistic phase had likely occurred no earlier than the reigns of Tuthaliya I and his successor, Arnuwanda I.<sup>4</sup>

As we shall see, new epigraphic discoveries and improved interpretations of the relevant historical sources have contributed to an understanding of the reigns of Tuthaliya I and Arnuwanda I as a period of radical transformation in political, administrative, and religious institutions—or, at least, in the official representations thereof. The bipartite periodization has the merit of acknowledging this transition, which would have been blurred in the mists of an unremarkable 'middle' phase were we to use the tripartite system. However, placing a clear-cut chronological divide in the late 15th century BCE risks oversimplifying transformations that took several generations to occur. In this framework, the opposition of the imperial and pre-imperial phases must also be better contextualized.

Most definitions offered by a rich anthropological and historical literature on empire and imperialism conceive of an empire as a "territorially expansive and incorporative" polity in which a 'core' formation tries to impose forms of control over other sociopolitical entities.<sup>5</sup> Seen in these absolute terms, the limits of Hittite imperialism are hard to pin down.<sup>6</sup> For example, 'imperial'

<sup>3</sup> Later in the same volume, Gurney (1973b:669–s683) devotes a paragraph to the 'Middle Hittite Kingdom,' but exhibiting sound skepticism towards the validity of this definition: "The period has come to be known, for no very adequate reason, as the Middle Kingdom." See Archi 2003:3.

<sup>4</sup> Melchert 2008a.

<sup>5</sup> Sinopoli 1994.

<sup>6</sup> Gerçek 2017; Glatz 2020.

dialectics were in action both within and outside the core of the Hittite territorial domain (i.e., Hatti). This blurs spatial boundaries between the core and the peripheries-that is, between the ideal motor of imperial expansion and the targets thereof. From a chronological perspective, it is apparent that imperial ambitions informed the conduct of Hittite kings from the earliest formative stages, as is shown most prominently by the expansionist ventures of Hattušili I and Muršili I. In line with this, elements of an imperial ideology, including claims of hegemonic control over an extensive area or self-aggrandizing titles such as 'great king,' appear in royal propaganda at various stages, even with possible roots in the Anatolian canton states of the Old Assyrian period.<sup>7</sup> Finally, on an organizational level, infrastructural interventions aimed at incorporating various sociopolitical realities in a centralized economic network are much more conspicuous in earlier rather than later Hittite archaeological sequences (below, § 3). These few hints are useful to show that the onset of a Hittite imperial phase may shift considerably on the spatiotemporal grid depending on the absolute parameters used to measure 'imperiality.'

Moving from an absolute to a relative perspective, the characterization of a Hittite imperial phase may be useful for underlining the moment when the Hittite polity evolved from a merely local Anatolian phenomenon to an entity with a much greater impact on the broader Near Eastern landscape. In this sense, the label 'Empire' would most appropriately apply to the period from the (late) reign of Šuppiluliuma I onwards, when the Hittite power network more steadily embraced extra-Anatolian regions and was formally reorganized around structured hierarchical protocols. This change can also be observed from the emic perspective of the contemporaneous interregional diplomatic corpus, in which the Hittite polity is finally accorded the status of 'great power' on a par with other hegemonic states such as New Kingdom Egypt, Kassite Babylon, Mittani and, later, Assyria. In this light, the generations separating Tuthaliya I from Šuppiluliuma I, between the late 15th and early 14th century BCE, are often assigned to a distinct phase of the imperial period, usually termed the Early Empire. Here we prefer the term 'proto-imperial,' aiming to emphasize the transitional character of this period. Another major turning point was reached in the second quarter of the 13th century, with the temporary relocation of the Hittite capital by Muwattalli 11 from Hattuša to Tarhuntašša and the subsequent dynastic shift caused by the conflict between Hattušili III and Urhi-Teššub/Muršili III. The Hittite Empire then entered a phase of inner political fragmentation and economic instability that led to its final dissolution in the first quarter of the

<sup>7</sup> Gerçek 2017; Klinger 2014.

12th century BCE. In the literature, this phase is often called the Late Empire period, a convention that will be followed here as well.

The Hittite kingdom and empire were centered in north-central Anatolia, within the bend of the Kızılırmak River. The key sites for the investigation of Hittite material culture and, above all, all of the known archives of cuneiform tablets related to the Hittite central administration (Figs. 5.1 and 6.3), are found in this region.<sup>8</sup> The most important site and findspot of epigraphic material is, of course, the Hittite capital, Hattuša (modern Boğazköy), where uninterrupted excavations since the early 1900s have uncovered about 30,000 cuneiform tablets written in all of the eight languages mentioned above. These compositions belong to all textual genres and are chronologically distributed throughout the Hittite period. The richest archives after those of Hattuša are those that were discovered at Ortaköy, the site of Hittite Šapinuwa. They comprise 4000 texts spanning the 14th century.<sup>9</sup> Šapinuwa, the seat of a local administrative palace and a temporary residence for the Hittite kings, was founded anew in the early 14th century by Tuthaliya 111. The archives of Maşat Höyük, the site of Hittite Tapikka, have yielded a small administrative and epistolary corpus of letters belonging to local functionaries and dating between the late 15th and the early 14th century BCE.<sup>10</sup> The site of Kuşaklı has revealed a small corpus of mainly ritual texts that have permitted the identification of the site as the Hittite Šarišša.<sup>11</sup> Kayalıpınar, now safely identified with the important Hittite center of Šamuha, was the findspot of about a hundred tablets of various genres dating from the proto-imperial period onward.<sup>12</sup> Minor tablet finds have occurred at other sites in north-central Anatolia, most prominently at Oymağaç Höyük, identified with the important cult center of Nerik.13

The remaining significant cuneiform tablet archives within the Hittite domain are all from beyond the Taurus, in Syria and Cilicia, most prominently at Ras Šamra-Ugarit and Meškene-Emar. Outside the Hittite domain, El Amarna,

<sup>8</sup> Mielke 2011; Genz and Mielke 2011. An updated interactive map of all Hittite epigraphic finds, with bibliographic references to related publications, has been prepared by a team at the University of Florence and is available online at http://www.hittiteepigraphs.com (last accessed April 4, 2022). For more details on the tablets' findspots and the composition of the archives, see Chapter 6 in this volume.

<sup>9</sup> See Schwemer and Süel 2021, devoted to the Akkadian texts. For the rest, the Ortaköy/Šapinuwa texts remain for the most part unpublished or only briefly summarized in extant reports (e.g., Süel 2009).

<sup>10</sup> Alp 1991a–b; Del Monte 1995.

<sup>11</sup> Wilhelm 1997a.

<sup>12</sup> Rieken 2019a.

<sup>13</sup> Czichon 2009.

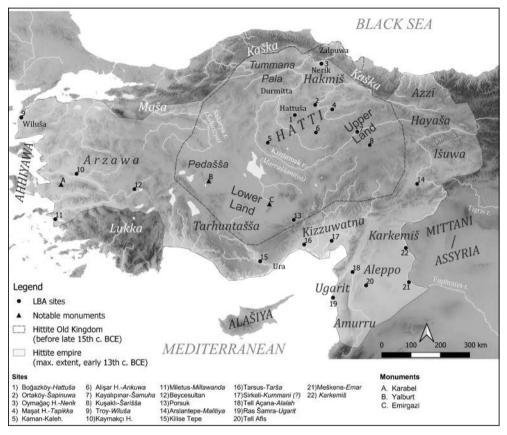


FIGURE 5.1 Anatolia during the Hittite kingdom and empire, with key sites mentioned in the text

the seat of the Egyptian capital founded in the 14th century BCE by the pharaoh Amenhotep IV/Akhenaten, yielded hundreds of diplomatic letters in cuneiform exchanged by the pharaoh and other contemporary rulers of the ancient Near East.<sup>14</sup>

Besides cuneiform, Hittite and other Anatolian rulers are known for their adoption of another script, called Anatolian hieroglyphs, that features on seals or their impressions, in graffiti, and especially in monumental inscriptions on stone. Inscriptions on seals generally include only the name of the seal owner(s) and their title(s). Graffiti is also generally quite short, whereas monumental inscriptions can be much longer and more detailed (Volume 2). As tools of the administration of the Hittite domain, seals and impressions bearing hieroglyphic inscriptions are found in archives in settlement sites across

<sup>14</sup> See Chapter 6, § 3.2. for more details.

the entire area that became subject to the Hittite domain. Urban secondmillennium monuments and graffiti with hieroglyphic inscriptions occur in a few sites in Anatolia and Syria. In addition, monumental inscriptions and graffiti can also appear in extra-urban contexts, on the so-called landscape monuments that served as cultic places and locales of commemorative celebrations. Landscape monuments are more numerous and feature some of the longest hieroglyphic inscriptions known so far, but appear only on the Anatolian mainland.<sup>15</sup>

## 2 The Formative Period and the Question of Ethnicity: Hittites and Hattians

The beginning of the Hittite period is conventionally set around 1650 BCE, when another 'man of Kuššar' (after Anitta) came to Hattuša, making this city a new royal residence for himself and his successors. To advertise his choice, the man would change his name to Hattušili, meaning 'he of Hattuša.' This event and the subsequent rise of the Hittite kingdom have been often described as the final product of ethnic conflicts that resulted in the political dominance of one Indo-European group, identified with speakers of the Hittite language, over indigenous Hattian populations.<sup>16</sup> At the core of this interpretation is the assumption that the linguistic areas arguable for second millennium Anatolia corresponded with an equal number of ethnocultural zones and that the latter broadly overlapped with the main political entities of the time. According to this scheme, ethnic Hittites inhabited and ruled the land of Kaneš/Neša, the city after which they named their vernacular (nešili or nešumnili). Kuššar is also held to be part of the Hittite homeland because it was the place of origin of Anitta and, especially, Hattušili 1.17 The Hattians, instead, had their homeland and political centers in the 'land of Hatti,' lying within the Kızılırmak River bend, thus encompassing 'pre-Hittite' Hattuš(a). Other areas are assigned to other ethnopolitical entities: Luwians to the south and west of the Kızılırmak, Pala to the northwest, and the Hurrians to the southeast.

Within this scope, reasons of ethnic affinity or dissimilarity would explain Anitta's differential treatment of the cities that he subjugated. He spared Kaneš because of the Hittite heritage that it shared with his native city of Kuššar but violently destroyed and cursed Hattuša because it was situated in Hatti

<sup>15</sup> On Hittite second-millennium monuments, see Kohlmeyer 1983 and Ehringhaus 2005.

<sup>16</sup> Most recently, Singer 2007a; McMahon 2010.

<sup>17</sup> Lastly, Kloekhorst 2019:265–269.

and thus belonged to the Hattian ethnopolitical area. Relevant to this line of thought have been interpretations of the story of the Queen of Kaneš that forms the first part of the so-called Tale of Zalp(uw)a (CTH 3).<sup>18</sup> According to this account, the Queen of Kaneš gave birth to thirty princes at once and laid them down in a basket that she set adrift on the river. After being transported by the current to the sea, the boys were rescued by the gods and brought to the city of Zalpuwa. The river can be none other than the Kızılırmak and Zalpuwa a city located close to its mouth, that is, on the Black Sea coast.<sup>19</sup> Once grown, the princes made their way back to Kaneš where, unrecognized by their mother and unaware of her identity, they aspired to marry her thirty daughters. Only the youngest brother realized that the unions would be incestuous and tried to warn his elders. At this point the text breaks off, leaving us to wonder whether the princes persevered in their attempt to marry their sisters. When the text resumes, it is with a very fragmentary historical account of a series of conflicts between representatives of the city of Zalpa (so spelled!) and a sequence of at least three kings—the present king, his father, and his grandfather. In this second part of the tale, Kaneš is no longer named, seemingly replaced by Hattuša as the main counterpart of Zalpa.<sup>20</sup>

Otten (1973:64) proposes that the travel of the thirty brothers from Zalpuwa to Kaneš echoed the movement of Indo-European populations between the Black Sea and central Anatolia.<sup>21</sup> Singer (1981; 2007), who does not subscribe to Otten's view, emphasizes instead the first movement, from Kaneš to Zalpuwa, suggesting that it reflected the Hittite penetration into Hattian territory and the resulting cultural tensions. In this scenario, the brother-sister union and its condemnation by the youngest brother would reference the contrast between the Hittite customs forbidding incest and Hattian mores that (allegedly) allowed it.<sup>22</sup> Moreover, according to Singer, the historical section of the tale represents the natural continuation of interethnic conflicts between Hittites and Hattians after Hattuša had become the new center of 'Hittiteness,' inheriting the role previously held by Kaneš.<sup>23</sup>

<sup>18</sup> Otten 1973; Holland and Zorman 2007; Gilan 2015:179–213, with references to further literature.

<sup>19</sup> For a different view, see Steiner 1993.

<sup>20</sup> But see the alternative hypotheses advanced by Martinéz 2016 (Zalpa vs. Hurma) and Kloekhorst 2021 (Zalpa vs. Kaneš).

<sup>21</sup> For a similar suggestion, see also Oettinger 2004.

To our knowledge, there is no direct evidence for any 'Hattian attitude' towards incest. Singer (2007:16–17) more generally refers to customs tolerating brother-sister incest held by "indigenous populations of Anatolia" and reflected in the treaty between Šuppiluliuma I and Huqqana of Hayaša (CTH 42, §§ 25–26).

<sup>23</sup> Cf. also Corti (2005:117), who sees this ideal transfer echoed in the final agnition: the wise

Any connection proposed between the story of the Queen of Kaneš and distant Indo-European roots is hardly compelling. The mythological character of the account could suggest several other interpretations. Watkins (2004:73-78) considers the mytheme of the prodigious multiple births as the legacy of a common Indo-European literary repertoire, shared with the Greek legend of the Danaids and Vedic mythical accounts. While this is possible, other literary motifs with an eclectic array of cultural parallels can be found in the story of the Queen of Kaneš, which argue against the possibility that it was the product of a 'pure' Indo-European cultural heritage.<sup>24</sup> For example, parallel stories of multiple births also feature in Biblical accounts (Judg. 10:1–15 and 12:7–15; Tsevat 1983), and the motif of the commitment of newborns to a river is also widely diffused outside the Indo-European horizon (cf. the mythical origins of Sargon of Akkad and Moses). If any etiological meaning existed behind the composition of the Tale of Zalp(uw)a, this can hardly be related to ethnicity, which did not play a significant role in the construction of Hittite society. The main parameter of Hittite self-identification was politico-geographical rather than ethnic or linguistic. From a juridical standpoint, a Hittite is simply a LÚ or DUMU (KUR) <sup>URU</sup>HATTI, that is, any inhabitant 'of the land/city of Hattuša,' irrespective of language or other cultural traits. Moreover, there is virtually no aspect of what we call Hittite culture that does not display a degree of cultural hybridization, including language, literature, religion, and even kingship ideologies. As discussed in the preceding chapter, Anatolian societies were culturally and linguistically mixed by the Old Assyrian period. The linguistic areas were not absolute and did not necessarily overlap with the areal distribution of other cultural traits. Even less did they correspond to real or alleged political spaces. Linguistic evidence points to a strong interference between Indo-European Anatolian language(s) and Hattian, deriving from a coexistence likely rooted well before the formation of the archives of Hattuša.<sup>25</sup> Hittite personal names and even toponyms are attested in Hatti/Hattum alongside Hattian examples by the Old Assyrian period, even though this region likely derived its name from an ethnonym for the Hattians.

Attempts to draw definite boundaries between a Hittite nucleus and Hattian or other cultic milieus in the earliest religious traditions attested at Hattuša are not conclusive.<sup>26</sup> Of course, based on elements such as divine names and

youngling refusing to commit incest would be the progenitor the Hittite royal house in Hattuša, while his sacrilegious brothers would condemn to disgrace the dynasty of Kaneš.

<sup>24</sup> See Holland and Zorman 2007:95–103 and Gilan 2015:191–192.

<sup>25</sup> Goedegebuure 2008. See the related discussion in Chapter 4.

<sup>26</sup> Klinger 1996:16–24; Steitler 2017:178–227.

associated toponyms, we are often able to distinguish primarily Hattian from Hittite or Luwian gods. Given these distinctions, it is now agreed that ideologies of kingship during the Old Kingdom were largely based on a Hattian religious system.<sup>27</sup> In this light, any notion of a direct nexus between ethnic identity and political developments is better set aside when considering historical developments in second-millennium Anatolia.<sup>28</sup>

Another line of investigation on the Hittite formative period focuses on the reconstruction of dynastic histories but incidentally argues against a sharp ethnopolitical separation between Indo-European Anatolians, chiefly Hittites, and Hattians. After the end of the Kārum Ib period, Old Assyrian scribal traditions disappeared from Anatolia, resulting in the temporary discontinuation of all record keeping. As a result, the intervening half century before the rise of Hittite kingship in Hattuša, corresponding to Kārum Ia at Kaneš, did not yield textual records. A documentary hiatus of about sixty years is thus produced between Zuzu's reign at Kaneš (Chapter 4) and the installation of Hattušili I in Hattuša. This would roughly correspond to at least two or three generations. Later Hittite evidence, namely the Cruciform Seal of Muršili II (late 14th century BCE) and the offering lists of deceased kings, also called King Lists (CTH 661), vield the names of two predecessors of Hattušili I who could have filled this gap, namely, Huzziya and Labarna.<sup>29</sup> A king named Labarna, who was a predecessor of Hattušili I, is also mentioned in the Edict of Telipinu (CTH 19) in relation to the conquest and annexation of southern provinces (see below).<sup>30</sup>

There is no certainty or scholarly consensus about possible kin relationships, if any existed, between Huzziya, Labarna, and Hattušili I, and several hypotheses have been formulated in this regard.<sup>31</sup> Forlanini (2004b:254; 2010:123) tentatively suggested that Huzziya was a descendant of the namesake king of Zalpuwa who was confronted by Anitta, but the supporting arguments are hardly conclusive. Onomastic considerations, however, offer circumstantial elements that point broadly in the same direction. The name Huzziya is of no clear etymology, but several hints would localize its origin in a northern, and

<sup>27</sup> Torri and Görke 2013.

<sup>28</sup> On concepts of Hittite ethnicity, see Gilan 2008; Gilan 2015:185–201. In this chapter, the label 'Hittite' generally refers to either the political affiliation, with the meaning 'of Hatti/Hattuša,' or the period, with the meaning 'age of the kingdom and empire of Hatti.' Further specifications or the context indicate when the term is referring to the language, i.e., as an equivalent of *nešili*.

<sup>29</sup> For the Cruciform Seal, see Dinçol et al. 1993. On the King Lists, see Otten 1951 and, more recently, Gilan 2014.

<sup>30</sup> Hoffmann 1984.

<sup>31</sup> See the discussions in Beal 2003; Forlanini 2004b and 2010.

thus mostly Hattian, environment.<sup>32</sup> A god with this name was part of the Hattian pantheon; this is best exemplified by the birth ritual KUB 30.29, featuring <sup>d</sup>Huzziya together with a series of deities of the Hattian tradition—the Sun goddess of Arinna, Halmašuit, Hatepinu, Telipinu, and Hannahanna.<sup>33</sup> Interestingly, in this text Huzziya is associated with the northern city and region of Hakmiš, the same nisbe attributed to another Huzziya, this time a prince, in the

estingly, in this text Huzziya is associated with the northern city and region of Hakmiš, the same nisbe attributed to another Huzziya, this time a prince, in the offering list KUB 36.120 (Otten 1951:64; Gilan 2014:96). This evidence concurs with the Anitta Text to locate the name Huzziya and, as a reflex, at least some of its bearers, in a northern Hattian milieu. In addition, Forlanini (2010:123 and fn. 43) convincingly analyzes as Hattian the name Pawahtelmah, which was borne by a prince somehow connected to Hattušili's family mentioned in the King Lists and in Hattušili 1's so-called Testament (CTH 6). With these premises, the roots of the Hittite royal family might be more appropriately placed in northern 'Hattian' milieus rather than in 'Hittite' Kaneš. In consonance with this, the most salient Kuššarite-Kanešean rulers, Anitta and Pithana, did not play any prominent role in Hittite dynastic histories, as their names never recur as Hittite dynastic names and are absent from known royal genealogies, including the Cruciform Seal and the King Lists.<sup>34</sup>

## Hatti, Luwiya, and Pala: Core-Periphery Dialectics in Hittite Anatolia

We do not know what reasons induced Hattušili I to establish the capital at Hattuša. In this regard, we may perhaps follow Schachner (2020), who proposes that Boğazköy gained a prominent role in the frame of interregional contacts of the late third to early second millennium due to its position at the interface between the southern plains and the northern mountain ranges that were rich in raw materials. Be that as it may, Hattušili's transfer to Hattuša was definitive: this city became the permanent center of Hittite power down to the 13th century and the seat of the main gods of the Hittite official religion, headed by the Hattušean Storm god. In Hittite texts of all periods, the toponym Hattuša is used interchangeably with the term Hatti to mean both the city itself and surrounding land within the Kızılırmak basin. Scholars generally agree that the term Hatti was merely the Akkadian form of Hattuša.<sup>35</sup> The two terms Hat-

<sup>32</sup> Cf. also Yakubovich 2010:250.

<sup>33</sup> Beckman 1983:22-31; Steitler 2017:151-153.

<sup>34</sup> Gilan 2015:200–201.

<sup>35</sup> Güterbock 1956a:98, fn. o; Weeden 2011:244–245; Kryszeń 2017.

tuš and Hattum, geographically distinct during the Old Assyrian period (see Chapter 4, § 4.2), were thus conflated in the pair Hattuša/Hatti in Hittite usage. Significantly, Wiušti only claims the title *ruba'um Hattuš* in the Old Assyrian letter KBo 71.81 but is named interchangeably 'king of Hatti' and 'king of Hattuša' in the Anitta Text, which was composed in the current form during the Hittite period and thus reflected Hittite geographic perceptions.

When Hattušili I took power, a large portion of central Anatolia was probably under Hittite hegemony. Starting from this base, Hattušili I and his successor Muršili I pushed their claims well beyond the limits of central Anatolia. As told in his Annals (CTH 4), Hattušili I consolidated his power in Anatolia and crossed the Taurus, marching against various Syrian cities. It is generally held that these campaigns inaugurated the second wave of cuneiform literacy in Anatolia, through the introduction of Syrian scribal traditions (see Chapter 6, § 2.2). Like Hattušili I, Muršili I raided Syria, putting an end to the powerful kingdom of Yamhad, based at Aleppo, but then overshadowed his predecessor pushing as far as Babylon, which he famously sacked in 1595 BCE.

According to a text composed almost a century after these events, the Edict of Telipinu (late 16th century BCE), aspirations to territorial expansion informed the actions of Hittite kings even before Hattušili I. In fact, the long historical introduction of this text starts with the account of Labarna's conquest of lands to the south and southwest of the Kızılırmak River, followed by the organization of a patriarchal administrative network:

(Labarna) kept devastating countries, he disempowered countries, he made them the boundaries of the Sea. When he came back from campaign, however, each (of) his sons went somewhere to a country: the cities of Hupišna, Tuwanuwa, Nenašša, Landa, Zallara, Paršuhanta (i.e., Purušhanda), and Lušna. These countries they each governed and the *great cities* made progress.<sup>36</sup> (CTH 19, i 7–12)

Incidentally, this passage would also inform us that spatiopolitical interactions during the formative stages of the Hittite kingdom were structured through relationships between the king and a cohort of descendants or relatives dispatched to various townships as local governors. While the spatial extent of Labarna's reign was almost certainly inflated for propagandistic purposes in Telipinu's account, the existence of a patriarchal base in the early administrative organization is corroborated by other Old Hittite sources. For exam-

<sup>36</sup> Based on van den Hout 2003.

ple, each episode of the conflict unfolding in the historical section of the Tale of Zalp(uw)a follows a fixed scheme: the ruling kings dispatch their sons to Zalpa to act as local administrators; the sons rebel against the authority of their fathers/kings, and the rulers intervene to restore order. According to Gilan (2015:204–213), precisely this theme would connect the historical narrative to the preceding part of the Tale of Zalp(uw)a—the myth of the Queen of Kaneš—constituting a warning of sorts that large royal families could be the main cause of dramatic internecine conflicts. The Palace Chronicle (CTH 8; OH), whose anecdotes provide an idealized sketch of early Hittite political life, closes with a banquet scene that features the ruling king with his sons and relatives, who are associated with various townships through the formula DUMU  $^{\rm URU}$ GN (KBo 3:34 iii 15'–19').<sup>37</sup>

These considerations may have important politico-geographical implications. It is worth noting that none of the preserved toponyms associated with 'governors' (*išha-*), 'administrators' (<sup>LÚ</sup>manivahtalla-), or even 'men of GN' in Old Hittite sources can be traced in the 'land of Hatti' or localized within the bend of the Kızılırmak. No appointed governor is ever mentioned in relation to such cities as Ankuwa, Šanahuitta, Tawiniya, Hattena, Zippalanda, or Katapa that were important nodes in the Hittite administration. This picture might well be skewed because of the limited evidence available for the formative period. However, it may also reflect an actual geographical differentiation in the administrative layout of the early Hittite kingdom, based on a distinction between Hatti centers and those belonging to the outer fringes of the Hittite domain. In this framework, only centers belonging to the external belt were assigned to the care of local governors. Interestingly, no definite ethnocultural or linguistic rationale can be discerned behind this apparent subdivision. Some centers traditionally assigned to a 'Hattian' cultural milieu also belonged to the inner administrative sphere (Hatti), but other Hattian centers, such as Zalpuwa, were run by princely governors. Other governmental seats were located in the Luwian area, such as Tuwanuwa, Purušhanda, or Lušna.

Dardano 1997. Despite differing views on the dating of Old Hittite compositions, scholars generally agree in considering both the Palace Chronicle and the Tale of Zalp(uw)a among the most ancient products of Hittite literature. On the interpretation of the Palace Chronicle as a historical source, see Gilan 2015;127–135. To be sure, belonging to the royal family was probably not the only way to attain a position in the administrative network. Beside the banquet scene, various anecdotes of the Palace Chronicle refer to governors of various townships without mentioning kinship ties with the king. One of these governors, a man named Išpudašinara who was administrator ( $^{L0}maniyahtalla$ -) of Ulama, was formerly a potter—a profession hardly appropriate for someone of royal descent (KBo 3.34 ii 15–16). Cf. Beal 1992:531; Bilgin 2018;311–312.

The governors likely enjoyed a good degree of autonomy. They could escape royal authority by becoming local dynasts and, eventually, force their way up the hierarchy by waging war against their overlords. Telipinu in his Edict famously depicts the reigns of Labarna and his successors, Hattušili I and Muršili I, as an idealized 'golden era' of harmony and peace within the royal family. In anite of its muthical tong, the Tele of Tele (up) provides a more realistic pie

šili I, as an idealized 'golden era' of harmony and peace within the royal family. In spite of its mythical tone, the Tale of Zalp(uw)a provides a more realistic picture of the interactions existing within the early royal family, including those between the kings and the princes appointed as local governors. Similarly, the anecdotes told in the Palace Chronicles also warn rulers of corruption among peripheral ruling elites, while a text attributed to Hattušili I (CTH 5) depicts a generalized rebellion of various princes against their father-king, involving the governors (NB: 'men') of Zalpa, Haššuwa, and Halpa (i.e., Aleppo).<sup>38</sup> Interestingly, at least some of the cities governed by royal offspring were important city-states during the Old Assyrian period (e.g., Purušhanda, Zalwar). In these cases, dynastic tensions between the center and periphery that emerged in the Hittite formative period may have mapped onto fractures rooted in the former political fragmentation.

We are unable to follow the evolution of the situation during the poorly documented generations after Muršili I. The next phase in Hittite administrative history is documented a century later in §§ 35 to 40 of the Edict of Telipinu (CTH 19), devoted to illustrating an administrative reform focused on the management of staple production. Unfortunately, several passages in this section are lost, but what is preserved is nonetheless illuminating. In § 35 provisions are made for the fortification of cities and the irrigation of fields. The poorly preserved § 36 mentions Telipinu Great King (iii 7–8) and, perhaps, Hattuša (iii 12). The next sections, 37 and 38, are occupied by two lists of toponyms, respectively described as cities of the 'storehouses' (É  $^{NA4}$ KIŠIB, lit. 'house of the seal') and 'storehouses of the mixed fodder' (É  $^{NA4}$ KIŠIB *imiulaš*). Finally, §§ 39 to 40 set forth provisions for preventing fraud and embezzlement by the administrators of staple revenues, namely the  $^{LÚ.MEŠ}$ AGRIG.<sup>39</sup> This passage includes the advice to future kings to always 'seal the grain' (*halkiuš šai-*) with their own seals.

One may wonder how innovative these provisions were as there is nothing to compare them to in the preceding century of Hittite history. Elsewhere in the Edict, Telipinu shows an insistent concern for protecting estates and movable

<sup>38</sup> KBo 3.27 obv. 28'-31'. See de Martino 1991. In this case, Zalpa is probably identical with Zalwar, in the Antitaurus, rather than the northern Zalp(uw)a. On the use of LÚ <sup>URU</sup>GN as equivalent of 'royal representative/governor of the city,' see Dardano 1997:81-82.

<sup>39</sup> On this office, see Singer 1984.

properties from the appetites of dignitaries and courtiers.<sup>40</sup> These passages have often been analyzed in connection with the supervised land transfers documented by the land grants (*Landschenkungsurkunden*, hereafter LSU) that were meant to keep land transactions under royal control.<sup>41</sup> The provisions of §§ 35 and 40 and the LSU are complementary strategies of institutional intervention in the administration of agricultural land, symbolized in both cases by the apposition of the royal seal,<sup>42</sup> and they testify to a practice introduced by Telipinu and followed by his successors.<sup>43</sup>

Archaeological research corroborates the picture of the mid- to late 16th century as an age of great transformations in the Hittite urban and economic landscape that involved both the capital and peripheral centers.<sup>44</sup> The Hittite state began to sponsor massive infrastructural interventions in central Anatolia in tandem with a new settlement policy. The best documented case is Kuşaklı-Šarišša, a large (ca. 18 ha), planned Hittite settlement built ex nihilo in the Upper Kızılırmak area.<sup>45</sup> Several dendrochronological determinations from architectonic timber date the foundation of this settlement to around the mid-to late 16th century.<sup>46</sup> Architecturally, Kuşaklı-Šarišša was modeled on Hattuša, as best illustrated by the layout of the main temples (Building C and Temple 1) and fortification system. Most importantly, in its earliest phase, the city was equipped with a granary silo with a storage capacity of about 700 tons, situated near the city wall like contemporary counterparts at Hattuša.<sup>47</sup>

The foundation of Kuşaklı-Šarišša and its administrative facilities was roughly coeval with the reign of Telipinu or preceded it by only a few decades. Other granaries besides those of the Hittite capital and Kuşakli-Šarišša have been found in north-central Anatolia, chiefly at Kaman-Kalehöyük and Alaca Höyük. Circumstantial arguments suggest that these structures were in use during the 16th century, although evidence is lacking for a more precise chronological contextualization.<sup>48</sup> There is, in any case, sufficient evidence to indicate that the mid- to late 16th century BCE witnessed a major reorganization of the

- 43 Wilhelm 2005; Rüster and Wilhelm 2012.
- 44 Schachner 2009; Schachner 2011:82–94.
- 45 Müller-Karpe 2017, with further references to the literature.
- 46 Mielke 2006:266–269.
- 47 Mielke in Müller-Karpe 2001.
- 48 Schachner 2009.

<sup>40</sup> Cf. ii 56–60: "For the reason for which princes usually die (does) not (affect) their houses, their fields, their vineyards, their male (and) female servants, their oxen (and) their sheep. So now, if some prince sins, he shall pay with (his) own head while you shall not commit evil against his house and his son." (Translation: van den Hout 2003).

<sup>41</sup> Imparati 1988:229–232.

<sup>42</sup> D'Alfonso and Matessi 2021:135–136.

Hittite state that was enhanced by new plans for urbanization and the renovation of administrative institutions. This scenario parallels the reform of the storehouse system that was ordered in roughly the same period by Telipinu in his Edict.

What was then the novelty of Telipinu's reform? Some interesting clues in this respect may derive from its geographical scope. As observed by Singer (1984:104), none of the several preserved toponyms of arguable location associated with the storehouses can be ascribed with any confidence to Hatti and the Kızılırmak area. Important administrative seats in this core region, such as Ankuwa, Tawiniya, Katapa, and Hattena, either were not implicated in the reform or, as Singer further suggests, were enumerated in a separate list that has not survived. By contrast, several towns listed in § 37, namely Šukziya (iii 20), Hurma (iii 22), and Purušhanda (spelled Paršuhanda, iii 30) were earlier seats of peripheral governors, as attested by the Palace Chronicles and the first lines of Telipinu's Edict (see above). We would thus propose that the storehouse network devised by Telipinu was an attempt to enforce a uniform bureaucratic system across the entire kingdom under the formal control of the crown, thus making obsolete the earlier partition hypothesized above between the peripheral governmental seats and central cities of the Hatti group.<sup>49</sup> In summary, the administrative reform set forth by Telipinu testifies to an attempt to place Hattuša at the core of a rationalized and structured dialectic with a composite periphery characterized by diverse political allegiances and identities.

The relationships inferred here between the core and periphery of the early Old Kingdom may perhaps clarify some oft-debated passages of the Hittite Laws, in which Hatti features in opposition to the lands of Luwiya and, in a single instance, Pala. The passages in question, dealing with cases of murder (§ 5), abduction (§§ 19–21), and the seizure of runaways (§§ 22–23), are preserved in the main OH manuscript (A) and, with a few but very important variants, in the NH duplicate B. We reproduce here the formulation of §§ 5, 19a, and 22 to 23.<sup>50</sup>

§5 "If anyone kills a merchant, he shall pay 100 minas of silver, and he shall look to his house for it. If it is in the lands of Luwiya or Pala, he shall pay the 4,000 shekels of silver and also replace his goods. If it is in the land

<sup>49</sup> This does not mean that Telipinu completely abolished the governmental seats as titles associated with them, such as 'lord of <sup>URU</sup>GN,' are attested until the 13th century. However, the evidence suggests that the responsibilities of the 'lords of <sup>URU</sup>GN' had become largely ceremonial. In this regard, see Bilgin 2018:114.

<sup>50</sup> Based on Hoffner's translation (1997:19, 30–32).

of Hatti, he himself shall (also) bring the aforementioned merchant (for burial)."

§ 19a "If a man of Luwiya abducts a free person, man or woman, from the land of Hatti, and leads him/her away to the land of Luwiya (A) /Arzawa (B), and subsequently the abducted person's owner recognizes him/her, he (i.e., the abductor) shall deliver (*arnu*-) his own house."

§ 22 "If a male slave runs away, and someone brings him back, if he captures him nearby, he shall give him (i.e., the finder) shoes. If (he captures him) on the near side of the river, he shall pay 2 shekels of silver. If on the far side of the river, he shall pay him 3 shekels of silver."

§ 23 "If a male slave runs away and goes to the land of Luwiya, (his owner) shall pay 6 shekels of silver to whomever brings him back. If a male slave runs away and goes into an enemy country, whoever brings him back shall keep him for himself."

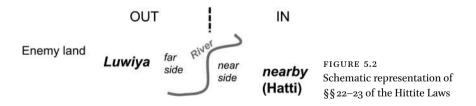
Most scholars tend to take literally the differentiation between Hatti, Luwiya, and Pala suggested in these paragraphs, assigning each toponym to a welldefined geographical entity with neat ethnolinguistic boundaries. In this approach, Luwiya would be the homeland of Luwians, speaking luwili, and Pala the homeland of Palaeans, speaking *palaumnili*. According to Yakubovich (2010:240), "the 'men of Hatti' and 'men of Luwiya' were contrasted as ethnic groups whose social status differed rather than inhabitants of distinct geographic areas."<sup>51</sup> From this perspective, however, the definition of Hatti would remain problematic: was it meant to refer to the Hittites or the Hattians? Yakubovich opts for the first solution (2010:241). Yet, as we have described, the land of Hatti included both Hattians and Hittites, and the name Hattum/Hatti was losing its ethnolinguistic connotation already in the Old Assyrian period (see Chapter 4). Similarly, Luwiya and Pala could have had more general geographic connotations. The two terms are clearly intended as such in §5, in which the two toponyms are used to label hypothetical scenes of murders of merchants. Logistic considerations obviously implied different penalties for crimes committed far away from Hatti as opposed to those committed in Hatti itself (see Chapter 12). In a similar vein, §§19 to 21 make perfect sense when considering Hatti and Luwiya as places rather than ethnonyms.<sup>52</sup>

<sup>51</sup> For an ethnic contraposition, see also Singer 1981.

<sup>52</sup> See Hoffner 1997:180, Table 11.

Leaving aside the ethnolinguistic implications, we would argue for a more minimalistic interpretation of the Hatti-Luwiya-Pala opposition in the Laws. In § 5, which is the single passage in which the three toponyms appear together, Luwiya and Pala are treated as peers from a legal standpoint. The land of Hatti, on the other hand, is the vantage pointsetting of all of the other dispositions, explicitly in §§ 19 to 21 and implicitly in §§ 22 to 23.<sup>53</sup> Seen in this light, the tripartition of the Hittite domain does not reflect a rigid ethnic or territorial differentiation, but a loose distinction between a core, represented by Hatti, and a periphery, represented by Luwiya and Pala as *partes pro toto*. This minimalistic bipartite scheme is certainly more compatible with the Old Hittite administrative system: Luwiya and Pala would both correspond to areas occupied by governmental towns before Telipinu's reform, as opposed to Hatti, whose cities were likely subject to different administrative regimes.

The juxtaposition of Hatti and Luwiya to represent the core and periphery is most clearly suggested by §§ 22 to 23 of the Laws, where rewards for the restitution of runaway slaves are classified by distance from an unnamed vantage point, arguably corresponding to Hatti/Hattuša. Luwiya appears here as nothing but a vague land extending between an even vaguer enemy territory and the 'river.' The latter, presumably the Kızılırmak, constitutes the limit between the far side (*edi*) and the near side (*ket*). The river can thus be interpreted as a boundary separating the *inner* mainland, that is, the land of Hatti/Hattuša, from the *outer* peripheries of the Hittite domain to which Luwiya belonged (Fig. 5.2). Following the same logic, Pala would also belong to the outer sphere as it is treated as a peer of Luwiya in § 5. Incidentally, the formulation of §§ 22 to 23 also proves that Luwiya primarily denoted a land rather than the ethnicity of individual people living in the Hittite domain.



Interestingly, this continuum between Hatti, the river, and the external dominion, that is, Luwiya/Pala, closely recalls the organization of the Mari kingdom

<sup>Cf., for example, the use of the verb</sup> *pehute-* 'to lead away', i.e., from Hatti to Luwiya (§§ 19a-b), in contrast with *uwate-* 'to lead here', i.e., from Luwiya to Hatti (§§ 21–22). See Hoffner 1997:180.

under Šamši-Addu, which staged a similar subdivision between the land of Mari ( $m\bar{a}t$  Mari), the Banks of the Euphrates (ah Purattim) and Mari's domains beyond the Euphrates ( $namlak\bar{a}tum$ ).<sup>54</sup>

The minimalistic interpretation of Luwiya as a *pars pro toto* for the periphery of the Old Hittite domain might also provide the simplest explanation for the substitution of Luwiya for Arzawa in the New Hittite version of § 19 (manuscript B). This substitution is often taken as proof that Luwiya and Arzawa were identical, which would support the widespread view that Arzawa was the Anatolian homeland of the Luwians.<sup>55</sup> In contrast, Yakubovich (2010:239–247) sees the Luwiya/Arzawa alternation as proof of their distinctness and argues for identifying Luwiya with the province known as Lower Land during the Empire period, roughly corresponding to the modern Konya region.<sup>56</sup> Challenging both perspectives, we instead propose that the relationship between Luwiya and Arzawa—if any—was more functional than strictly geographical: both toponyms were paradigmatic representatives of the 'Anatolian' peripheries of the Hittite domain. Arzawa was just more readily understood in this sense during the Empire period and thus slipped in manuscript B version of the Laws in place of Luwiya, by then outdated as a meaningful indicator.

Starting from this minimalistic understanding of the terms Hatti, Pala, and Luwiya in the Hittite Laws, we can now reframe their relevance to the ethnolinguistic geography of the Hittite domain in a more rigorous way. We know from other sources that besides its generic and undefined usage in the Laws, Pala had a more specific geographic meaning: it indicated a town and/or a region on the Pontus ranges to the northwest of Hattuša. The Comprehensive Annals of Muršili II also mention a governor of Pala, thus indicating that this location may have functioned as the seat of an administrative unit.<sup>57</sup> The toponym Pala forms the root of the adverb *palaumnili*, meaning 'in the language of Pala (Palaic).' Palaumnili would thus be a language designation bound to a politicogeographical reality, on a par with nešili in relation to Kaneš/Neša. Luwiya might also have had a more specific usage, although, unlike Pala, it was not linked to a precise politico-geographical reality: indeed, this toponym is never attested outside the Hittite Laws. In this light, the clear etymological relationship with the adverb *luwili* 'in Luwian' would suggest that Luwiya was in origin a genuine ethno-geographical designation for the Luwians, loosely bound to a region situated beyond the far side of the Kızılırmak/Marraššantiya River.

<sup>54</sup> Fleming 2004:119.

<sup>55</sup> E.g., Hoffner 1997:29–30, 179–180; Bryce 2003:29–32.

<sup>56</sup> Also see Matessi 2016:137–138, with references to additional literature.

<sup>57</sup> Corti 2017a:231–234; Cammarosano and Marizza 2015; Bilgin 2018:76–78.

Specifically, a consensus would assign Luwiya to the south and southwestern sectors of this area, with Pala, in contrast, lying to the northwest of Hatti.

The toponym Hatti has a different history, which we have already detailed in part elsewhere in this book (Chapter 4, § 4.2). *HATTI* is likely to be an Akkadian genitive of a word etymologically related to Old Assyrian Hattum.<sup>58</sup> Also, Akkadian Hattum and Hatti share a root with the Hittite adverb *hattili*, designating the Hattian language. Observing that *hattili* is not attested in Old Hittite texts, Klinger (1996:91) raises the possibility that this adverb was created from the toponym Hatti only at a later stage of Hittite history, when Hattian was no longer dominant in Hatti, if spoken at all (see Chapter 9). Such a posthumous language designation is hardly convincing and, to the best of our knowledge, has no parallels elsewhere.<sup>59</sup> On the contrary, it is far more logical that the term hattili gained currency during the centuries of interaction between Hittites and Hattians preceding the formation of the archives of Hattuša, when Hattian was spoken in Hatti and recognizable as a local linguistic feature. Kryszeń (2017:219) convincingly proposes a common derivation of Hattum/Hatti and hattili from a stem hat(t)-, which is also shared by the Hattian toponyms Hattuš and Hatten. This would corroborate the argument presented in Chapter 4, § 4.2, that Hattum, and Hatti with it, originated from an ethno-geographical designation for the Hattians and their land. This, however, was no longer the primary meaning of the word at the point the Old Assyrian records were written, as the Old Assyrian scribes used Hattum in a more general geographic sense. By the Hittite period, Hatti had become a purely geopolitical designation for the core of the Hittite kingdom, synonymous with the city and land of Hattuša. At the time the Old Hittite version of the Laws was composed, the land of Hatti/Hattuša corresponded to the inner side of the Kızılırmak/Marraššantiya bend, as suggested above in the analysis of § 23.

### 4 The Empire Period: A Historical Outline

The late 15th century, corresponding to the reigns of Tuthaliya I and his son Arnuwanda I, witnessed another major phase of reorganization of Hittite

<sup>58</sup> The supposed nominative *HATTU* and accusative *HATTA* are virtually never attested in Hittite texts except, perhaps, in KBo 7.14+ (<sup>URU</sup>*HATTU-e* and <sup>URU</sup>*HATTU-az*, both in damaged contexts). Hatti is not necessarily a direct development from Hattum, but a common derivation of both terms from a stem \**hatta-*, \**hatti-*, or \**hat-* cannot be excluded. See Weeden 2011:246–247 and Kryszeń 2017, with references to further literature.

<sup>59</sup> See also Weeden 2011:246.

power in Anatolia, accompanied by a novel focus on military expansion. Tuthaliya I engaged in military campaigns in western Anatolia against a loose coalition that included, among other political entities, the land of Arzawa. During the Old Kingdom, the term 'Arzawa' referred to the lands and peoples outside the Hittite power network to the west and southwest of the Marrassantiya/Kızılırmak.<sup>60</sup> From the reigns of Tuthaliya I and Arnuwanda I onwards, 'Arzawa' in Hittite could take two distinct but related meanings. In some contexts, this term is used in a narrow sense, indicating one of the several western Anatolian polities confronting the Hittite army. 'Arzawa' also functioned as an umbrella term for a group of western polities that included, besides Arzawa proper, the Šeha River Land, Mira, and Hapalla.

It is generally agreed that the eastern limits of the Arzawa complex, neighboring the Hittite mainland, were marked by Pitašša, in the likely environs of Ilgın (northwestern Konya province),<sup>61</sup> and Hapalla, which lay somewhere between the upper Sakarya (Hittite: Šahiriya) River and the Lake District.<sup>62</sup> Arzawa proper, the Šeha River Land, and Mira extended west of this limit, along the Meander and Hermos river basins down to the Aegean coast. A fundamental anchor point in this respect is represented by the relief and hieroglyphic inscription of Targaššanawa king of Mira marking the Karabel Pass 25 km east of İzmir.<sup>63</sup> The regions south of the Arzawa complex were home to the land of Lukka, a fluid constellation of communities resisting incorporation into the Hittite domain and thus targeted by various military campaigns, especially during the 13th century BCE. In Classical sources this region is known as Lycia (Greek  $\Lambda \upsilon x i \alpha$ ), a toponym etymologically related to Hittite Lukka.<sup>64</sup>

The ethnolinguistic composition of the Arzawa complex is currently a controversial topic. No cuneiform document is known to have originated in western Anatolian chanceries except a single letter from El Amarna (EA 32) sent by the Arzawan king Tarthuntaradu to the Egyptian pharaoh Amenhotep III (early 14th century BCE). Significantly, this letter is written in Hittite, which was arguably not the Arzawan official language but rather the closest thing to an international language that the senders and recipients could have shared. The western Anatolian rulers and elites had a local Anatolian hieroglyphic tradition, which they used for a few short, monumental inscriptions. Among these, the most famous is the inscription of Targaššanawa, the king of Mira (Karabel

<sup>60</sup> Gander 2017a:263-264.

<sup>61</sup> De Martino 2017a:260–261, with references to additional literature in fn. 135.

<sup>62</sup> Gander 2017a:271–272 and 278, fn. 224, which includes additional references.

<sup>63</sup> Hawkins 1998. For an alternative view, see Gander 2017b.

<sup>64</sup> Gander 2010.

A), which accompanies a rock-cut relief overlooking the Karabel pass 25 km east of İzmir. The name Targaššanawa is Luwian/Luwic, and the same holds, with few exceptions, for all other known names borne by Arzawan kings and individuals. The question remains, however, whether Arzawa was a Luwian-speaking area in a narrow sense. Traditional interpretations have held that this was the case, mainly on account of the alternation between Luwiya and Arzawa in manuscripts of the Laws. However, as argued above, this alternation has no real geographical implication but rather a functional one as both terms were non-synchronic proxy definitions for the peripheries of the Hittite domain. Although starting from a different perspective, Yakubovich also split Arzawa from Luwiya (2010:107–111) and argued on a linguistic basis that Arzawa had a mixed Anatolian Indo-European heritage, with proto-Carian the most prominent component (86–96).

Tuthaliya I led military campaigns not only in western Anatolia but also in the east and particularly in Syria if we can credit some indirect evidence.<sup>65</sup> The main rival of Hatti in this sector was Mittani, a Hurrian kingdom centered on the upper Khabur. Over the 16th and 15th centuries BCE, Mittani had expanded its hegemonic rule from the Upper Euphrates basin to Cilicia and Syria, taking advantage of the political void left in the region by the raids of Hattušili I and Muršili I. One of the main achievements of Tuthaliya I on the southeastern front was to attract on the Hittite side one of the former main allies of Mittani, the kingdom of Kizzuwatna, based in Cilicia. Before Tuthaliya I, political interactions with Kizzuwatna were mostly formalized through parity treaties that chiefly focused on the reciprocal restitution of fugitives. However, Tuthaliya I marked in this respect the beginning of a new era by negotiating a new treaty with the Kizzuwatnean ruler Šunaššura that, despite some reciprocal agreements, placed Kizzuwatna in a position subsidiary to Hatti (CTH 41).<sup>66</sup> This can be considered the first example of a Hittite subordination treaty, a genre of diplomatic dispositions that would later become the main legal tool for formalizing Hittite hegemonic rule.

By the 15th century, Kizzuwatna was home to a mixed cultural landscape, in which Luwian and Hurrian linguistic and religious contributions were blended. The integration of Kizzuwatna in the Hittite political sphere after the Šunaššura Treaty also led to the adoption of local Luwian and Hurrian cultural features in

<sup>65</sup> KUB 23.11 (Annals of Tuthaliya I. See Carruba 2008:34–47); CTH 75 (Treaty between Muwattalli II and Talmi-Šarruma of Aleppo. See Devecchi 2015:233–237, with references to previous literature).

<sup>66</sup> Edition: Wilhelm 2011. On the hybrid character of the Šunaššura-treaty and the rhetoric devices revealing it, see Liverani 1973.

the Hittite court, whether they were introduced directly or indirectly. Hurrian religious influences became particularly strong, with the integration of Hurrian deities at the top of the Hittite pantheon (see below).

The first interactions between Hittites and the Kaška can also be dated to the late 15th century BCE. The term Kaška, always treated as a toponym in Hittite texts (KUR <sup>URU</sup>*Kaška*), designated a constellation of groups inhabiting the Pontic arch from the northeast to the northwest of the Kızılırmak basin. In the Hittite official narrative, the Kaška are depicted as unruly barbarians, always ready to disrupt the social order on the Hittite northern frontiers. Sometimes Kaška groups formed coalitions and conducted raids that reached as far as Hattuša and the more southern provinces. The cult of the Storm god in the important sanctuary of Nerik was allegedly disrupted after a Kaškean occupation under Arnuwanda I and could not be restored until the reign of Hattušili III (13th century BCE).<sup>67</sup> Possibly in response to this event, Arnuwanda I negotiated agreements with individual Kaška groups to integrate them into the Hittite power network and prevent the formation of a more united Kaška front (CTH 137–139).<sup>68</sup>

The Šunaššura treaty and Arnuwanda's agreements with the Kaška can be seen as part of broader diplomatic efforts that were made by Tuthaliya I and Arnuwanda I to stabilize the frontiers of the Hittite domain in all directions. Similar attempts involved Mida of Pahhuwa (CTH 146) in the east and the elders of the harbor city of Ura (CTH 144) to the south. In line with this frontier policy, Tuthaliya I bestowed a large *foedus* on the unruly leader Madduwatta, designed to be a buffer against western polities.<sup>69</sup>

A normative effect on the internal front corresponded to this engagement at the margins of the Hittite domain. A substantial group of so-called instructions, meant to regulate and place under royal control the activities of various functionaries, are dated to the reigns of Tuthaliya I and, especially, Arnuwanda I.<sup>70</sup> The most prominent among these relates to the office of the *BEL MADGALTI*, which, significantly, is not attested before Arnuwanda I. The *BEL MADGALTI* 

<sup>67</sup> Recent excavations at Oymağaç, the likely site of Nerik itself, seem to confirm a major destruction event towards the late 15th century BCE but also reveal that the main temple area underwent major restoration during the course of the 14th century. This raises the possibility that cultic activities continued uninterrupted during the Kaška occupation, albeit on a minor scale. A new temple was then constructed in the 13th century (cf. Czichon et al. 2019, especially Hnila, 'Stratigraphie und Befunde,' 44–58).

<sup>68</sup> On the Kaška in general and their relations with Hatti, see von Schuler 1965, Glatz and Matthews 2005, and Gerçek 2012.

<sup>69</sup> This is what we learn from the so-called Indictment against Madduwatta (CTH 147).

<sup>70</sup> Miller 2013:129–273.

had authority over a broad spectrum of military and civil responsibilities. Chiefly, these involved security management (through the maintenance of fortresses) and the extraction of the necessary staple and labor resources.<sup>71</sup> However, his sphere of action seems to have been limited to the frontier regions, which justifies the conventional translation of the title as 'governor of the border district' or 'frontier governor' (lit. 'lord of the watchtower').

The late 15th century, or early 14th at the latest, also witnessed the formation of two important regional provinces, named the Lower and Upper Land. They were governed by high-ranking officers and lay in buffer zones near lands inhabited by the Arzawa and Kaška, respectively. The Lower Land included some of the town-districts forming the administrative basis of the Old Kingdom southwest of the Kızılırmak River and thus occupied part of the region defined as Luwiya in the Hittite Laws.<sup>72</sup> The Upper Land was centered at Šamuha, on the modern site of Kayalıpınar, on the upper Kızılırmak (Sivas province). The creation of these provinces, in conjunction with the diplomatic initiatives described above, can be interpreted as part of a general reorganization of the Hittite territories that was informed by an incipient regionalization and formalized frontiers with external polities. In this respect, it is relevant that documents dating from the late 15th century onwards make frequent reference to administrative offices linked to regional compounds (EN KUR-TI), while institutions that gravitated around single towns (EN <sup>URU</sup>GN) become increasingly marginalized.<sup>73</sup> It is also in light of these innovations that the designation of the late 15th to early 14th centuries as the Early Empire or, as preferred here, the proto-imperial period, can be justified.

Arnuwanda I and his wife Ašmunikkal issued the last known LSU. Contrary to all its predecessors in the same genre, this text was written in Hittite, with Akkadian used only in the standard formulas. By the late 15th century, Hittite had definitively become the official scribal language of the Hittite state, used to compose political texts, treaties, edicts, royal grants, prescriptive documents, letters, administrative records, prayers, mantic texts, and, above all, the descriptions of festivals and rituals that constitute the bulk of the Hittite written legacy. Akkadian remained in use in scholarly texts serving the cuneiform scribal curriculum (lexical lists, Mesopotamian literary texts, etc.) and as the language of diplomatic communication with extra-Anatolian partners (see Chap-

<sup>71</sup> Beal 1992:435-436; Pecchioli Daddi 2003; Bilgin 2018:88-92.

<sup>72</sup> Matessi 2016:134–142. The equation of the Lower Land with Luwiya that was advanced by Yakubovich (2010:239–248), can be reformulated based on the discussion above as a partial—and accidental—geographic correspondence.

<sup>73</sup> Bilgin 2018:94–95; Matessi 2023.

ter 8, § 3.3), but no longer featured in political texts addressed to an internal audience.  $^{74}$ 

Another important development in Hittite literacy that began in the late 15th century was the growing use of Anatolian hieroglyphs. First attested only on seals to render the name(s) and title(s) of the owner(s), through the late 14th and especially the 13th century BCE this script found its way onto monumental inscriptions in the main Hittite centers and extra-urban contexts across Anatolia. Many such monumental inscriptions were short, but others displayed long, public, commemorative accounts of the accomplishments of the Hittite kings. Significantly, the chronological distribution of these longer inscriptions, which appeared from the reign of Tuthaliya IV onwards, complements that of celebrative historiographic compositions in cuneiform, which are not attested after Hattušili III.<sup>75</sup> This might reflect a changing target audience for official narratives, perhaps no longer addressed only to the court and the few cuneiform literati but to a wider audience that comprised at least those lower-level administrators and priests who used the Anatolian hieroglyphic script in their seals.<sup>76</sup>

Notwithstanding Tuthaliya I and Arnuwanda I's efforts to stabilize the frontiers, their successor Tuthaliya III (early 14th century) faced a dramatic political instability, depicted in later sources as a consequence of hostile pressures from the Kaška, Arzawa, Hurrians, and other enemies. The letters and administrative records from the archive of Maşat Höyük (Hittite Tapikka), mostly dating to this period, document the difficulties faced by local officials in organizing military posts and securing regular revenues on the frontier with the Kaška.<sup>77</sup> Based on some fragmentary hints contained in a later document (Deeds of Šuppiluliuma, CTH 40), it is possible that Tuthaliya III temporarily resided at Šamuha, from there leading his forces on the reconquest of the lost domains.<sup>78</sup> This move was perhaps a strategic retreat from the capital after the Kaškean occupation, an event later recalled in the so-called account of the 'concentric invasions', that features in an edict issued by Hattušili III (KBo 6.28 obv. 6-15). Notwithstanding the general military crisis, Tuthaliya III is also credited with having founded the royal city of Šapinuwa (nowadays Ortaköy), to which he moved his main residence and court. The activity of Tuthaliya III and his wife, Queen

For an overview, van den Hout 2011:59–66; van den Hout 2020:139–172.

<sup>75</sup> Consider, however, the debate recently arisen as to whether the SÜDBURG inscription should be dated to the reign of Šuppiluliuma I or Šuppiluliuma II; see the overview on Šuppiluliuma II's reign further below in this section, with references therein.

<sup>76</sup> Van den Hout 2020:173–183.

<sup>77</sup> Alp 1991b; Del Monte 1995.

<sup>78</sup> Del Monte 2008:12, 25.

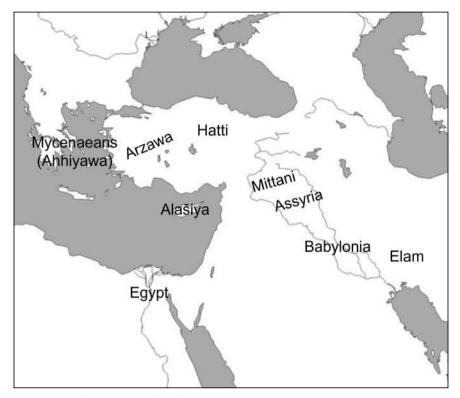


FIGURE 5.3 The Near East in the 14th century BCE

Taduheba, at this site is best represented by an important corpus of Hurrian rituals (see below).

The reign of Šuppiluliuma I, the son and successor of Tuthaliya III (mid-14th century BCE), inaugurated the phase termed the Empire period. At this time, the Hittite power network began to incorporate extra-Anatolian regions in a more systematized fashion, formalizing their submission through structured hierarchical protocols. On the international stage (Fig. 5.3), the Hittite kings became universally acknowledged as 'great kings,' on a par with the rulers of hegemonic polities such as New Kingdom Egypt, Mittani and, later, Assyria.

Most military endeavors of Šuppiluliuma are known from the account offered by his son and successor Muršili II in the so-called Deeds of Šuppiluliuma (CTH 40). As an army commander under Tuthaliya III, Šuppiluliuma committed himself to reconquering most of the regions that the Hittites had lost in central Anatolia. He launched attacks in various directions, especially against the Kaška and Arzawa. After attaining kingship, Šuppiluliuma I turned his focus to the east. Here, he inflicted a definitive blow on Mittani by subtracting from its hegemonic rule all the dependencies west of the Euphrates and eventually turned Mittani itself into a sort of Hittite protectorate. A major achievement in Syria was the conquest of the city of Karkemiš, on the middle Euphrates, which Šuppiluliuma I bestowed to his son Piyaššili, also known as Šarri-Kušuh. A dynasty branching out from the Hittite royal family thus took off at Karkemiš, and attained a prominent position within the Hittite power network, acting as the de facto supervisor and overlord of most of the Hittite dependencies in Syria. Another son of Šuppiluliuma I, Telipinu, was installed on the throne of Aleppo, which thus became another appanage kingdom formally under Hittite rule.

Among the other Syrian acquisitions of Šuppiluliuma I, one of the most important was Ugarit (modern Ras Šamra), a harbor city and the capital of a canton state that lay on the coast close to modern Latakia (Syria). During the 15th century, Ugarit had flourished as a major hub of commercial interactions that spanned the eastern Mediterranean from the Aegean to Cyprus and Egypt. After being annexed to the Hittite hegemonic sphere following its spontaneous submission, Ugarit continued to pursue its previous economic role. The local dynasty also maintained some autonomy, gained through the promise to pay regular tribute to Hatti and offer military support when required.

The era of Šuppiluliuma in Anatolia is known in the wider Near East as the 'Amarna Age' after the Egyptian site of El Amarna/Akhetaten, a city founded by pharaoh Amenhotep IV, also known as Akhenaten, after a major religious reform. A large corpus of cuneiform tablets from El Amarna dating to this period, mostly written in Akkadian, document the intensive diplomatic contacts that the Egyptian court entertained with various Near Eastern partners, including the Hittites.

Muršili II succeeded his father Šuppiluliuma I at a very young age after the short-lived reign of his brother Arnuwanda II. He inherited a vast kingdom, which was, however, afflicted by an epidemic and a series of upheavals and unrest. In his extensive historiographic work (Ten Years and Comprehensive Annals, CTH 61.I–II), Muršili II claimed to have fought against the Kaška in the north to prevent the formation of an alliance that was about to emerge among different groups. Uprisings also took place in Arzawa and nearby polities that still controlled large swathes of western and southwestern Anatolia. Muršili II claimed that he led several campaigns in this direction and eventually defeated Arzawa, resulting in mass deportations of local populations toward the Hittite mainland. Through subordination treaties, Muršili II partitioned and reorganized the former Arzawa lands into several client kingdoms, the Šeha River Land (CTH 69), Mira-Kuwaliya (CTH 68), and Hapalla (CTH 67). In the meantime, in Upper Mesopotamia, Assyria was growing stronger, sup-

planting Mittani as the main political player and rival of Hatti on its eastern frontiers.

During the reigns of Šuppiluliuma I and Muršili II, tensions mounted with Egypt, which had entered a new expansive phase in the Levant with the advent of the 19th dynasty. After the death of Muršili II and the accession to the throne of his son Muwattalli II, Hittito-Egyptian tensions reached an apex. In 1275 BCE Pharaoh Ramses II and Muwattalli II gathered massive armies and faced one another near the upper Orontes River in the famous Battle of Kadeš. They fought to a draw, with major human losses on both sides and no significant territorial advances on either. The frontier between the two empires was maintained and consolidated at Kadeš.

In terms of internal politics, the most important deed attributable to Muwattalli II was the relocation of the Hittite capital from Hattuša to Tarhuntašša, a still undiscovered site in the Lower Land (Fig. 5.1).<sup>79</sup> This event was not a mere repositioning of the royal residence, akin to those that occurred decades earlier toward Šamuha and Šapinuwa, but a more encompassing endeavor that involved the transference of the entire religious apparatus that legitimized power for the Hittites. Scholars agree that this move was ideologically sanctioned by a religious reform through which Muwattalli II promoted his personal god, the Storm god of Lightning (*pihaššašši*), to the head of the Hittite pantheon (Great Prayer of Muwattalli II—CTH 381).<sup>80</sup> However, economicstrategic considerations had a role in Muwattalli's choice because the land of Tarhuntašša offered access to several routes leading to both Arzawa and the eastern Mediterranean.<sup>81</sup>

In the west, the situation seems to have remained relatively peaceful after the reorganization imposed by Muršili II. Muwattalli II seems to have expanded the range of allegiances by negotiating a treaty with Alakšandu, ruler of the kingdom of Wiluša (the Hittite name of Ilion/Troy).<sup>82</sup> Endemic clashes with the Kaška continued in the north, accompanied by major repopulation programs carried out under the supervision of Muwattalli's brother, Hattušili, who was then the viceroy of the northern region of Hakmiš.

Although Muwattalli II intended the relocation to Tarhuntašša to be permanent, events took a different direction. Muwattalli's son and successor, Urhi-

<sup>79</sup> Cf. Apology of Hattušili III—CTH 81 i 75 ii 2 and ii 52–53. For the possible identification of Tarhuntašša with the recently discovered site of Türkmen-Karahöyük, in the Konya region, see Massa et al. 2020, and the critical response by Hawkins and Weeden 2021:384–387.

<sup>80</sup> Singer 2006.

<sup>81</sup> Matessi 2016.

<sup>82</sup> See the synthetic overview by Gander (2017a:272–273), with references to the earlier literature.

Teššub/Muršili III, left Tarhuntašša and—likely pressed by his uncle, Hattušili—restored Hattuša as the Hittite capital. Subsequent struggles within the Hittite ruling family had a profound impact on territorial and political developments in Anatolia. Hattušili grew more and more influential within the Hittite court and, with a pretext, declared war on Urhi-Teššub, who was ruling as the legitimate king.

In his Apology (CTH 81), Hattušili depicted his final victory over Urhi-Teššub as an ordeal and claims that he triumphed with the help of his patron goddess, Ištar. However, Hattušili III could not have won without the support of the elites, including not only client-rulers but also members of the royal family. One of these supporters was probably Kurunta, another son of Muwattalli II and thus a possible claimant to the throne. Once king, Hattušili III bestowed the vacant throne of Tarhuntašša on Kurunta as both a reward for his support against Urhi-Teššub and a means of checking Kurunta's legitimate aspirations to kingship in Hatti. Like Karkemiš in Syria, Tarhuntašša thus became a subsidiary seat of the Hittite royal family (*Sekundogenitur*), with borders carefully defined through treaties (CTH 106).

Hattušili III is particularly well known for the peace he signed with Pharaoh Ramses II in the so-called Eternal Treaty, which is known from both an Akkadian tablet found at Hattuša and monumental Egyptian inscriptions in the Ramesseum and Temple of Karnak (CTH 91). This act inaugurated a period of relative stability in the eastern Mediterranean, aptly termed the *Pax Hethitica* by Itamar Singer (1999:646). Throughout his reign, Hattušili III shared much of his power with his wife, the queen Puduheba, who was the daughter of the Kizzuwatnean priest Bentipšarri. Thanks to this union, a second wave of Hurrian influence, after the one of the late 15th century, reached the Hittite court. Puduheba outlived her husband, continuing to rule as the queen mother during the reign of her and Hattušili's son Tuthaliya IV.

As king Tuthaliya IV signed a treaty with Kurunta of Tarhuntašša, expanding the territorial extent and political prerogatives of the *Sekundogenitur*. Given his status as the son of a usurper, Tuthaliya IV was constantly preoccupied with ensuring that the court remained loyal to him and his descendants as opposed to other possible lines of succession. In this context, the presence of a semiindependent Anatolian kingdom in the hands of an heir of Muwattalli II and thus legitimate claimant to the throne of Hattuša certainly represented a thorn in the side of Tuthaliya IV. It is not yet ascertained, however, whether Kurunta and Tuthaliya IV ever engaged in open warfare.<sup>83</sup>

<sup>83</sup> For a synthesis of the debate, with references to the literature, see Giorgieri and Mora 2010:143–145.

In the lengthy hieroglyphic inscription of Yalburt in the northern Konya province, Tuthaliya IV claimed to have campaigned in the lands of Lukka. On the international front, tensions grew stronger with Assyria, which bordered Karkemiš on the Euphrates after annexing the former territory of Mittani. Eventually, Tuthaliya IV lost the battle of Nihriya, a town on the Euphrates, against Tukulti-Ninurta I of Assyria, but there was little change in the territorial holdings of either party in the Euphrates area.

Tuthaliya IV was succeeded by his son Arnuwanda III, who, however, died shortly after, leaving little to no trace in extant records apart from his sealings.<sup>84</sup> The throne then passed to the other son of Tuthaliya IV, Šuppiluliuma II, who is the last known Hittite king to have ruled from Hattuša. The documentation available on Šuppiluliuma II is also scarce and fragmentary. Although this king authored the monumental hieroglyphic inscription of Nişantaş/Nişantepe at Hattuša, which is the longest imperial Hittite document of this kind discovered to date, the inscription is badly eroded due to its long exposure to atmospheric events. From the few signs preserved, we learn that Šuppiluliuma 11 conducted a naval expedition against Alašiya (i.e., Cyprus). This topic reconnects Nisantepe with the cuneiform tablet KBo 12.38(+), which narrates similar events. It is now generally agreed that Šuppiluliuma's endeavors were meant to re-establish connections with the island and its copper resources after the disruptions caused by the seaborne raids of the so-called Sea People. The reality behind the vague term 'Sea Peoples' is controversial. Nonetheless, several pieces of evidence, including epigraphic information from Ugarit and Egypt and violent destruction events along the coast, are suggestive of increasing instability in the eastern Mediterranean area around the end of the 13th century BCE (Volume 2).

Most scholars would also attribute to Šuppiluliuma II the long hieroglyphic SÜDBURG inscription, which was found a short distance from Nişantaş in a chamber underneath a sacred pool complex.<sup>85</sup> However, some scholars have objected to this attribution, proposing instead to associate the inscription with Šuppiluliuma I.<sup>86</sup> The SÜDBURG inscription tells of military expeditions and construction works in various locales of Anatolia. The toponyms involved in this context include Lukka and Ikuna, that is, Ikkuwaniya (modern Konya). In addition, the text tells of actions involving a city named with the logographic form TONITRUS<sup>URBS</sup>, whose identification with Tarhuntašša, once subscribed to by many, has since been called into question.<sup>87</sup>

<sup>84</sup> Herbordt et al. 2011, Kat. 138–145.

<sup>85</sup> Hawkins 1995.

<sup>86</sup> Oreshko 2012; Klinger 2015; Payne 2015:78–84; Weeden 2020a.

<sup>87</sup> Van Quickelberge 2015; Weeden 2020a:483–485.

The view that the final demise of the Hittite monarchy at the turn of the 13th century was accompanied by violent destruction at Hattuša is now dismissed and is not supported by any archaeological evidence. Rather, it seems that the monarchs, their entourage, and their institutional apparatus relocated elsewhere after emptying the buildings of any objects of value, probably including portions of the tablet archives.<sup>88</sup>

## 5 Shaping the Cultural Landscape of Hittite Anatolia

The array of military, political, and economic interactions unfolding in the four documented centuries of Hittite history inevitably had a considerable impact on Anatolian cultural landscapes. We have mentioned that an intense exchange affecting the very core of Hittite ideological conceptions was already occurring during the formative stages of the Hittite polity. Furthermore, extra-Anatolian foreign influences on Hittite cultural milieus were already strong at the time of Hattušili I, and continued with varying intensity and effects until the end of the Hittite period. Dealing with the countless variables of cultural interaction in this evolving historical scenario and their manifold relationships with documented events would far exceed the scope of this chapter. There are, however, some major catalysts of cultural contact connected with documented historical processes that it is worth to sum up here as a framework for the linguistic interactions detailed in the next chapters.

To begin with, the imperial expansion and endless conflicts in which Hittite monarchs and their armies engaged had broad cultural effects that reached well beyond accidental consequences. The raids of Hattušili I contributed to the (re)introduction of cuneiform literacy and Syro-Mesopotamian traditions within the Hittite court (Chapter 6, § 2.2). But dynamics of cultural exchange could work in more subtle, bottom-up mechanisms. The mobilization of the Hittite army from several different districts of the Hittite domain resulted in the forced socialization of individuals who came from diverse cultures and spoke a variety of languages. The Egyptian records of the Battle of Kadeš offer an iconic portrait of the multicultural kaleidoscope of Muwattalli II's army:

(The Hittite) had come and had collected together all the foreign countries so far as the end of the sea. The entire Land of Hatti had come, that of Mittani (lit.: Nahrin) likewise, that of Arzawa, Dardany, that of the Kaška,

<sup>88</sup> Seeher 2001.

those of Maša, those of Pitašša, that of Arawanna, that of Karkiša, Lukka, Kizzuwatna, Karkemiš, Ugarit, Kedy, the entire land of Nuhašše, Musanet, Kadeš.<sup>89</sup>

If this description is worth any credit, anyone walking among the soldiers deployed at Kadeš would have heard a representative sample of all of the languages spoken across the Hittite domain. Kadeš was certainly an exceptional case, which can hardly be generalized as a standard for the composition of the Hittite army.<sup>90</sup> Some Hittite texts, however, provide a realistic template for the linguistic interactions that could occur daily along the military chain of command. Famous examples are the O/MH protocols for the Palace Gatekeeper (CTH 263) and the Royal Bodyguard (CTH 262), which provided instructions in Hittite that officers and functionaries had to transmit in Hattian or Luwian to their subordinates.<sup>91</sup> The sociolinguistic implications of such interactions can hardly be overestimated. For example, we know that various dialects of Luwian were spoken in Anatolia and can reasonably assume that Luwians composed a large contingent, if not the bulk, of the Hittite army, at least from the 15th century onwards. Therefore, communications between officers of any native language and their Luwian subordinates could create the conditions for the emergence of a shared Luwian code that could span across different linguistic affiliations. This could have been one among several mechanisms that led to the formation of the so-called Empire Luwian koiné employed in the Hittite capital (cf. §6.2. and Chapter 11, §3).

Besides the deployment of force, Hittites could obtain or maintain control over conquered territories through a network of diplomatic and political relationships.<sup>92</sup> This would have compelled Hittite scribal schools to maintain a training in Akkadian, which was necessary for international communications with Syrian subordinates and other Near Eastern polities. Political relationships across the Hittite Empire also entailed the movement of people in multiple directions. Representatives of Hatti were dispatched to provincial seats and client courts that in turn sent representatives to Hattuša. Client courts could also entertain diplomatic relations with third parties within the Hittite domain. This was most prominently the case of Karkemiš, whose rulers sent representatives to various Syrian courts on behalf of the Hittite monarchs. Interdynastic

<sup>89</sup> Bryce 2005:235.

<sup>90</sup> On the mobilization of provincial troops in the Hittite army, see Beal 1992:71–104.

<sup>91</sup> Yakubovich 2010:264–265; Miller 2013:88–89, 99–100.

<sup>92</sup> Altman 2003; Beckman 1995a. On the circulation of people entailed by Hittite diplomatic relationships, see, e.g., Mora 1988 and 2008; Simon 2013.

marriages were another important aspect of diplomatic transactions. Through such marriages Hittite monarchs established bonds with both foreign and subordinate courts. To be sure, the circulation of people entailed by diplomatic relations concerned only a minority of individuals—those gravitating around the ruling elites and the latter's institutions. These, however, are the same environments in which extant written records were produced. Therefore, sociolinguistic scenarios determined by politico-diplomatic relations are generally more visible to us despite their limited impact on the general population. As we shall discuss in a moment, this was the case of the Hurrian influence, which reached the Hittite court mainly through interdynastic marriages and determined important changes in official religious and ideological expressions even though it did not spread beyond the inner circles of the ruling elite.

Hittite military campaigns into hostile territories typically resulted in the capture and transportation of sizable numbers of civilians, who were sent to be used as workers or specialized craftspeople in the home provinces. Hittite texts designate this category of people with the logogram NAM.RA, which corresponds to the Hittite *arnuwala* 'transportees'. Those sources that provide information on the numbers of deportees mention as many as several thousand.<sup>93</sup> In his Ten Years Annals (KBo 3.4 iii 32–33), Muršili 11 claimed that, after a campaign in Arzawa, he transported to Hatti no fewer than 66000 captives.<sup>94</sup> This is an astounding figure, especially if we consider that the entire population of Hattuša hardly exceeded a third of that number.<sup>95</sup>

Most episodes of deportation are attested in extant sources in connection with Hittite military campaigns against foreign polities, chiefly the lands of Arzawa and Kaška. However, deportations were not only a demonstration of brutal force in times of war but also a structural component of the Hittite economy. Bronze Age Anatolian agriculture was highly reliant on precipitations, but this was subject to extreme variations due to the endemic climatic instability characterizing the region. In such conditions, agricultural yields in Anatolia were very low compared to those obtained in contemporary Mesopotamia and Egypt. Without a supplementary infrastructure, farming could support little more than a subsistence economy. Acquiring more arable land was not a sufficient solution without the manpower necessary to till the new fields. For this reason, preserving and, whenever possible, increasing the supply of labor was a

<sup>93</sup> On civilian captives, see Hoffner 2002 (with a resumptive table, p. 61); Bryce 2005:217–219; Cammarosano 2018:272–273.

<sup>94</sup> Goetze 1933:76–77.

<sup>95</sup> For similar considerations, see van den Hout 2020:175.

primary concern of the Hittite state.<sup>96</sup> The forced mobilization of people could also take place independently of wars, especially in conjunction with particular settlement policies. Forced mobilization could be used to populate towns that were founded *ex novo*, such as Kuşaklı/Šarišša (see above), expand existing settlements, or repopulate (Hittite *ašeš*-) locales that had been deserted for various reasons.<sup>97</sup>

War captives were not equated to slaves but were transported in Hatti to (re)populate the land in which they were forced to reside. In most cases, the crown assigned them fields and/or other means of production so that they could contribute to the state economy.<sup>98</sup> We can imagine that some of the captives tried to run away as is suggested by the stipulations on the restitution of fugitives included in treaties and other legal documents. Many others may have perished during deportations or did not survive long after being transplanted to foreign lands. However, many captives settled down and integrated to varying degrees into the Hittite socioeconomic environment. Over time, the forced transfers of war captives must have resulted in the presence of multiple ethnolinguistic groups, variably assimilated to the cultural facies of their host communities, in the Hittite core region.

Alongside deportations, individuals were forced to move from region to region to perform specific duties or because they were hired by central institutions. These situations, of course, involved scattered numbers of people yet could still produce interesting sociolinguistic data. The Luwian ritual practitioners who moved to the Hittite court to perform religious services and, above all, helped Hittite scribes to record Luwian language incantations, constitute a case in point. One of these peculiar specialists was the 'attendant woman' Kuwattalla (see below), who received land in Hatti from Arnuwanda I and Ašmunikkal.<sup>99</sup>

Trade is one last factor to consider among the catalysts of cultural contacts, although its implications on the sociolinguistic make-up of Anatolia are not clearly evident in the Hittite textual corpus. Compared with the Old Assyrian period, for which almost all of the records that we have were produced by merchants, very little is known about trade in Hittite Anatolia.<sup>100</sup> The increasing presence of Anatolian merchants in the Old Assyrian records raises the pos-

<sup>96</sup> D'Alfonso and Matessi 2021:129.

<sup>97</sup> Mielke 2017.

<sup>98</sup> Hoffner 2002:62, with further references in fn. 3; Cammarosano 2018:273.

<sup>99</sup> Assuming her identity with the recipient of the land grant LSU no. 91, bearing the same name and title.

<sup>100</sup> For some overviews, see Klengel 1979; Hoffner 2001; Kozal and Novák 2007; and Genz 2011.

sibility that at least the inner Anatolian circuits of trade continued to work independently after the last Assyrian firms had left. The Hittite term for city, *happira-*, is etymologically related to the noun *happar-* (price) and the verb *happirai-* (to sell, conduct business).<sup>101</sup> This would suggest that commerce had an important role in Hittite emic conceptions of social life.<sup>102</sup> Hattuša might have risen to power because of its continued role and increasing importance in Anatolian trade.<sup>103</sup> The localization of merchants in Hatti, Luwiya, and Pala that was foreseen by § 5 of the Laws (see above) may reflect an organization of early Hittite trade into three broad circuits that centered on the Kızılırmak bend, Pontic area, and south-central Plateau, respectively. If so, this subdivision may have perpetuated the organization of the Anatolian branch of the Old Assyrian network, which had nodes in Kaneš, Durhumit, and Purušhattum (Chapter 4, § 4).

Hittite involvement in long-distance exchange is relatively better documented during the Empire period. Two parallel circuits existed and must be kept distinct. An upper circuit, which is the best documented, functioned along the channels of diplomatic relations between the Hittite court and other great powers, namely, Egypt, Kassite Babylon, and Assyria. This system was conceived of as a reciprocal exchange of gifts rather than proper trade among rulers, with the gifts being luxury goods, valuable metals, and specialized personnel. Associated with this but designed for the sole benefit of the Hittite court was the inflow of tribute demanded from subordinate polities.<sup>104</sup> The lower circuit of long-distance exchange involved the regular trade run by commercial firms, who could be hired by state institutions as specialized personnel. This second layer is less well documented in Hittite textual records. The overall impression, nonetheless, is of a general shift of the Anatolian trade from the eastern, Mesopotamian trajectory that had characterized the Kārum period to a more southerly focus on the Levant and the Mediterranean. During the Hittite Empire period, documented direct exchange between Anatolia and Mesopotamia mostly involved the upper (gift) circuit. The archaeological record from Anatolia and Mesopotamia also gives this impression, because most of the imports in either direction were luxury goods and seals.<sup>105</sup> Some direct commercial interactions with Middle Assyria involved Hittite subordinate polities in Syria, chiefly Karkemiš, Emar, and Ugarit, but not Hatti itself.<sup>106</sup>

<sup>101</sup> HEG A-H:166, s.v. *happira*-; HED H:127–128, s.v. *happir(iy)a*.

<sup>102</sup> Hoffner 2001:180.

<sup>103</sup> Schachner 2020.

<sup>104</sup> Zaccagnini 1973; Liverani 2001:141-195.

<sup>105</sup> Helft 2010:116–122; Kozal 2017:129.

<sup>106</sup> Faist 2001.

The harbor of Ugarit, annexed by Šuppiluliuma I around the mid-14th century BCE, was a major focus of Hittite commercial interests in the south. Through its control over maritime trade, Ugarit granted indirect access to all of the eastern Mediterranean markets from the Levant to Egypt, Cyprus, and the Aegean.<sup>107</sup> Texts dating to the 14th and 13th centuries, from both Ugarit and Hattuša, witness that commercial interactions between Ugarit and Hatti were mainly mediated through the Anatolian port of Ura, which was probably situated in Rough Cilicia at the mouth of the Göksu River (the classical Kalykadnos).<sup>108</sup> The treaty of Arnuwanda I with the elders of Ura (CTH 144) marks the first Hittite attempt to establish forms of control in this area.<sup>109</sup> Interestingly, this document features an oath ritual in honor of the Luwian god Yarri (obv. 9: <sup>[d]</sup>Ya-ar-ri), and the Luwian element muwa- ('might') occurs in the name of an elder (obv. 3: <sup>m</sup>Mu-w[a-).<sup>110</sup> This might suggest that the port of Ura was located in a Luwian-speaking area. The name Ura itself might be etymologically related to the Luwian *ura*- 'great', but this is per se not diagnostic: there was another Ura in the territory of Azzi-Hayaša, in the eastern Pontic area, where Luwian had hardly any influence.<sup>111</sup>

Areal contacts between Anatolia and the Aegean during the LBA will be detailed in a dedicated chapter of Volume 2. Here it suffices to emphasize the very meager evidence for direct trading relations along this trajectory, which are represented, if anything, by scattered finds of Mycenaean ceramic wares (Late Helladic IIIA–B) and other objects in central Anatolian sites. This contrasts with the situation in Cilicia and, above all, the Levant, where LBA Aegean imports were relatively more abundant.<sup>112</sup>

Having outlined the general mechanisms of interregional and cross-cultural contacts operating in Hittite Anatolia, we will discuss and contextualize some of them in the frame of two specific cases that are particularly important for their broader historical implications: Hurro-Hittite and Luwo-Hittite interactions.

<sup>107</sup> Heltzer 1999:439-445.

<sup>108</sup> Klengel 1974; 2007. On the possible location of Ura, see Lemaire 1993.

<sup>109</sup> De Martino 1996:73–79. For the connection with archaeological data in the Göksu area, see Matessi 2021.

<sup>110</sup> The other names referring to Uraeans in this text are either too fragmentary or of no obvious etymology. De Martino (1996:76) proposes to restore as [mAr]nuwanda the two names mentioned in obv. 2. The only complete name is Zappananda (obv. 3). The others are: m[...]*alla* (obv. 5) and mParkul[*i*-...] (obv. 6). On muwa- as an onomastic element, see Yakubovich 2010:261.

<sup>111</sup> Alparslan 2017:216. On other aspects of the trade and trajectories in interactions between Hatti and the south, see Matessi 2021, with references to additional literature.

<sup>112</sup> Kozal 2003; Kozal 2017:118–123.

### 5.1 Hittites and Hurrians

The first epigraphic traces of the Hurrian language are attested in Upper Mesopotamia and the Syrian Jazira toward the end of the third millennium BCE.<sup>113</sup> Later on, during the early second millennium, Hurrian cultural features expanded to northern Syria and southeastern Anatolia and, by the 17th century, are abundantly attested in the archives of Alalah VII in the Amuq plain. It is in this broad area that early Hittite texts set the military encounters between Hattušili I and Muršili I and various enemies defined as Hurrians (LÚMEŠ/ÉRINMEŠ KUR <sup>URU</sup>HURRI/Hurla vel sim.). Hattušili I raided and destroyed Alalah VII, an event generally connected with the archaeologically attested destruction of the local palace.<sup>114</sup> The name of a general of Yamhad, Zukraši, who was confronted by Hattušili I during his Syrian campaigns, was Hurrian (Zukraši Text— CTH 14). Hattušili I also interacted with Tunip-Teššub, the ruler of Tikunani, in Upper Mesopotamia, to involve him in an alliance against Hahhu, which was located on the Upper Euphrates (Tikunani Letter-Salvini 1994). The name Tunip-Teššub is Hurrian, as are several other names attested in the few texts from Tikunani. This corpus may even include a text entirely written in Hurrian, which, unfortunately, is very fragmentary.<sup>115</sup> Hurrians are mentioned as potential supporters of an anti-Hittite front in the Uršu Text. Based on these and other sparse references, the main area of the earliest Hittite-Hurrian political interactions seems to have been the land stretching between the Euphrates and the Antitaurus down to Aleppo. The position and role of Cilicia in these interactions are not entirely clear as there is very little uncontroversial evidence of Hittite political involvement in this area until the reign of Telipinu.<sup>116</sup> The oft-repeated assumption that Hattušili I crossed the Cilician Plains to reach Alalah finds no support in the relevant historic-geographic evidence.<sup>117</sup> On the contrary, the reference to Zalwar and Uršu as stages of the Syrian campaign (Annals of Hattušili I, CTH 4) would suggest that Hattušili's army took the Maraş-Elbistan corridor through the Antitaurus Mountains, skirting Cilicia to the east.<sup>118</sup> The most relevant Hittite source about Cilicia is the retrospective prologue of Telipinu's Edict (CTH 19), in which Adaniya (modern Adana) figures in a list of countries that became hostile to Hatti during the reign of

<sup>113</sup> For a recent overview of Hurro-Hittite contacts drawn upon in this subsection, see de Martino 2017b.

<sup>114</sup> Most recently Lauinger 2015:203–208.

<sup>115</sup> Salvini 1996:126.

<sup>116</sup> Ünal 2014; Trameri 2020:167–173.

<sup>117</sup> E.g., Beal 1986:425-426; Bryce 2005:70.

<sup>118</sup> Matessi 2021.

Ammuna. Scholars generally take this passage as proof that, before this event, Cilicia was part of the Old Hittite domain.<sup>119</sup> However, as Trameri points out (2020:179-183), the list does not involve Hittite possessions rebelling against their subordinate status but rather countries that were already outside the sphere of Hittite control. In fact, besides Adaniya, the list includes Arzawa and Šallapa, which were never subject to the Hittites before the time of Muršili 11 (14th century BCE).

Be this as it may, from Telipinu through the 15th century, Cilicia is attested as the seat of the kingdom of Kizzuwatna, which dealt with Hatti as an equal in a series of parity treaties. Another treaty tablet from Alalah IV (AT 3)<sup>120</sup> attests that in this period Kizzuwatna was in the political sphere of the Hurrian kingdom of Mittani. Any possible relationship between this political situation and the ethnolinguistic composition of Kizzuwatna or even just of its ruling class is difficult to determine. In any case, the Kizzuwatnean religious traditions imported by Hattuša around the late 15th century BCE confirm the picture of the local cultural landscape as a melting pot of Syrian, Hurrian, and Anatolian features and a mixed linguistic texture dominated by Luwian and Hurrian. In addition, linguistic interferences between Kizzuwatna Luwian and Hurrian are generally held to result from a long multicultural cohabitation with roots in the early second millennium BCE.

As opposed to these developments in the south, the Hurrian cultural influence north of the Taurus remained very modest throughout the first half of the second millennium BCE. Features of the Hurrian language left negligible footprints in the Old Assyrian record (with those present most likely the result of contacts that occurred in Assyria), and the few Hurrian merchants involved in the Anatolian trade had barely any impact on the local cultural frameworks (Chapter 4, § 3.3). During the Old Hittite kingdom, Hurrian names had no cur-

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E.g., Beal 1986:424-427; Bryce 2005:104. These assumptions were also based on a Hittite 119 land grant found at Tarsus (LSU no. 21), wrongly dated to Hattušili I on account of the anonymous tabarna seal validating the document. We now know that the king behind the tabarna seals was most probably Telipinu (see above). Even so, this land grant remains problematic as Cilicia was certainly independent from Hatti at some point in Telipinu's reign, as proven by the parity treaty that this king signed with Išputahšu of Kizzuwatna (CTH 21). With Trameri (2020:184-193, with references to further literature), we should probably consider the possibility that this document was issued in central Anatolia by Telipinu and then brought to Tarsus as an heirloom later.

Parity treaty between Pilliya of Kizzuwatna and Idrimi of Alalah, signed under the impri-120 matur of the Mittanian king Barattarna. See Schwemer 2005:182-183. Pilliya's political position vis-à-vis Mittani is perhaps ambiguous as he also signed the treaty with Zidanta II (CTH 25), perhaps in the frame of a (partial) subordination to Hatti (see above).

rency among either Hittite rulers or state officials.<sup>121</sup> Likewise, Hurrian gods and cults played no part in the official Hittite religion before the Empire period. The earliest Hurrian texts known from the Hittite archives are liver omina that are paleographically dated to the first half of the 15th century BCE.<sup>122</sup>

The situation changed drastically in the proto-imperial phase. A crucial trigger was the annexation of Kizzuwatna, which was kickstarted by Tuthaliya I through the Šunaššura treaty. Tuthaliya I's campaigns against Mittanian clients in Syria may have further exposed Hittite cultural environments to Hurro-Semitic influences in the same way that cuneiform scribal traditions had been channeled to Hatti via Syrian contacts about a century earlier. The prevalent view is that the new bond between Hatti and Kizzuwatna was sealed by an interdynastic marriage between Tuthaliya I and Nikkalmadi, a Hurrian princess who has been plausibly suggested to be of Kizzuwatnean origin.<sup>123</sup> It is reasonable to assume that Nikkalmadi moved to Hattuša together with her entourage and family members and that their arrival could have increased the receptivity of the Hittite court to Hurrian-Kizzuwatnean traditions.<sup>124</sup> Regardless of whether this supposition is correct, a document issued by Muršili II (KUB 32.133) relates to the relocation of the Deity of the Night from Kizzuwatna to Šamuha and attributes this move to a king named Tuthaliya. This text thus testifies to the direct involvement of the royal house in the importation of Kizzuwatnean cults.<sup>125</sup> The king mentioned in this document should certainly be identified with Tuthaliya I as Muršili II introduces him as his own 'forefather' (AB.BA-YA) rather than using the appellation 'grandfather' (ABI ABIYA) that he employed regularly to refer to Tuthaliya 111.<sup>126</sup>

Following these developments, a fascination with Hurrian language and literature started to grow within the Hittite court, reaching its peak under Arnuwanda I's successor, Tuthaliya III. Hurrian compositions of various genres began to circulate and be copied in Hittite archives.<sup>127</sup> Among these, one of the first to reach Hattuša was probably the famous Song of Release (CTH 789), attested in a bilingual Hurrian-Hittite format. It narrates the destruction of Ebla

<sup>121</sup> De Martino 2011:9, 25.

<sup>122</sup> Wilhelm 2010; Giorgieri 2013:164. For a dating to the Old Kingdom, see Salvini 1994:78.

<sup>123</sup> Houwink ten Cate 1998:43–50. We do not follow here the far-fetched hypothesis raised by Taracha (2004 and 2009) that Tuthaliya I was the initiator of a Hurrian dynasty at Hattuša that produced the subsequent generations of Hittite kings. See Miller 2014 for a critique.

<sup>124</sup> Campbell 2016.

<sup>125</sup> Miller 2004a:312-319.

<sup>126</sup> Miller 2004a:350, with references to earlier literature.

<sup>127</sup> For more detailed overviews, see Giorgieri 2013:163–166, de Martino 2017, and Chapter 10 in this volume.

by the god Teššub after the city refused to release the citizens of Igingalliš, who were detained in Ebla as slaves. The original Hurrian text was likely composed in the 17th to 16th century and, as many commentators suggest, may reflect the dismay caused in Syria by the raids of Hattušili 1.<sup>128</sup> Both Ebla and Igingalliš are attested as targets of Hittite military operations in the historical narratives attributed to this king. In any case, the Song of Release eventually reached Hattuša at a later stage, as the Hurro-Hittite version known to us cannot predate the late 15th century on paleographic and linguistic grounds.

A variety of religious texts testify to the Hurrian fashions that swept the Hittite court in the proto-imperial period (Chapter 10, § 3.2). A corpus of Middle Hittite rituals, attributed to the Old Women Allaiturahhi (CTH 780-781), Šalašu (CTH 788), and Ašdu (CTH 490), respectively, feature Hurrian incantations embedded in a Hittite descriptive framework.<sup>129</sup> The professed geographic origin of Allaiturahhi was the land of Mukiš, corresponding to the Amuq Plain in north Syria, but her ritual was similar to that of Šalašu, who was of Kizzuwatnean provenance. Ašdu is defined as Hurrian (URUHurlaš), with no further details about her geographic origin. The Middle Hittite dating of the earliest known recensions of these texts, in addition to their common cultural-geographic background, suggests that they were imported from Kizzuwatna after its annexation. More precisely, Miller (2004a:256) suggests that these texts were originally kept together with others in the state archives of Kizzuwatna and thence taken to Hattuša, from where they were transmitted onwards.<sup>130</sup> A few Hurrian fragments showing an unusual script, described by Miller (2004a:526-527) and Klinger (2001:200) as akin to Middle Assyrian, may represent a trace of the tablets transferred from the Kizzuwatnean archives.<sup>131</sup>

Other religious texts bear evidence of the direct involvement of the royal couple in the promotion and diffusion of Hurrian traditions within the Hittite court. Tuthaliya III, under his Hurrian name Tašmišarri, and his wife Taduheba are the patrons of the ritual series *itkahi* and *itkalzi* (CTH 777–778), which is almost entirely composed in Hurrian. Interestingly, several tablets of these rituals were stored in the archives of Šapinuwa/Ortaköy, where Tuthaliya III had built a royal palace.<sup>132</sup> A fragmentary tablet belonging to this corpus also derives from Šamuha/Kayalıpınar, where Tuthaliya III is likewise known to

<sup>128</sup> See Neu 1996:5–12 and Haas 2006:177, who consider Hattušili's claimed liberation of the citizens of Hahhu a further connection.

<sup>129</sup> Haas and Thiel 1978.

<sup>130</sup> But see below, in relation to Kizzuwatnean Luwian rituals.

<sup>131</sup> But see Yakubovich 2010:274, fn. 81.

<sup>132</sup> Süel 1998:554-555.

have resided.<sup>133</sup> Furthermore, Queen Taduheba appears to have been the author of a prayer entirely written in Hurrian (KUB 31.19) that addressed the Hurrian Storm god Teššub.<sup>134</sup> Finally, a Hurrian ritual for the royal couple with an invocation to Teššub and his spouse, Hebat, is attributed in its colophon to a brother of Tuthaliya III/Tašmišarri, the priest and prince Kantuzzili, whom their father Arnuwanda I had appointed as Great Priest in Kizzuwatna.<sup>135</sup>

For a long time, the evidence concerning Hurrian literacy in central Anatolia was limited to the epic-mythological and religious sphere. However, a fragmentary tablet (DAAM 1.11) entirely inscribed in Hurrian with what seems to be a historical account was recently found in Šamuha/Kayalıpınar.<sup>136</sup> The tablet is unlikely to have originated from a foreign Hurrian chancery as it displays a Middle Script ductus that reflects typical Hattušean scribal habits.<sup>137</sup> The initial and final portions of this text are largely missing, which makes it difficult to understand the purpose of the composition. The surviving lines narrate military events between Cilicia and North Syria that involve two otherwise unknown personages, Ehli-tenu and Ili-Šarruma (both Hurrian names). The first twenty lines that are preserved mention Kizzuwatnean places—Kizzuwatna proper, Zunnahara, and Winuwanda-together with Alalah, Mukiš, and Mittani in relation to what seems to be an itinerary across the mountains to the sea. Some passages are related in the first person and l. 21' contains a verb that can be interpreted as a pret. 2 ps. sg. ( $\check{s}att=\check{o}\check{z}=o$ ; 'you seized'). The use of the second person could suggest that the composition was a letter<sup>138</sup> but is theoretically compatible with reported direct speech in a historiographic/annalistic context or even a prayer, considering the cultic references in the last two paragraphs.<sup>139</sup> At any rate, scholars agree that the events narrated in this text are historical facts, likely linked to a Hittite military campaign against Mittani that involved Syria and Cilicia. On this basis, Wilhelm (2006:236) initially favored an attribution of DAAM 1.11 to Tuthaliya I in light of his attested activity in the area but then opted for a later dating, namely to Tuthaliya III (2018:475, fn. iii).<sup>140</sup> However, the tablet findspot would be more compatible with the earlier rather than the later origin.141

- 137 Rieken 2009:133.
- 138 Wilhelm 2019:199–200.
- 139 Von Dassow 2020:203.
- 140 See also Rieken 2009:130 on the late Middle Hittite appearance of some sign shapes.
- 141 Müller-Karpe and Müller-Karpe 2019:5–6.

<sup>133</sup> Wilhelm 2019:205-207.

<sup>134</sup> Wilhelm 1991a.

<sup>135</sup> Haas 1984.

<sup>136</sup> Wilhelm 2006; Rieken 2009:130–135; Wilhelm 2019:197–200.

The tablet DAAM 1.11 complements the information cited above on the relocation of the Deity of the Night as they both depict the strength of the interactions between Šamuha, Kizzuwatna, and Syria during the proto-imperial period. As Corti (2017b:11, fn. 35) tentatively observes, Šamuha could have had a role in the transmission of the Syro-Kizzuwatnean-Hurrian traditions to Šapinuwa, especially because both cities served as royal residences for Tuthaliya III. Moreover, the upper Kızılırmak area and Cilicia are directly connected along a pathway crossing the Antitaurus and entering eastern Plain Cilician (Yukarıova) at Kozan. During the Late Empire period, this path was still in use and ideologically charged through the dedication of several landscape monuments. The most prominent was the Fıraktın relief, which portrays Hattušili III with his wife Puduheba and emphasizes the latter's Kizzuwatnean

The widespread incorporation of Hurrian influences that started with the proto-imperial period coincided with an increase in the number of Hurrian personal names in the royal family. All of the proto-imperial queens bore Hurrian names (Nikkalmadi, Ašmunikkal, and Taduheba). Tuthaliya III, the son of Arnuwanda I and Ašmunikkal, is the first king known to have borne a Hurrian name, Tašmišarri, together with his Anatolian one. No Hurrian names can be attributed with any confidence to Šuppiluliuma I, Muršili II, or Hattušili III but are attested for Muwattalli II (Šarri-Teššub) and Muršili III (Urhi-Teššub). The last king known to have a Hurrian name was Tuthaliya IV, who can be safely equated with Tašmi-Šarruma based on his seal impressions.<sup>143</sup> Hurrian onomastics were diffused widely in the royal family and, by the mid-13th century BCE, other individuals within the ruling elites also bore them. Interestingly, however, Hurrian names remained a minority in Hittite society compared with those from other onomastic traditions, e.g., Luwian.<sup>144</sup>

It was traditionally assumed that Hittite kings who had a Hurrian birth name adopted an Anatolian name upon their accession to the throne.<sup>145</sup> This view, however, has been challenged by Beal (2002), who cogently pointed out the lack of any consistent pattern in naming habits within the royal family. There was no such distinction between throne names and birth names, and Empire period rulers could use Hurrian and/or Anatolian names irrespective of their career stage. For example, Tuthaliya IV/Tašmi-Šarruma used the Anatolian name in his princely sealings but both names upon attaining kingship,

descent.142

<sup>142</sup> Matessi 2021.

<sup>143</sup> Hawkins and Weeden in Herbordt et al. 2011:101-102.

<sup>144</sup> De Martino 2011:25-34.

<sup>145</sup> See the literature cited by Beal 2002:58, fn. 19.

whereas Muwattalli 11 employed his Hurrian name Šarri-Teššub until quite late in his reign.<sup>146</sup>

Hurrianization had a radical impact on the Hittite official religion, into which Hurrian cults were integrated from the late 15th century onwards at the highest ranks of the state pantheon.<sup>147</sup> This process culminated in the Late Empire period with the definitive assimilation of the supreme divine pair, represented by the Storm god of Hatti and the Sun goddess of Arinna, to their Hurrian counterparts, Teššub and Hebat. Teššub and Hebat formed a triad with their son Šarruma, who thus also joined the divine hierarchy. The cult of Ištar, equated with the Hurrian Šawuška, who had her main cultic centers at Šamuha and in the Kizzuwatnean city of Lawazantiya, also became prominent.

The configuration of the divine world resulting from this Hurro-Hittite syncretism finds its most magnificent concretization in the rock-cut sanctuary of Yazılıkaya, situated in an outcrop a few hundred meters northeast of Hattuša.<sup>148</sup> The largest chamber of this monumental complex (Chamber A) famously represents the opposed processions of female gods on the right and male gods on the left, with Anatolian hieroglyphic inscriptions identifying each deity. The two processions converge toward the climax of the composition: a scene on the front wall of the encounter of Teššub and Hebat. An entourage of seven deities surrounds the supreme couple, including the bulls Hurri and Šeri, who accompany Teššub in Hurrian mythology, and Šarruma. Stylistic considerations and the presence of three reliefs of Tuthaliya IV would support dating the extant iconographic repertoire of Yazılıkaya to the 13th century BCE, but the sanctuary itself was likely already in use in the 15th century.

After flourishing under Tuthaliya III, Hurrian traditions became less influential during the next two or three generations. No Hurrian names are attested for Šuppiluliuma I and Muršili II, and no Hurrian texts can be directly associated with the former. Muršili II, however, is mentioned in the ritual of Ummaya (CTH 779), which contains passages in Hurrian embedded in a Hittite procedural framework. The *itkahi* and *itkalzi* ritual corpora do not seem to have been copied during the 14th century BCE. Muwattalli II's taste for Hurrian traditions is reflected in his second name, Šarri-Teššub, and in those of his sons, Urhi-Teššub and Ulmi-Teššub,<sup>149</sup> but no Hurrian texts survive from his reign. This

<sup>146</sup> Hawkins in Herbordt et al. 2011:95.

<sup>147</sup> Taracha 2009:92–95.

<sup>148</sup> Seeher 2011.

<sup>149</sup> The direct filiation of Ulmi-Teššub from Muwattalli II is assured if we accept that he should be identified with Kurunta of Tarhuntašša. For a different scenario, cf. van den

observation, however, should be weighed against the general paucity of records attributed to this king, still buried within the ruins of Tarhuntašša.

A revival of Hurrian literary traditions took place during the 13th-century reign of Hattušili III. This was certainly due to the influence of Hattušili's wife Puduheba, the daughter of the Kizzuwatnean priest Bentipšarri. Significantly, both Puduheba and Bentipšarri are Hurrian names. A dynastic bond between the Hittite rulers and Kizzuwatnean-Hurrian elites was thus created. much as a marriage had triggered the first wave of Hurrianization of the late 15th century. Puduheba is credited with having entrusted the collection of the tablets of the Kizzuwatnean festival of hišuwa, which embed a few Hurrian recitations, to the chief scribe of Hattuša Walwaziti.<sup>150</sup> The bulk of the Hurrian mythological literature is also mainly known from Late Empire copies and redactions, although some compositions were imported earlier, perhaps by Šuppiluliuma I after the conquest of Mittani. Notwithstanding its shared Hurrian or Hurro-Mesopotamian background, the Hurrian mythological literature is a very heterogeneous corpus, mostly featuring Hittite adaptations of Hurrian (or Akkadian) originals, with fewer Hurrian monolingual or Hurro-Hittite bilingual texts (see Chapter 10, § 3.1.). This would indicate that Hurrian was no longer widely read in the Hittite court despite a persistent erudite interest in Hurrian culture.<sup>151</sup> Confirming this general trend, the last known version of the Allaiturahhi ritual, performed for the king Šuppiluliuma II, is in Hittite without a single passage in Hurrian.<sup>152</sup>

## 5.2 Hittites and Luwians

Parallel to Hurrianization, the record attests to a growing spread of Luwian cultural influences in Hatti. Most scholars agree that the main Luwian-speaking area was located to the southwest, south, and southeast of the Kızılırmak area, stretching from the southern plateau, around the Tuz Gölü, to Kizzuwatna, which was home during the second millennium BCE to a mixed Luwo-Hurrian population.

The evidence examined in Chapter 4 suggests that the Kızılırmak area had been frequented at least sporadically by Luwians since the Old Assyrian period. These contacts must have continued in subsequent centuries as Luwian influ-

Hout 1995:194: "Dass er aber der Bruder Kuruntas, also ein weiterer Sohn Muwattallis war [...] kann nur vermutet werden."

<sup>150</sup> Although versions of this text might have already circulated under Muwattalli II: see Campbell 2016a:302, fn. 44.

<sup>151</sup> Campbell 2016a:298.

<sup>152</sup> Haas and Wegner 1988:5.

ences left marks on the Old Kingdom records. Interactions with people from Luwiya, although not necessarily Luwian speakers, were frequent enough to require specific provisions in the Old Hittite redactions of the Laws (see above). Some tenuous interferences with Luwian can be traced in Old Hittite. A debated case in point is the name of the forefather of the Hittite ruling dynasty, Labarna, which from Hattušili I on came to be used as a royal title in either that form or the variant *tabarna*.<sup>153</sup> Luwian deities were poorly represented in the Old Hittite religion, which was still dominated by Hattian influences. However, Luwian incantations, often coupled with Palaic examples, feature in several Old Hittite rituals addressed to the main gods of the Hittite state pantheon and those of the Hattian/Palaic milieu.<sup>154</sup> This is a further indication that, by the end of the Old Kingdom, Luwian speakers constituted a significant component in the Hattušean population and were actively involved in the religious life of the city.<sup>155</sup>

With the proto-imperial phase of the late 15th century BCE, the influence of Luwian traditions in Hatti steadily increased, and continued to grow over the following centuries of Hittite rule in Anatolia. Luwian beliefs became more closely integrated with Hittite religious practices through the incorporation of Luwian rituals and local Luwian festivals. Worth noting among the latter are the festivals for the goddess Huwaššanna that took place in the centers of Hupišna (Cl. Kybistra) and Kuliwišna, located in the foothills of the northern Taurus around the Ereğli district. Significantly, Huwaššanna, rendered with the logogram dGAZ.BA.A.A, had a role in the Hittite state cult; in fact, she is often listed among the Hittite divine witnesses in international treaties.<sup>156</sup> Furthermore, several rituals of diverse origin that embedded Luwian songs and incantations were copied and recopied from the proto-imperial period onwards. Contextually, Luwian onomastics became more and more frequent at Hattuša, not only within the royal family (Muwattalli, Kurunta, etc.) but also among court dignitaries and employees of the administration. On a linguistic level, Luwian pressure is deemed to have triggered several of the dialectal innovations encountered in Middle and New Hittite. Moreover, Empire period texts make ever more extensive use of foreign words, most of them Luwian; these foreign words are often marked with Glossenkeil, or gloss wedges. By the mid-13th century, Hieroglyphic Luwian had become the standard language and script for

<sup>153</sup> Starke 1983; Melchert 2003:19; and Yakubovich 2010:229–232 (Luwian origin); Soysal 2005 (Hattian origin). See Chapter 12, § 2.3, and Chapter 14, § 3.1.

<sup>154</sup> Hutter 2003; Görke 2020a.

<sup>155</sup> Yakubovich 2010:248–260.

<sup>156</sup> Hutter 2013.

monumental commemorative inscriptions, a tradition continued within the Syro-Anatolian principalities of the Iron Age after the demise of the Hittite Empire.

The factors above suggest that during the last two centuries of Hittite history core Hittite institutions and perhaps the entire urban population of Hattuša had become a mixed Hittite and Luwian speaking environment, with Luwian tending to prevail.<sup>157</sup> The extent of this bilingualism within the Hittite core region is unclear because all of the extant records are linked to the ruling classes, with a focus on those residing in Hattuša. Relevant to this issue is the question of the relative status of Hittite as a living vernacular during the 14th and 13th centuries vis-à-vis the spread of Luwian.<sup>158</sup> As argued by Melchert (2003a:12–13; 2005), followed by Yakubovich (2010:406), there is no sound linguistic support to the claim that by the 13th century Hittite was a mere language of textual tradition. On the contrary, structural innovations and the presence of colloquialisms in the later stages of the Hittite language argue that it was still an actively spoken language at the time of the abandonment of the Hattuša archives.

Several local varieties of Luwian language and traditions were transmitted to the Hittite capital through various trajectories. Formerly, Cuneiform Luwian and Hieroglyphic Luwian were identified as two dialectal forms of the language.<sup>159</sup> Yakubovich (2010) challenged this subdivision, noting the strong structural and lexical overlap between the Luwian *Glossenkeil* words embedded in cuneiform texts and the dialect codified by hieroglyphic inscriptions. He then argued that both the language of hieroglyphic inscriptions and *Glossenkeil* words reflected the Luwian dialect spoken at Hattuša, a sort of koiné that he labeled Empire Luwian. The forms of Hieroglyphic Luwian represented in inscriptions of the post- and Neo-Hittite periods are derived directly from Empire Luwian.

The geographic attribution of the cuneiform Luwian passages embedded in MH and NH ritual texts is more complex.<sup>160</sup> Yakubovich (2010) observed that a group of rituals within this corpus featured Luwian insertions whose characteristics were distinct from those of Empire Luwian. In particular, diagnostic features of this dialect can be singled out as deriving from contact with Hurrian (Chapter 11). This would point to an origin of the related traditions in the southeastern peripheries of the Hittite domain, where extensive Luwo-Hurrian

<sup>157</sup> Yakubovich 2008 and 2010.

<sup>158</sup> Van den Hout 2006, with literature.

<sup>159</sup> Melchert 2003b:170-175.

<sup>160</sup> See Chapter 11 for more details on the linguistic features of the various Luwian dialects.

interactions were more likely to have occurred. A practitioner associated with these traditions, Zarpiya, was of professed Kizzuwatnean origin; hence the rituals and their Luwian recitations are referred to as Kizzuwatnean.<sup>161</sup>

Earlier classifications also assigned a group of rituals with Luwian incantations attributed to the Old Woman Tunnawiya (CTH 409) to Kizzuwatnean traditions. However, Miller (2004a:452–458), followed by Yakubovich (2010:20), convincingly argued against this association and singled out the Tunnawiya rituals as parts of a different corpus. The name Tunnawiya derives from the toponym D/Tunna,<sup>162</sup> generally identified with the site of Porsuk-Zeyve Höyük<sup>163</sup> in the northern foothills of the Taurus and mentioned among the dependencies of Tarhuntašša (BT ii 15–16). Mouton (2015) observed that the Tunnawiya rituals share several traits with Arzawan, Kizzuwatnean, and Hattian rituals and thus probably stemmed from the traditions of nearby regions. These and other factors thus support locating the origin of the Tunnawiya traditions in the south-central plateau, which constituted a natural crossroads between Hatti, Kizzuwatna, and western Anatolia. Hence the denomination of these traditions as Lower Land rituals, after the name of the main Hittite regional entity in the area.

Non-trivial similarities with the Tunnawiya rituals in formulas and ritual performance would place the Luwian traditions attributed to the attendant woman Kuwattalla within the same areal framework.<sup>164</sup> This group of rituals (CTH 759–761) was formerly ascribed to the Kizzuwatna milieu due to the presence of several Hurrian loanwords and theonyms. This taxonomy, however, has been revised by Mouton and Yakubovich (2021:32–36), who convincingly circumscribe the Hurrian influences to secondary interventions that occurred in Hattuša. These secondary interventions were in part inspired by the Old Woman Šilalluhi, a likely Hurrian native speaker who collaborated with Kuwattalla on some individual compositions. In turn, the Kuwattalla corpus shares several aspects with the Luwian rituals of <sup>m</sup>Puriyanni (CTH 758), which, lacking any obvious connection with Kizzuwatnean traditions, can likewise be included in the Lower Land group.<sup>165</sup> The composition of the Lower Land rituals likely dates to the proto-imperial period of the late 15th century BCE.

<sup>161</sup> KUB 9.31 (CTH 757) i 1: [<sup>m</sup>Zarp]iya <sup>LÚ</sup>A.ZU <sup>URU</sup>Kizzuwat[na]. See Starke 1985:50.

<sup>162</sup> Yakubovich 2013.

<sup>163</sup> But see Matessi 2021:11–12, in which I raise doubts about this identification. The site of Porsuk/Zeyve-Höyük was probably uninhabited during the period when most textual attestations of D/Tunna occur, i.e., during the 14th to 13th centuries BCE (see also Matessi, forthcoming).

<sup>164</sup> Starke 1985:73-81.

<sup>165</sup> See Mouton and Yakubovich 2021:31–32, with further arguments in support of this geographical reassessment.

Kizzuwatna Luwian probably spread in the same way as Hurrian cultural features, that is, through contacts with Kizzuwatna (see above). The rituals that were accompanied by Kizzuwatna Luwian recitations were probably recorded no earlier than the proto-imperial period, which would broadly match the first wave of Hurrianization in Hatti.<sup>166</sup> Yet the mechanisms of Luwian acculturation from Kizzuwatna differed slightly from the Hurrian mechanisms. Yakubovich (2010:277 ff.) challenged Miller's argument (2004a:256) that Luwian literacy existed in Kizzuwatna and distinguished between Luwian rituals, to which he attributed a private character, and Hurrian rituals, which he considered mainly focused on the public sphere. He then argued on linguistic grounds that Kizzuwatna Luwian recitations were recorded in Hattuša by Hattušean scribes after dictation from native ritual experts.<sup>167</sup> Divergent mechanisms of transmission between the Kizzuwatna Luwian and Hurrian traditions might explain the differential geographic distribution of the related texts. Significantly, no cuneiform Luwian texts have been reported from the archives of Kayalıpınar/Šamuha and Ortaköy/Šapinuwa, which were important hubs of Hurrian literacy in central Anatolia (Fig. 5.1).

Direct interaction with ritual experts provides a general framework for the incorporation of Lower Land Luwian traditions as well. Ritualists were likely hired by central institutions as witchcraft specialists and advisers to work in tandem with scribes to record magic wisdom deemed useful to the well-being of the court and royal family. We can suppose that the attendant woman Kuwat-talla was granted some land, most likely in Hatti, in recognition of this service by Arnuwanda I and Ašmunikkal (LSU no. 91). Likewise, Tunnawiya is termed on one occasion an 'Old Woman of Hatti/Hattuša' (MUNUSŠU.GI URUHATTI; KBo 21.1 i 1), perhaps indicating that she was residing in the capital as a dependent specialist.

A third corpus of cuneiform Luwian or, better, Luwic traditions, is represented by the songs performed on the occasion of the cult festival of Ištanuwa (CTH 771–772).<sup>168</sup> This toponym is not attested except in this textual group, nor is Lallupiya, cited as the place of origin of a team of singers that performed some of the songs. However, the celebrations also involved sacrifices to the river god Šahiriya, which would pull the geographic context of the Ištanuwa

<sup>166</sup> Melchert 2013:169.

<sup>167</sup> Melchert (2013:169) is more sceptical about the private character of Kizzuwatnean Luwian rituals due to the fact that they were recorded and copied within the Hittite state chanceries but otherwise accepts the 'dictation model' proposed by Yakubovich.

<sup>168</sup> See Chapter 11 and its references for the classification of Ištanuwa Luwian.

cult in the Phrygian highlands, west of the Kızılırmak area. In fact, the Šahiriya River is known from other sources to have been a frontier between Hatti and Arzawa and is unanimously identified with the classical Sangarios (known as the Sakarya River today).<sup>169</sup> If the 'Songs of Ištanuwa' originated in the Šahiriya River area, it would represent the northwesternmost group of cuneiform Luwic texts. In light of this localization, it should not be surprising to find Luwian practices in nearby Durmitta, on the western bank of the Kızılırmak (Chapter 4, § 4); traces of Luwian traditions are identified in the Zuwi rituals (CTH 412) in this locality. As discussed in Chapter 4, § 4, interactions between the Durmitta/Durhumit area and west-central Anatolia (Purušhanda/Purušhattum), probably transmitted along the Hulana and Šahiriya river basins, are well documented in the Old Assyrian period and might have continued through to the Hittite proto-imperial era.

Less obvious are the trajectories that brought Luwian traditions to the area of Tauriša. These are documented by a small ritual corpus (CTH 764–766) that can be dated paleographically no later than Middle Script/Middle Hittite. Geographic information on Tauriša is drawn primarily from records of the great AN.TAH.ŠUM festival, in which this center is associated with Mount Daha, near Zippalanda, and the Zuliya River(-god). This would localize Tauriša a few kilometers southeast of Hattuša, around the Çekerek river basin, which is unanimously identified with Hittite Zuliya.<sup>170</sup> The Tauriša rituals and the celebrations associated with this city during the AN.TAH.ŠUM festival provide a coherent picture of the local pantheon. This was centered on a triad formed by the Luwian Sun god Tiwad, the Luwian goddess Kamrušepa—the hypostasis of the Hattian Katahzifuri—and the tutelary deity (dLAMMA) of Tauriša.<sup>171</sup>

The peculiarities of the Luwian recitations embedded in the Tauriša corpus will be considered in a separate discussion (Chapter 11, §1.2). Here what matters is to emphasize that Tauriša Luwian was distinct from the Empire Luwian dialect spoken and written at Hattuša, whereas it shared several nontrivial features with Kizzuwatna Luwian.<sup>172</sup> In evaluating this distinction, it is important to remember that the Tauriša rituals, like all others in the cuneiform Luwian corpora, are only known from manuscripts composed at Hattuša. Yet the Tauriša Luwian dialect used in them does not match any other variety of Luwian so far attested and is thus considered a new dialect.<sup>173</sup> By itself, the

<sup>169</sup> Forlanini 1987:115 fn. 23; Corti 2017a:234-236.

<sup>170</sup> Forlanini 2008:169.

<sup>171</sup> Taracha 2010:100.

<sup>172</sup> Starke 1985:222.

<sup>173</sup> Yakubovich 2009:23; Mouton and Yakubovich 2021:38-46.

presence of Luwian speakers in northeast-central Anatolia should not be surprising. Around the early 14th century BCE, a small number of individuals with Luwic names were active in the Maşat/Tapikka area as observed by Yakubovich from attestations in the local tablet corpus (2010:262–263). However, the striking particularities of Tauriša Luwian, chiefly its connections with Kizzuwatna, raise the question of how and whence this dialectal variety could have reached the Tauriša area. Considering the matter from a historical perspective, we see two possible interpretations. One is that the Luwian recitations belonging to the Tauriša tradition were interpolated by Hattušean scribes. Faced with a foreign, 'low-status' variety of Luwian, they may have adjusted the language by borrowing from the more prestigious and familiar Kizzuwatna Luwian. Within this scenario, the recitations embedded in the Tauriša rituals would reflect a local Luwian environment of undetermined origin.

The other possibility requires that the Kizzuwatna Luwian features were genuine Tauriša Luwian forms, faithfully recorded by Hattušean scribes. In this case, Tauriša Luwian would be a local dialect somehow connected with Kizzuwatna Luwian and should thus be explained in the frame of a migration from somewhere within or near Kizzuwatna (see Chapter 11). This scenario would be hardly surprising. As the concentration of Hurrian traditions at Šapinuwa and Šamuha shows, contacts with Kizzuwatna were common around the upper Kızılırmak and Çekerek/Zuliya Rivers and might have involved the migration of Kizzuwatna Luwian groups and/or individuals. As argued above, the apparent absence of cuneiform Luwian records at Šamuha and Šapinuwa does not militate against this observation, as it can be explained in light of different transmission processes of Luwian as opposed to Hurrian literacy. Luwian speakers could have migrated to Tauriša spontaneously, but administered population transfers are also documented between Kizzuwatna and east-central Anatolia, significantly around the same period as the Tauriša rituals were composed. Evidence for this is offered by the Maşat letter HKM 74, which was sent by 'The Priest' of Kizzuwatna, likely Kantuzzili, and asked for the restitution of twenty Kizzuwatnean individuals deployed in the environs of Tapikka. We do not know further details of this request, but this and/or other undocumented population exchanges of the same sort could have involved Luwian ritual practitioners who, for a reason, transmitted their wisdom to Hattušean scribes.

At the end of this overview of the geography of Luwian sources, it is worth briefly mentioning a substantial group of texts that are known as the Arzawa rituals because they were authored by practitioners professing their origin from Arzawa or other territories of western Anatolia.<sup>174</sup> These rituals feature several

<sup>174</sup> For an overview, see Hutter 2003:234–238. See also Yakubovich 2010:101, table 7. For individual texts, or aspects thereof, see Mouton 2013 and 2014.

isolated Luwisms (Luwian god names, loanwords, ritual *termini technici*, etc.). However, in contrast with the corpora described above, both their prescriptive framework and recitations are in Hittite. The significance of this could depend on how the Arzawa rituals were transmitted to the Hittite archives, an issue that is all but clear. As detailed by Yakubovich (2010:102–104), there were two opposed scenarios, similar to those mentioned above concerning the Hurrian versus Kizzuwatna Luwian traditions: either the Arzawa rituals were compiled on tablets in Arzawa before being imported at Hattuša or they were recorded at Hattuša by, or on behalf of, Arzawan expats with ritual expertise.

#### 6 Concluding Remarks

The web of socio-cultural interactions analyzed in this chapter knit together an extremely diverse landscape that shaped in various and unpredictable ways the circulation of ideas, worldviews, objects, people, and languages. Some recurring patterns allow the identification of at least two types of interfaces that, when crossed, had different implications for the Hittite cultural legacy. The first, more elusive, type of interface was genuinely cultural and was mainly reflected in the interactions occurring between the various ethnolinguistic groups cohabiting in central Anatolia. At least one such cultural interface, between the Hittites and Hattians, was crossed quite early, probably centuries before the formation of the archives of Hattuša. This produced an intricate blend of religious traditions and ideological conceptions, if not mutual linguistic interferences (see Chapter 9). Geographically, this blend was summarized in the territorial definition of Hatti, which encompassed, with no apparent distinctions, both Hittite and Hattian milieus. Another cultural interface, which informed areal relations between Hittites and Luwians, resisted for somewhat longer. During the Old Kingdom, this interface was reflected in a core-periphery opposition between the lands of Hatti and Luwiya. This opposition was subsequently eliminated or reshaped by successive reforms: first the uniform application of the storehouse system throughout central Anatolia in the late 16th century BCE and then the creation of the Lower Land in the late 15th century. Significantly, it is at this last juncture that the Hittite-Luwian interface was definitively crossed from a cultural standpoint, producing the close culturallinguistic interference summarized here, in § 5.2., and detailed in Chapter 11.

The second type of interface was marked by a natural frontier, namely the Taurus mountain chain, which separated the central plateau from southeastern Anatolia, Cilicia, Syria, and Mesopotamia. The first remarkable effect of interactions across this natural interface was the (re)introduction of cuneiform literacy and Syro-Mesopotamian traditions in Anatolia, which was followed by waves of 'Hurrianization.' It is worth emphasizing that these contacts, although at times intensive, had their main impact on the ruling elites, with few echoes in the larger society. However, in certain places, more pervasive cultural interactions crossed the same natural interface—for example, between the south-central plateau and Cilicia. Intense contacts between those two regions go back to at least the third millennium BCE (Chapter 3). It is probably this long-lasting intercommunication that produced the condition for the formation of the dialectal continuum between Lower Land and Kizzuwatna Luwian.

# Hittite Anatolia and the Cuneiform Koiné

F. Giusfredi, A. Matessi and V. Pisaniello

## 1 The Cuneiform Koiné

In this volume, the term 'cuneiform koiné' will generally denote the group of cultures, occasionally identified with political entities, that at a given stage of their historical development adopted the cuneiform writing system.<sup>1</sup> This concept is a valid spatial and diachronic periodization tool to better identify what we commonly call, rather vaguely and aniconically, the ancient Near East. It can be used to describe a reasonably consistent cultural area that involved several groups, peoples, and languages until the middle centuries of the first millennium BCE.<sup>2</sup>

Based on this definition, the ancient Near East would include a core area that consisted of Mesopotamia and Euphratic Syria and peripheries at varying distances from the core (western Iran, the northern Persian Gulf, the Levant, the northern Tigris, and, most importantly for this book, central, eastern and southeastern Anatolia). Egypt and the southern portions of the Levant were involved in the wider cuneiform network in the age of Amarna, but despite long-established contacts were divided by a cultural boundary from the cuneiform koiné (although, of course, the boundary was scalar, blurry, and permeable as is always the case in cultural geography).<sup>3</sup>

<sup>1</sup> We do not use this label to refer to a language, nor to a specific tradition within the family of the cuneiform scripts (as done, e.g., by Salvini 2014:308–309). We intend koiné in its widest meaning, as it is used already in Giusfredi and Pisaniello 2019a and Giusfredi 2020d ('koinè cuneiforme').

<sup>2</sup> During the Neobabylonian and Achaemenid dynasties, cuneiform still existed and one version of it was employed for writing Old Persian. However, its features, functions, and the very role of the Mesopotamian cultural model had changed significantly during the transition from an Akkadian-centered to a Persian-centered world that would survive at least until the arrival of Islam despite the addition of Greek components during the Macedonian and Roman eras.

<sup>3</sup> Cuneiform was used and known in Egypt as shown by the Amarna archive. Furthermore, permeability to the Ancient Near Eastern cultural environment is equally evident in the introduction of Semitic divine figures, roughly during the age of the XIV and XV dynasties. Still, no evidence exists that cuneiform ever became a dominant code in the Nile kingdom or that it became part of the standard scribal formation.

But how can the cuneiform koiné be an adequate representation of the cultural area of the ancient Near East? Can the diffusion of the cuneiform writing system adequately represent the cultural area? And, based on this criterion, can we explain what features Hittite Anatolia, northern Syria, and southern Mesopotamia have in common that Egypt, for instance, did not entirely share?

When considering the diffusion of cuneiform beyond Mesopotamia, we should not understand this writing system as a mere technology to record spoken language. While such a definition may be helpful for the investigations of the linguists and to disambiguate proper writing systems from simpler semiotic codes (such as the clay tokens used for early accounting), it is a very inadequate definition when the emphasis is put on the cultural significance and implications of the functions and patterns of diffusion of a script.

Cuneiform is a logo-syllabary that exhibited a functional quasi-optimality for the rendering of the linguistic code of the Sumerian area in the third millennium BCE. It had developed from a proto-cuneiform semiotic system that slowly evolved toward a glottographic phase. However, anthropic systems hardly ever evolve in a linear and tidy fashion: describing a framework in which a system evolved completely in isolation before being transferred to other areas in an orderly fashion would have been an easier task, but interference was at work during the glottographic definition of the Sumerian cuneiform writing system, and local adaptations started to emerge in the closer peripheral areas. The development of cuneiform advanced contemporaneously in Syria and Mesopotamia, with interconnections between the Sumerian, Syrian, and Mesopotamian Semitic traditions that produced, in some cases, scribal environments like that in Ebla in the 24th century BCE, in which Mesopotamian traditions, local substrate systems, and imported practices mingled. The result was a sort of stratified system in which the exact steps of alteration and evolution of the logo-syllabary and local traditions sometimes cannot be discerned.

Apart from noting the complexity of the diffusion, which involved Upper Mesopotamia, Elam, and Syria during the third millennium BCE and then spread to the neighboring areas, including Anatolia, during the second, it is important to be aware that cuneiform was a complex cultural construct. It was not limited to a system of glyphs that evolved both graphemically (functionally) and paleographically (formally),<sup>4</sup> but featured a system for organizing and

<sup>4</sup> The concepts of graphemics and paleography are sometimes confused in the literature. Graphemics is the study of the functional aspect of the graphic sign (its value and the way it is combined with other signs in a writing system). It is, therefore, a structural concept (Beccaria 2004:369). Paleography, on the other hand, is the analysis of the formal aspect of the glyphs:

representing knowledge (religious, literary, scientific, and administrative) and a conception of society based on the preservation of human memory through the written word (from the microsocial level of a single legal transaction to the political horizon of the building or narrative inscription dictated by a king). In this context, the adoption of cuneiform can be considered truly complete only when the culture adopting it adapts the script to its functional needs (local language, selection or creation of technical jargon, production of a specific type of documents, etc.). Furthermore, the use of cuneiform implies the acquisition of the cultural heritage the writing system carries.

The cultures that entered the cuneiform koiné did not merely adopt a syllabary. Rather, they adopted a tradition that began in the southern Mesopotamian cultural milieu and contributed to maintaining and perpetuating it. A clear indicator of this is the diffusion of Sumerian and Akkadian literature in the most peripheral areas. Just as a marker of classical culture was knowing Homer, fragments of the Gilgameš poem found in the Hittite archives, including parts of a Hittite and a Hurrian translation,<sup>5</sup> could tempt us to say that knowing the literary tradition about the King of Uruk was a marker of Near Eastern culture.

Adopting cuneiform implied the adoption of a complex cultural system: in Hatti, lexical lists and literary materials from the Mesopotamian tradition were copied, translated, and re-elaborated. As cuneiform Akkadian began to be used for administrative purposes in land grants (see Chapter 8 for a discussion), the juridical jargon and formulas combined local innovations and inheritances from the Syro-Mesopotamian world. Literary topoi of the Mesopotamian tradition entered the Hittite textual production. Even though the quantity of evidence varies from one area to the next, the same principles seem to apply elsewhere, such as in the West Semitic cultures of the Levant. For example, consider the lexical lists produced in cities like Ugarit or the synonym list *mallku* = *šarru*, which includes Elamite, Hittite, and Hurrian words.<sup>6</sup> Such lists testify to the amplitude of an areal phenomenon that we can read only in part.

either their synchronic variation or diachronic change. Graphemic change can occur in conditions of paleographic stability, and paleographic change can occur without alterations in the traditional shapes of the signs.

<sup>5</sup> The Hattuša tablets preserving the Akkadian, Hittite, and Hurrian versions of the epic of Gilgameš correspond to CTH 341. A recent edition is offered by Beckman 2019b.

<sup>6</sup> Published in Hrůša 2010.

#### 2 Cuneiform in Anatolia: The General Context

#### 2.1 Cuneiform in the Peripheries

The literature on the diffusion of cuneiform and Akkadian suggests the adoption of a model of diffusion that appears linear and quasi-unidirectional, at least in its initial stages. A core area can be identified that coincides with southern Mesopotamia (probably the best choice in considering the diffusion of the writing system) or Mesopotamia as a whole (when considering the diffusion of the Akkadian language rather than the writing system). The other regions in which various cultures adopted the cuneiform linguistic and cultural toolset are generally referred to as 'peripheral.'

It is not hard to imagine that the toolset spread more or less directly from the core to the most distant areas of the periphery, including the Syrian areas of the Euphrates valley or the Jazira. Nor is the timing problematic. Cuneiform reached Syria sometime during the Early Dynastic third millennium; one might even challenge Syria's designation as a peripheral area and argue that the areas of Ebla and Mari, quite different from one another, were part of the region that adopted the writing and connected cultural system from a very early stage. The earliest cuneiform documents from Elam seem also to date to the third millennium and probably pattern graphemically with the Old Akkadian stage of the script.

The situation becomes blurrier during the Middle Bronze Age. The crisis of the Second Urbanization increased cultural mobility in the former outskirts of the (Syro-)Mesopotamian world, and cuneiform, as a result, now appeared to be steadily employed by populations that, according to the available evidence, did not share the orthographic standardization of the central Old Babylonian world but derived their graphemic praxis from the system that was typical of the Old Akkadian age.<sup>7</sup> The Hurrian principalities of the Jazira, Syrian centers such as Alalah, and northern Mesopotamian and Anatolian archives of the Old Assyrian kingdom and its outposts seemed to develop strategies for the writing of stops and sibilants that were different from those developed in Old Babylonian southern Mesopotamia.

Among the geographically and genealogically non-Anatolian and non-Semitic languages, Hurrian is most relevant to the study of the diffusion of cunei-

<sup>7</sup> This derivation is testified by the use of specific signs for rendering specific types of stops, sibilants, glides, and vowels. The orthography of Old Babylonian in southern Mesopotamia became standardized at some point during the 19th century BCE after undergoing changes that are not found in the northern and peripheral graphemic inventories. For an overview on the historical phonology of Akkadian, see Sommerfeld 2021. For details on the complex issue of the notation of Semitic sibilants, see also the seminal work by Goetze 1958.

form to the western peripheries. By their geographical collocation, the Jazira principalities, during the Middle and Late Bronze Age, and those Hurrian groups and polities that settled in western Syria, were necessarily involved in the diffusion of the writing system to the north and west.

The literature on Hurrian and the Hurrians is rich if a little fragmented, but the historical reconstructions, except for the history of the main polity, Mittani, are not as numerous as the studies of language and religion. The main reference works remain those by Wilhelm (1989) and Salvini (2000a, 2000b). The Hurrian settlements in the Jazira and Upper Mesopotamia (cf. Chapter 10) produced, starting from the third millennium, texts that employed a type of cuneiform that generally patterned with the Old Akkadian system.

The Hurrian cuneiform traditions are quite inhomogeneous. Middle Bronze Age texts from Mari (Thureau-Dangin 1939) show features that are similar to those of the locally produced Akkadian texts, which were mostly Old Babylonian, but this is a very site-specific phenomenon. The Late Bronze Age Mittanian system, on the other hand, had different ways of treating syllables formed by a stop and a vowel, designating some signs for the rendering of specific vowels (Giorgieri 2000a), but are overall consistent with a peripheral tradition. As for the Hurrian texts produced in Hattuša from the xv century onwards, they are rather inconsistent, and to some extent appear to be influenced by the graphemic system of Hittite.

By the mature Late Bronze Age, the use of cuneiform, along with a standardized variety of Akkadian we will call international Akkadian (cf. Chapter 8), was diffused throughout the Levant, Canaan, and the famous, all-important Egyptian archive of El Amarna. Cuneiform may also have been known at this stage in some extremely peripheral regions, including western Anatolia, if the Amarna Letters EA 31 and 32—written in Hittite instead of Akkadian—were prepared in a Luwian scribal office. Peripheral archives such as Emar or Ugarit, especially active during the 14th and 13th centuries, testify to the mixing of the Middle Babylonian linguistic and scribal culture with local West Semitic vernaculars. However, some of the standardizing power of the lingua franca is visible in most of these local productions.

The wave of 'cuneiformization' of most areas of the ancient Near East continued until the crisis at the end of the Bronze Age. The very different situation that emerged after the storm is material for a different section of this work and will be discussed in Volume 2.

#### 2.2 The Wave Hits Anatolia

The penetration of cuneiform in Anatolia is a phenomenon that belongs to the earlier phases of the diffusion of this writing technology. As discussed in Chapter 4, cuneiform came into use in Anatolia during the Middle Bronze Age, in the socioeconomic setting of the Old Assyrian trading network. The extension of the adoption of the writing technology, geographically speaking, can only be speculated upon, but it is reasonable to assume that the centers that were involved in the trades and visited by Assyrian traders or their associates had, or may have had, scribal facilities of some sort. This provides us with a potential area of diffusion of the writing that reached the west-central center of Purušhanda, to the west, Hattuša and its sub-region to the north. The area is large, and it is difficult to guess to what extent the writing system was adopted by non-Assyrians. Certainly it was used in Kaneš, as proven by the archives of Anatolians and the evidence for Anatolian or at least non-Assyrian scribes. A few non-commercial documents also indicate that writing cuneiform letters was a practice that was not unknown at the courts of local princes.<sup>8</sup>

Anitta's adventures, which can be dated to the final decades of the 18th century, and the newly published Wiušti's letter from Hattuša (KBo 71.81) indicate that by roughly this time the Anatolian principalities wrote Akkadian in an Old Assyrian fashion. The gap separating this phase from the second half of the 17th century and the reigns of Hattušili I and Muršili I must have been characterized by a cultural and political reshaping, with the almost complete forfeiting of the *kārum* scribal tradition and a reintroduction of cuneiform writing in Anatolia, probably following a North Syrian trajectory of diffusion. Ultimately, even the Akkadian documents from the Old Hittite kingdom presented Babylonian linguistic features rather than Assyrian ones.<sup>9</sup>

This stage corresponded, more or less, to the phase of the diffusion of cuneiform in the peripheries in the mature and final Middle Bronze Age. An Old Babylonian version of Akkadian was employed in northern Syria, where the cultural and political hegemony was shifting from Mari to the emerging Yamhad polity. Paleographically, level VII of the stratigraphy of Alalah returned cuneiform texts whose ductus resembles that of the first documents that emerge from the Hittite archives of Hattuša.

If we simplify and summarize decades of scholarly debate,<sup>10</sup> we find two main theories about the path of penetration of the cuneiform culture in Hittite Anatolia. What we will call the 'paleography-centered' theory compares the shape of the signs used in Hattuša in the Old Hittite phase with those employed in the surrounding areas of the cuneiform koiné and concludes that the best match is, as previously mentioned, represented by the syllabary employed in

<sup>8</sup> See above, Chapter 4, for further discussion on the Old Assyrian age in Anatolia.

<sup>9</sup> On the sociolinguistics of Akkadian in the Old Hittite phase, see Chapter 8.

<sup>10</sup> For an overview of the history of the studies, cf. van den Hout 2009c.

Alalah in the late Middle Bronze Age and early Late Bronze Age. The second view is represented by the 'graphemics-centered' theory, which emphasizes the similarity between the function of specific sets of consonant-vowel signs in some peripheral varieties of Akkadian and—allegedly—in Hurrian and concludes that the 'cuneiformization' of the Hurrian and Hittite worlds were part of the same wave that diffused the technology of writing.

An optimist would be tempted to conclude that the two hypotheses could be combined in a comprehensive theory because of the presence of many Hurrian names in the main cities of northern Syria, Alalah and Mari (Oliva Monpeán 1999, with references to previous literature). But despite the paleographic similarity between the Alalah VII and (Old) Hittite ductus, verifying the claim of a graphemic *close* connection between the Hurrian and Hittite cuneiform systems turns out to be tricky. Since one of the claims that belong to the general model proposed in this monograph is that the status of Hurrian in Anatolia was sociolinguistically and culturally prominent only from the late 15th century BCE, tackling the issue of the alleged Hurrian role in the transmission of cuneiform of Anatolia is unavoidable.

The arguments are, as previously stated, graphemic, and go back to the work by Hart (1983). It was suggested that some similar developments exist in the functional features of cuneiform signs in Hurrian and Hittite, which include limiting the use of the sign PI to writing the syllable with an approximant w followed by a vowel (and, in the case of Hurrian, also a syllable with a labiodental onset) and not distinguishing between signs with a voiced and voiceless onset for 'stop + vowel' signs. The biggest problem in evaluating these arguments is trying to understand what the term 'Hurrian cuneiform system' is supposed to mean. The Hurrians used a version of the Old Akkadian syllabary to compose their earliest texts, in the third millennium BCE. These were written in Akkadian (for further details on this stage, cf. Chapter 10, §2). During the Middle Bronze Age, Hurrian texts were composed in northern Syria: the Hurrian tablets from Mari testify to the use of the sign PI for glide-onset-syllables only, but there appears to be a distinction in the function of the voiced and voiceless signs for stop+vowel syllables. Nothing in these documents points to a direct connection with the treatment of stops in the Hittite writing system (where double writings vC-Cv indicate either a fortis or a voiceless consonant and v-CV indicates a lenis or voiced one) or with the specialization of these signs to distinguish specific vowel colors<sup>11</sup> as will be the case in the system employed by the Hurrians of Mittani during the Amarna age (14th century BCE). The system

<sup>11</sup> Giorgieri 2000a:181.

used for the writing of Hurrian texts in Hattuša, starting from the 15th century BCE, is inconsistent and certainly partly influenced by the Hittite system, which makes its employment in this analysis impossible to avoid circular argumentation.

The weakness of these arguments is self-evident. The treatment of stoponset-signs is immediately qualifiable as inconsistent when comparing the different Hurrian traditions with each other and with the Hittite one. With the partial exception of Mari Hurrian, all are explained within the context of a peripheral cuneiform tradition that derives not from the Old Babylonian system, that was later enriched by independent and only partly similar innovations.

The same observation applies to the specialization of PI (MZL 598) to write syllables that start with an approximant (or, again, a labiovelar fricative). While it is true that both the Hittite system and the 'Hurrian' system(s) share this innovation, its importance has been overemphasized. It was certainly a monogenetic change in the functions of the syllabary, but it was not unique to these traditions.

Another peculiarity of the cuneiform systems adapted to the writing of non-Akkadian texts in Hittite and Hurrian is the specialized use of the signs containing sibilants. The traditional cuneiform system offered some options: the series of Š signs (ŠA, ŠI, ŠU), the series of S signs (SA, SI, SU), the series of Ssigns (SI/E and SU [=ZUM]; SA coincides with ZA), the series of Z-signs (ZA, ZI/E, ZU). Over the centuries, these signs took on alternative values that in part reflect the complex relationship between different local traditions, with the same sign employed for the continuants of different Proto-Semitic sibilants in different areas (Gelb 1947; Goetze 1958). When adapting the cuneiform system to render the phonology of Hittite, only two series were used: the palatalized Šseries for the non-palatalized fricatives (v-Šv and vŠ-Šv for /s/and /ss/, with no available data on possible voiced allophones) and the Z-series for the affricate /ts/. Gamrkrelidze (2008) compared this situation with the signs selected for the notation of consonants in Hurrian (notwithstanding the obstacles encountered in defining a single Hurrian scribal praxis) and correctly concluded that neither the system employed in the Mittani letter nor in the early North Syrian texts from Mari have any features in common with the Hittite adaptations.<sup>12</sup> In general, Hurrian employs the Š-series and the Z-series with a certain

<sup>12</sup> Beside supporting the view that Hittite cuneiform belonged to a peripheral tradition derived from the Old Akkadian system, Gamkrelidze (2008) proposed to identify in Nuzi cuneiform a possible candidate for the transmission to Anatolia. This theory that cannot be excluded but is not strongly supported by the available evidence and does not

degree of interchangeability, at least in Mittani, while the system adopted in the Hurrian texts from Hattuša partly shares this feature and partly appears to be influenced by the Hittite syllabographic inventory. (The writing of Hurrian in Hattuša belongs to a later stage and employing it to discuss the introduction of cuneiform would result in circular argumentation). As the Hittites were active in Syria in the earliest phases of the age of Hatti (cf. Chapter 5, §2), it is worth taking a closer look at the Hurrian texts produced in Mari during the Middle Bronze Age. As correctly observed by Jäntti (2017:22), the area of Mari is the one in which the Hittites of early Hatti might have interacted with Hurrian traditions; here also the sibilants are rendered with the S-sign series (Thureau-Dangin 1939, Gamkrelidze 2008), a feature absent in the Hittite syllabary.

In general, the idea that Hurrian played a role in the diffusion of cuneiform to Anatolia is based on an outdated representation of the geography, history, and functional features of the peripheral versions of the script. Both Hurrian and Hittite adapted cuneiform to the rendering of non-Semitic languages, and both acquired the syllabary from a phase and area that were not included in the orthographic regularization of southern Mesopotamian Old Babylonian. But the connection is limited to this, and no proof exists that a Hurrian or Hurrianized milieu was part of the transmission. What is certain, on the other hand, is the paleographic contiguity of Hittite cuneiform and the syllabary of Old Babylonian Alalah, which leads us to the only conclusion that can be reached about the penetration in Anatolia of the cuneiform used by the Hittites: it originated in a Syro-Anatolia interface area at some point between the last years of the Middle Bronze Age and the early Late Bronze Age and derived from local traditions that developed out of an Old Akkadian *syllabary* rather than from an Old Babylonian one.

Soon after attaining power, Hattušili I adopted the expansive policies of his predecessors but pushed his claims well beyond the limits of central Anatolia. As told in his bilingual Akkadian-Hittite annals, Hattušili I crossed the Taurus and marched against various Syrian cities. Among these were Zalwar, Uršu and Haššu, but the most prominent was certainly Alalah (modern Tell Açana in the Amuq valley), which Hattušili I raided twice. Excavations carried out at Tell Açana/Alalah since the 1940s have brought to light a sequence of two tablet corpora, the oldest of which, from level VII, provides information on political and economic affairs in and around the city in the decades preceding Hattušili's

appear particulary promising from a historical perspective. For general criticism about the involvement of Hurrian in the development of the Hittite cuneiform system, see also Jäntti 2017.

attacks. We know, therefore, that during the 18th and 17th centuries, Alalah was a major satellite of the powerful kingdom of Yamhad, which was centered in Aleppo. The cuneiform texts uncovered at Alalah VII show striking graphic and graphemic similarities with the Boğazköy ductus that is typical of later Hittite texts, which in turn is very different from Old Assyrian cuneiform. Therefore, it is generally—albeit not universally—maintained that, after the kārum Ia hiatus, cuneiform was reintroduced in Anatolia by Hattušili I as he returned from Syria.<sup>13</sup> This process likely involved the hiring of Syrian scribes or even their seizure as war prisoners to employ in Hittite scriptoria. The Akkadian of Hattušili I's Annals shows close formal affinities with variants of that language attested in Syria around the time of Hattušili's raids that could identify the author as a native Syrian scribe.<sup>14</sup> Also, the Akkadian letter sent by Hattušili I to Tunip-Teššub, ruler of the Upper Mesopotamian kingdom of Tikunani, appears to be the work of a Syrian scribe.<sup>15</sup> In this document, certainly an original and probably the earliest known product of a Hittite chancery, Hattušili I introduces himself only as Labarna, inaugurating the use of this personal name as a title. The possibility that King Labarna himself was the author of the letter is not very attractive since the interactions between Hatti and Tikunani described in the letter involve an Euphratic area—Zalwar, Hahhu, and Tikunani—closely matching the known geographic sphere of Hattušili's actions. Moreover, Hattušili I is known to have used the title *tabarna*, a variant of *labarna*, in both the Akkadian and Hittite versions of his Annals.

Another early Hittite document with strong Syrian affinities is the Siege of Uršu (KBo 1.11). This text was also written in Akkadian, but its cuneiform complies with Syrian graphic traditions rather than the Syrianizing Boğazköy ductus, and recent archaeometric analyses on the tablet confirm that it was produced in Syria.<sup>16</sup> Unlike the Tikunani letter, which was directed to a foreign court and used Akkadian as the international *lingua franca*, the Uršu text belonged to the archives of Hattuša and dealt with a topic relevant to a Hittite audience in the times of Hattušili I, who claims to have campaigned at Uršu on his way back from the first expedition to Alalah. Indeed, the Uršu text is probably the earliest known original text from Hattuša.<sup>17</sup>

<sup>13</sup> The relationship between the cuneiform traditions of Hattuša and Alalah VII has been thoroughly addressed by van den Hout in various articles (e.g., 2012) and is summarized in his 2020 monograph (pp. 38–56).

<sup>14</sup> Devecchi 2005:28–29, 113–127.

<sup>15</sup> Edited by Salvini 1994.

<sup>16</sup> Showing a chemical signature from the Middle Euphrates area. See Goren et al. 2011.

<sup>17</sup> Archi 2010:40.

In summary, the expansionist ventures of Hattušili I and their continuation under Muršili I not only placed Hattuša/Hatti at the center of a hegemonic kingdom in Anatolia but also transcended the kingdom's natural barriers, revitalizing contacts with the cultural traditions of the eastern Mediterranean and Mesopotamia. From this time onwards, the archives and scriptoria of Hattuša, and later those elsewhere in central Anatolia, hosted a copious cuneiform textual production that continued until the demise of the Hittite kingdom. Of course, not all periods of Hittite history are documented with equal intensity, and the Old Kingdom is one of the least known. This is due to the finding conditions of Hittite archives as well as the very processes that formed them. At Hattuša most tablets and tablet fragments were not found in situ (i.e., close to their original archival collocation) but rather in secondary contexts. Although significant archival groups can be identified, chiefly those from the Great Temple, Büyükkale Building A, and the Haus am Hang (House on the Slope), no collection matching, for example, the wonderful preservation of Ebla's archives has been detected at Hattuša.<sup>18</sup> Moreover, record management in the Hittite archives inevitably involved the dumping of many documents considered no longer necessary or obsolete to free up space to shelve new records. Only those texts that retained their relevance were kept or copied across generations.

Almost all the records that survive from the Old Kingdom up to the reign of Muršili I are known from later copies. Most contain (pseudo-)historiographic content. They include monolingual texts written in Akkadian or Hittite and bilingual texts using both languages. The Annals of Hattušili I and his Political Testament (CTH 6) belong to the latter category.<sup>19</sup> Another text generally attributed to Hattušili I, the Edict (CTH 5), as well as the Anitta text and some fragmentary *Res Gestae* of either Hattušili I or Muršili I, are monolingual (written in Hittite).<sup>20</sup> Textual production in Hittite harking back to the formative stages of the Hittite state also comprises a group of historico-didactic texts: the Palace Chronicle,<sup>21</sup> the Tale of Zalp(uw)a, the Puhanu text (CTH 16),<sup>22</sup> and KBo 3.60 (better known as the Cannibal Text).<sup>23</sup> The only two originals from this period, namely, the Uršu text and Tikunani letter, are both written mono-

<sup>18</sup> But cf. some succinct references to 'clearly stacked tablets' in reports on the earliest excavations (van den Hout 2020:266–268).

<sup>19</sup> De Martino 2003:21–79; Devecchi 2005; Klinger 2005.

<sup>20</sup> De Martino and Imparati 1998:392–395; de Martino 2003, nos. 3–5.

<sup>21</sup> Dardano 1997.

<sup>22</sup> Gilan 2015:295–325.

<sup>23</sup> Güterbock 1938:105–113. For the interpretation and definition of the historico-didactic genre in Old Hittite literature, see Gilan 2015.

lingually in Akkadian, although the former includes several Hittite words and even an entire sentence.

In contrast with the rich coeval documentation available for the previous period, there are very few testimonies of textual production dating to the generations between Muršili I and Telipinu. Remnants may include some tiny fragments of historical accounts attributed to Hantili I (but perhaps Hantili II!)<sup>24</sup> and Ammuna,<sup>25</sup> all preserved in Hittite from NS copies. The latter king is also known from an original text: an Akkadian course formula inscribed on a bronze ax.<sup>26</sup>

A new phase of revitalized scribal production coincides with the reign of Telipinu. This king is famous for a lengthy document, termed the Edict of Telipinu (CTH 19), which is preserved in multiple later copies. These include both a Hittite version and fragments of an Akkadian version.<sup>27</sup> This text opens with a long historical prologue (§§ 1–27), in which the author offers his perspective on Hittite political history from the heyday of Labarna and focuses on the factional strife that afflicted the court from the reign of Muršili I until Telipinu's accession. A normative section (§§ 28–50) is presented as an attempt to put an end to endemic conflicts through the (re)affirmation of succession rules and administrative reform. Besides the edict, Telipinu signed the first known Hittite international treaty, which was negotiated with Išputahšu of Kizzuwatna. This was a parity treaty, in which two parties reciprocally acknowledge each other's power sphere, and was drafted in both an Akkadian and a Hittite version (CTH 21.I–II).<sup>28</sup>

Telipinu is credited with having inaugurated the tradition of the *Land-schenkungsurkunden* (LSU), a well-defined group of royal grants through which Hittite kings transferred lands and/or other resources (a labor force, livestock, etc.) from one subject, generally an institution, to notable individuals.<sup>29</sup> Each of the grants is a unique document, inscribed on a pillow-shaped tablet sealed in the central field of the obverse by the ruler issuing the transaction. This is a guarantee that all extant LSU were written when issued and were originals in

26 Salvini 1993.

<sup>24</sup> KUB 26.74 (NS); KBo 3.57 (NS); KUB 31.64+ (as per Soysal 1989). See de Martino 2003, nos. 6–7.

<sup>25</sup> KUB 26.71 and duplicates, KUB 36.98 and KBo 3.59.

<sup>27</sup> Hoffmann 1984.

<sup>28</sup> Only tiny fragments of the Hittite version are extant. The Akkadian version, slightly better preserved, was edited by Del Monte 1981:210–212.

<sup>29</sup> Riemschneider 1958; Rüster and Wilhelm 2012. The hypothesis of an LSU tradition stretching back to Hattušili I, first proposed by Balkan 1973, has since been discarded on sound prosopographical grounds; see Ruster and Wilhelm 2012:49–52.

their time. The presence of the royal seal would also seem to be crucial for dating the LSU. However, several LSU bear anonymous royal seals (called *tabarna* seals for their use of royal titles alone as identifiers of the issuing authority). Fortunately, comparisons of the witness lists that accompanied each grant recently permitted fine-tuning the relative chronologies. Thus it was verified that most if not all of the LSU bearing *tabarna* seals date to the reign of Telipinu. Nonetheless, Rüster and Wilhelm (2012:49–51) do not exclude the possibility that LSU nos. 1 and 2 were issued by Huzziya I or even Ammuna, that is, a generation or two before Telipinu. The earliest kings attested by name on LSU are the immediate successors of Telipinu, Alluwamna and Hantili II. The tradition continued thereafter in almost every reign except that of Tuthaliya I (whose name is associated with at least one land grant) until Arnuwanda I and his wife Ašmunikkal (late 15th century), who issued the last known document of this kind (LSU no. 91).

All LSU issued up to the reign of Muwattalli I are drafted in an Akkadian conforming to Old Babylonian, with sporadic Hittite insertions for technical terms and topographic indications (cf. also Chapter 8, § 3.2). The texts follow a fixed structure, marked by a set of formulas perhaps derived from Syrian models but revealing at the same time a Hittite scribal background (e.g., the Akkadian *našûm* as a calque of the Hittite *šara da*- in the grant formula).<sup>30</sup> The LSU are the first datable documents that provide the names of individual scribes, who are all conspicuously Anatolian.<sup>31</sup> This indicates that by the time of Telipinu an independent, local scribal expertise had developed within the Hittite administration. Interestingly, unlike all its predecessors, the grant issued by Arnuwanda I and Ašmunikkal is written in Hittite, complete with sentence-initial conjunctions and particles (e.g., n(u)=ašta), finite verbal forms (e.g., *anda paizzi*) and nominative endings for personal names (e.g., <sup>f</sup>Zidanduš; <sup>m</sup>Aparkammiš). The standard formulas, however, are still maintained in Akkadian in this latest land grant.

After the reign of Telipinu we reenter a dark age that is sometimes called the Middle Kingdom. As argued above (Chapter 5), this definition is now generally considered inappropriate for a historical evaluation. It is nonetheless true that there are very few records except the LSU securely attributed to this period until the reign of Tuthaliya I. Tahurwaili and Zidanta II issued two treaties with Kizzuwatna, unfortunately quite fragmentary, involving their respective counterparts, Eheya and Pilliya. Judging from preserved sections, the treaty

<sup>30</sup> Archi 2010:39. Against the Syrian origin of the model, see van den Hout 2020:64.

<sup>31</sup> Van den Hout 2009a:81–84.

between Tahurwaili and Eheya (CTH 29), known only from Akkadian manuscripts, was a paritetic treaty modeled upon the one drawn between Telipinu and Išputahšu.<sup>32</sup> A treaty between Zidanta II and Pilliya (CTH 25), found in Hittite only, has the general appearance of a paritetic treaty but also includes the clause *našta lingain šarratti* (obv. 12, 'you, i.e., Pilliya, are transgressing the oath'), which is normally used to refer to client rulers in subordination treaties.<sup>33</sup> The fragmentary treaty of an unknown Hittite king with Paddatiššu of Kizzuwatna (CTH 26), preserved in an Akkadian manuscript, almost certainly belongs to the same period.<sup>34</sup> It is a paritetic treaty similar to those of Telipinu and Tahurwaili, which suggests that it must predate the era when Kizzuwatna was subordinate to Hatti (the reign of Tuthaliya I and thereafter).

This is the situation of early Hittite literacy as considered from original texts and texts known from later copies but datable to the Old Kingdom by their authorship or historical association (Hittite scribes never employed a system for dating the texts they redacted). Given that most of the Hittite archives were used for long periods—often even for the entire length of Hittite history tablet findspots, even if well documented, are not very useful as dating criteria. Therefore, students of Hittite philology since the infancy of the discipline have tried to develop independent paleographic methods to sort out the chronological distribution of Hittite manuscripts. A tripartite system of Old, Middle, and New Script, based on observable diachronic changes in sign shapes and ductus, was thus devised and covers the entire span of Hittite history. As defined in this system, Old Script was used roughly between the reigns of Hattušili I and Telipinu, Middle Script from the reigns of Telipinu to Šuppiluliuma I, and New Script thereafter until the end of the 13th century.<sup>35</sup>

This tripartition based on paleography laid down the premises for the development of a parallel system that focused on stages of the Hittite language and was formulated accordingly as Old, Middle, and New Hittite.<sup>36</sup> The starting point for this effort was the identification of a supposed original of the reign of Hattušili I that was written in Hittite, the Zukraši text (KBo 7.14+). Its

Del Monte 1981:209; Devecchi 2015:66. This text is only partially edited by Del Monte (1981:210–213), but a complete translation (in Italian) is elaborated by Devecchi (2015:65–68).

<sup>33</sup> Editions: Otten 1951; Wilhelm 2014a.

<sup>34</sup> Editions: Meyer 1953:112–119; Wilhelm 2014b.

<sup>35</sup> Neu 1980, XIII–XXII; Starke 1985:21–27. For recent syntheses on the state of the art of Hittite textual dating, see van den Hout 2009b; Weeden 2011:42–52; de Martino 2021; Klinger 2022.

<sup>36</sup> Heinhold-Krahmer et al. 1979.

discovery encouraged the belief that the Hittite language had been written down since the founding of the Hittite kingdom.<sup>37</sup>

It turned out that this straightforward reconstruction was far too optimistic. Recent research has questioned a rigid application of the tripartite system, especially as regards the chronology of the Old Script and its boundaries with the Middle Script phase. Miller (2004a:463–464, fn. 733) argued that the earlier phase lasted until the reign of Tuthaliya I, which raised the suspicion that many texts formerly classified as Old Script were written in the 15th century BCE, that is, during what was considered the Middle Script phase. This might well be true of the Zukraši text, whose sign shapes are closer to those of the Middle Script.<sup>38</sup> Paleographic evidence from the LSU, now firmly dated to the 15th century BCE, further corroborates the existence of several Old Script features during the Middle Script period.<sup>39</sup> Finally, the significant divergence in ductus and sign shapes between the Tikunani letter or Uršu text and other Old Script documents suggests that the evolution of Hittite cuneiform during its early stages was far more complex than the linear development suggested by the tripartite paleographic system.

On these premises, and considering that all ascertained originals up to the late 15th century BCE are written in Akkadian, Popko (2007) and van den Hout (2009) advanced the view that Hittite became a scribal language no earlier than the reign of Telipinu. According to this theory, the Palace Chronicle, the Tale of Zalp(uw)a, and Old Hittite texts with historical narratives such as the Anitta text and the deeds of Old Hittite kings would be considered translations from Akkadian. Given the lack of Akkadian versions, however, this hypothesis remains highly speculative and can hardly be accepted. In his 2020 monograph, van den Hout argued instead that monolingual Old Hittite texts could have been transmitted orally for more than two centuries before being transcribed during the reign of Telipinu or later. In a broader comparative perspective, van den Hout makes a case for a slow Hittite adaptation to cuneiform, which involved a long phase when this script was used seldom and only in the language from which it was first introduced, namely, Akkadian.

Notwithstanding van den Hout's numerous thought-provoking insights, his arguments are mostly circumstantial and hardly conclusive. To be sure, orality

<sup>37</sup> Otten and Souček 1969:42.

<sup>38</sup> Popko 2007:578; Weeden 2011:47. Archi (2010:38) stresses similarities with the treaty between Zidanta II and Pilliya (see above). However, the findspot of the Zukraši Text in level IVc of Büyükkale, adduced by Otten and Souček (1969:42) as the main argument for its early dating, can at best provide a terminus ante quem in the late 16th century.

<sup>39</sup> Wilhelm 2005; Rüster and Wilhelm 2012.

was an important and perhaps even the prevalent medium for the propagation of literary traditions in all proto-literate societies, and LBA Anatolia Hittite was no exception. The Tale of Zalp(uw)a, Palace Chronicle, and Puhanu Chronicle were all well suited to public declamation, but lengthy, non-recitative texts such as the deeds of Old Hittite kings or the Anitta Text were less so.<sup>40</sup> The final banquet scene in the Palace Chronicle provides a context in which this text, or parts of it, could have been recited aloud as a form of entertainment.<sup>41</sup> However, this does not rule out the possibility that the anecdotes making up the composition could have circulated in writing as aides-mémoire; the same might be true for the other compositions as well.<sup>42</sup> As Rieken argues (2000), the Tale of Zalp(uw)a and the Palace Chronicle preserve traces of an archaic linguistic layer that perhaps dated to Hattušili r's time. This kind of conservativism is normal in poetic texts, in which meter, musicality, or other stylistic considerations constrain linguistic choices, but would not be typical of prosaic folk tales and historical accounts circulated in a purely aural environment.

There is also no reason to assume a long phase of adaptation of cuneiform to the Hittite language. Numerous Hittiticisms or Hittite expressions, including a short sentence, are already present in the Uršu text. Whether the scribe was a Hittite native speaker, as argued by Beckman (1995a:27), or Syrian, as proposed here (see Chapter 8, § 3.1),<sup>43</sup> the Uršu text would prove that the process of adapting cuneiform to Hittite was in progress by the time of Hattušili I. Nothing would prevent this sort of experimentation from continuing and reaching a mature stage in a matter of decades. As Archi (2010:43) and de Martino (2021:114) note, the full development of cuneiform writing in a local vernacular could take less than a generation, as proven by the cases of the Eblaite and Urartian cuneiforms.

Whether or not Old Hittite texts in Akkadian were later translations of Hittite versions is still the subject of heated debate. For most texts, the choice of Akkadian was reasonable. The Tikunani letter and the treaties with Kizzuwatna were diplomatic documents involving or addressed to non-Hittite partners and thus used Akkadian as an interregional lingua franca, as customary in the Near East during the second millennium BCE. The scribes of the Annals and Testament of Hattušili I might have resorted to the prestige of Akkadian to best

<sup>40</sup> Archi 2010:42.

<sup>41</sup> Gilan 2015:132–133.

<sup>42</sup> In this regard, van den Hout (2020:85–86) cogently stresses the brachylogic style of the Palace Chronicle, which seemingly was meant to be enriched by a knowledgeable reader during a public recitation.

<sup>43</sup> See also Archi 2010:40 (Syrian or trained in a Syrian scribal school).

convey the king's word. For the same reason, an Akkadian version was also drafted for the Edict of Telipinu at the end of the following century, at a point when even van den Hout believes that Hittite was written. The LSU do not provide definitive proof that Akkadian was the official scribal language of the Old Hittite court. The Akkadian formulas making up discursive parts of these texts hardly originated from Anatolia as they are earlier attested only at Alalah VII, in a single instance and with a small variation.<sup>44</sup> Other examples, however, might have circulated at sites where the second-millennium occupation has yet to be investigated. A likely candidate in this respect might be Aleppo, to which Alalah VII was subordinate.<sup>45</sup>

The Akkadian of the Uršu Text is easily explained if its scribe was Syrian or trained in a Syrian scribal school, as the script would suggest. Finally, the use of Akkadian for inscribed objects is not a valid argument for the primacy of Akkadian over Hittite during the Old Kingdom: would one deny that Hittite was the official scribal language in Hattuša during the Empire period because of the Akkadian inscriptions on Tuthaliya I's sword and the cuneiform legends on royal seals?

Relevant to the question of Hittite literacy are discussions around the Old Hittite redactional phases of the Hittite Laws. This is an imposing legal corpus organized in two series (Series I–II) of 100 paragraphs each, named in the respective colophons 'if a man' (*takku* LÚ-*aš*; CTH 291) and 'if a vine' (*takku*  $^{GIŠ}$ GEŠTIN-*aš*; CTH 292).<sup>46</sup> Each paragraph summarizes the case law on a type of case, such as the murder of merchants, abduction, theft, land tenure, lost property, or damage to animals, plants, or implements. The language is Hittite and, notwithstanding the conditional structure, which closely recalls Mesopotamian legal codes, there is no reason to postulate that the laws derived from a lost Akkadian archetype. The Hittite Laws are the most copied product of Hittite scribal culture: each series is preserved in more than twenty manuscripts, and these are dated paleographically and linguistically from OH to NH. Those who have edited the documents agree that the most ancient copies are manuscripts A (KBo 22.62+) and M (KBo 19.2+) in Series I and manuscript aa (KBo 25.85+) in Series II.

Most of the manuscripts are de facto identical, with later variants modernizing the language of more ancient copies. However, a stratification of different versions of individual dispositions is already testified in the OH manuscripts

<sup>44</sup> See van den Hout 2020:61, 64.

<sup>45</sup> On this issue, van den Hout's reasoning was contradictory: he acknowledged the striking similarities between the Hittite LSU and the Alalah document to confirm the Syrian origin of Hittite cuneiform but dismissed the comparison as an argument for the Syrian origin of the LSU model.

<sup>46</sup> Main edition: Friedrich 1959; Imparati 1964; Hoffner 1997.

by references to earlier stages ( $kar\bar{u}$ , 'formerly'), contrasted with more recent ones (kinuna; 'now'). The process of re-elaboration of the dispositions then continued to be made up to the NH era, chiefly resulting in the replacement of corporal punishments with pecuniary fines. The last and most extensive revision, dating to the Late Empire period, is the so-called Parallel Text (KBo 6.4), which is organized in 41 sections that reformulate some of the paragraphs of Series I.

In contrast to their Mesopotamian counterpart, namely the Code of Hammurapi, the Hittite Laws are not claimed by a ruler, nor do they have a prologue or epilogue that hints at when they were written. This has generated a discussion about the dating and attribution of the text. Like the Tale of Zalp(uw)a and the Palace Chronicle, the Laws refer to the 'father of the king' (*ABI* LUGAL), in relation to a *karū* clause reported in §§ 54 to 56. Identifying this personage as Hattušili I, several commentators have ascribed the most ancient corpus (not directly attested but reflected by the *karū* clauses) to him and assigned to Muršili I the *kinuna* redaction preserved in the actual OH manuscripts.<sup>47</sup> Hoffner (1997:230), instead, argued that Telipinu authored the *kinuna* redaction.<sup>48</sup>

Even though neither proposal can be confirmed conclusively, the later rather than the earlier dating of the *kinuna* stage of the laws seems more convincing. A reformation of the law collection would be more consonant with the process of rationalization and internal reorganization of the kingdom claimed by Telipinu in the normative and administrative sections of his edict. Hoffner (*apud* Roth 1995:215) observed that the edict included two legal statements, regarding premeditated homicide and sorcery, respectively, that seem to complement the legal spectrum covered by the laws.<sup>49</sup> At this juncture, one may also consider § 47 of the laws, which concerns the fiscal regulations applied to lands assigned by royal grant. This passage and the terminology employed therein—for example, the use of the word 'gift' (NÍG.BA) in reference to such grants—closely recall the formulas employed in the LSU, thus reflecting a practice of land management that, as detailed above, is not attested before Telipinu or his immediate predecessors. In general, archaeological records agree that the age of Telipinu (the mid- to late 16th century) was characterized by major trans-

<sup>47</sup> Carruba 1962; Archi 1968. This dating would also accord with the references in the above mentioned kāru clause in §54 to some towns (Tamalkiya, Hatra, Zalpa, Tašhiniya, etc.) that figure prominently in texts attributed to Hattušili I or Muršili I and are either not attested or really attested in later records; see Collins 1987 and Singer 2001.

<sup>48</sup> For a dating of the OH Laws to the reign of to Telipinu, see also Imparati 1964:5–8.

<sup>49</sup> For a similar observation, see Korošec 1963:130.

formations in the Hittite social landscapes. This might be broadly compatible with attempts at legislative rationalization.

The question of when the  $kar\bar{u}$  dispositions were redacted remains. As pointed out by Dardano (1997:8–11), the words 'father of the king' that are associated with the  $kar\bar{u}$  version might be a rhetorical device evoking an indefinite remote past rather than a reference to a specific ruler.<sup>50</sup> In line with his hypothesis about the beginning of Hittite literacy, van den Hout (2020:92–94) proposed that the  $kar\bar{u}$  laws had been transmitted orally since the time of Labarna, perhaps as *exempla* that resembled the anecdotes of the Palace Chronicle, and then were collected and revisited in a single corpus under Telipinu. This might be a reasonable interpretation as it is common for law codifications to be preceded by a 'prehistory' of customary or traditional law transmitted across generations. However, the  $kar\bar{u}$  laws could have circulated in a written form as well, perhaps individually embedded in royal edicts or other normative documents that eventually did not survive. This might explain why they needed to be explicitly superseded by the *kinuna* version when the final law collection was drawn.

After the Old Hittite stage, the Hittite scribal practice remained relatively stable, even during the pre-imperial phase, when the Hittites were subject to renewed influence from the Syro-Mesopotamian and Hurrian spheres. At this stage, roughly corresponding to what was once called the Middle Hittite age, Hittite relationships, first with Kizzuwatna and then with the influential Mittanian kingdom, coincided with a transformation of the Mesopotamian culture in Hatti. This had literary consequences—the introduction of Hurrian and Mesopotamian literary works<sup>51</sup>—and possibly affected how the Akkadian language was used. Innovations emerged in the paleography of the writing system: some texts show a Middle Babylonian, Assyrian, or Mittanian ductus. This phenomenon, which was probably connected with the slightly later development of the Late New Script (LNS, or Type IIIc) ductus, had little or no impact on the functional structure of the syllabary and, while conducive to the identification of intensive contacts, generally influenced only the shape of the glyphs.<sup>52</sup>

<sup>50</sup> See also van den Hout 2020:87.

<sup>51</sup> For an overview of the Hurrian literary texts, which were usually designated SIR in the Hittite tablets, see Chapter 10. For the presence of Mesopotamian literature and Mesopotamian scribes in Hatti, cf. Beckman 1983, who demonstrated that some of the materials were introduced to Hatti by Mittanian intermediation, but others were probably directly imported from Mesopotamia. See also Chapter 7 for the Sumerian texts from Hatti and Chapter 8 for the Akkadian texts.

<sup>52</sup> For a rich discussion of the state of the art of Late Hittite paleography and the questions that remain to be answered, cf. Weeden 2016, with references to previous literature.

## 3 Cuneiform Archives of Anatolia and the Relevant Neighboring Areas

By the end of the Old Hittite stage, Hatti was projecting an increasing political influence beyond the boundaries of Anatolia. Therefore, during the Late Bronze Age, archives connected with the Hittite world were also found outside the kingdom. Having described Anatolia in its ancient Near Eastern context at the time of the introduction of cuneiform, we will consider the Hattian context during the later stages of the historical phase discussed in this volume by presenting the relevant archives.

In archival studies, a distinction is usually made between two types of document collections: archives and libraries. An archive is generally understood as a spontaneous collection of documents that has accumulated progressively and represents the direct product of the practical activity of an institution. Therefore, one expects an archive to house mainly administrative documents that are related to the bureaucratic activities of a given institution. Over time, documents that are no longer relevant may be either discarded or kept in the archive; if they are retained, the collection becomes a historical archive. Conversely, a library is a deliberate collection of documents that was formed for cultural purposes and does not reflect the administrative activities of an institution. Literature is what we prototypically expect to find in such a collection.

When turning to the tablet collections of the ancient Near East, the distinction between an archive and a library is often blurred. Even when we can reconstruct with relative certainty the documents originally held in a given repository—which is by no means always the case—their nature is not always consistent with what we expect to find in either type of collection. Most of the time, it is hardly possible to discern anything but a general trend toward one or the other type; the reason for this may simply be that modern categories are not always applicable to ancient realities.<sup>53</sup> Therefore, in the following, we will mostly refer generically to 'tablet collections,' making cautious use of the terms 'archive' and 'library.' A thorough investigation of each tablet collection—which is outside the scope of our work—would be necessary to establish whether these terms, in their modern meanings, would be appropriate to describe a given collection.

<sup>53</sup> On this topic, cf. especially Francia 2015a, including the references.

### 3.1 Anatolian Archives

The majority of the Hittite texts have been found in the buildings of the Hittite capital city, Hattuša (corresponding to the modern village of Boğazköy), where excavations began in 1906 under the direction of the German Assyriologist Hugo Winckler. The main areas where texts have been found were in the Lower City, the oldest part of the capital, although some findspots were in the Upper City (Fig. 6.1). The three major findspots of the Lower City were the citadel of Büyükkale, the storerooms surrounding Temple I, and the House on the Slope.

Several tablet collections were identified in the citadel (Fig. 6.2). The largest, in Building A, included texts belonging to all of the genres that we could term literary. Economic documents and other archival materials, as well as ephemeral documents like oracle reports, were scarcely represented, supporting the interpretation of this building as a palace library.<sup>54</sup> Other findspots on the citadel included Building E, whose function was either residential or cultic, but which also contained an archive of tablets;<sup>55</sup> Building K, which had a small collection of mostly religious texts; Building D, where several Middle Hittite *Landschenkungsurkunden* and sealed *bullae* were found; and building complex B-C-H, which seemed to be a library but also may have included a scribal school related to the nearby Building A.<sup>56</sup>

In the Lower City as well were the storerooms surrounding Temple I, which contained documents belonging to all textual genres, including most of the few economic records we have. The third major findspot in the Lower City, the House on the Slope (*Haus am Hang*), was located on the slope leading to the citadelof Büyükkale, which probably also included a scribal school and was in a close connection with the Temple 1.<sup>57</sup>

In the Upper City, some temples (8, 12, 15, 16, and 26) contained tablet collections, including texts belonging to almost all documentary genres and mostly dating to the Old and Middle Hittite periods. The archive of Nişantepe in the Upper City is also worth mentioning because thousands of sealed *bullae* of the Empire period and several Middle Hittite land grants were found there.

Outside Boğazköy/Hattuša, more or less considerable collections of Hittite tablets have been found at Maşat Höyük/Tapikka, Ortaköy/Šapinuwa, Kuşaklı/ Šarišša, and Kayalıpınar/Šamuha (Fig. 6.3).

<sup>54</sup> Cf. Košak 1995.

<sup>55</sup> Cf. Alaura 1998; Alaura 2015.

<sup>56</sup> Cf. Francia 2015b; Pisaniello 2015a.

<sup>57</sup> Cf. Torri 2008.

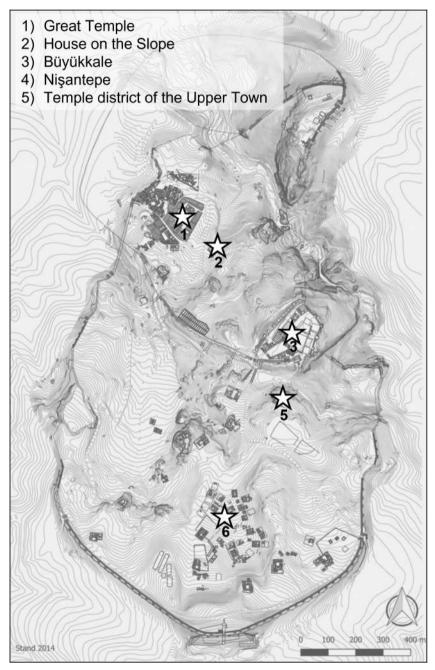


FIGURE 6.1 Plan of Boğazköy-Hattuša with distribution of the main cuneiform archives COPYRIGHT ARCHIVE OF THE BOĞAZKÖY EXPEDITION, DEUTSCHES ARCHÄOLOGISCHES INSTITUT BERLIN

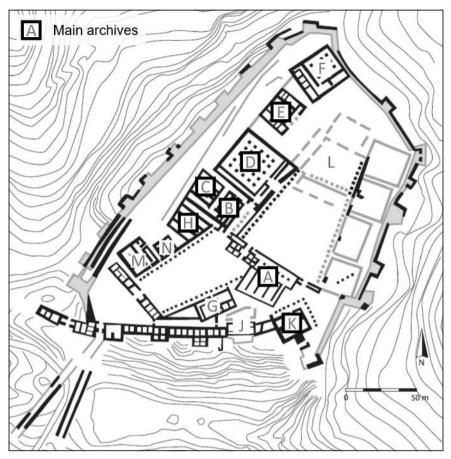


FIGURE 6.2 The citadel of Büyükkale and its main archives

At Maşat Höyük, corresponding to the ancient city of Tapikka, more than 100 tablets were found from 1973 to 1984.<sup>58</sup> All of the tablets except one date to the 14th century BCE, and most are letters exchanged between the Hittite king and the officials residing in Tapikka. A smaller collection of texts, consisting of rituals, oracles, cult inventories, and two letters, was found at Kuşaklı, the ancient city of Šarišša, which has been under excavation since 1992. Texts found in Building A date to the 13th century BCE and have been published by Wilhelm (1997b). A few other tablets, mostly dated to the Middle Hittite period, have been found in Building C and on the top of the acropolis, in the remnants of Building D.<sup>59</sup>

<sup>58</sup> The tablets from Maşat Höyük have been published by Alp 1991.

<sup>59</sup> Cf. Wilhelm 1998; Wilhelm 2002.

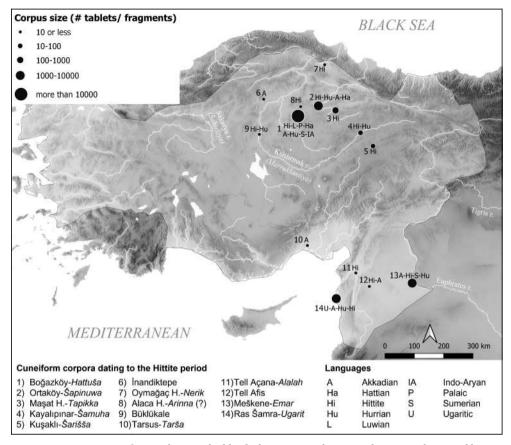


FIGURE 6.3 Hittite cuneiform archives and tablet findspots across the Hittite domain, with attested languages

In Ortaköy (ancient Šapinuwa), excavations that began in 1990 have brought to light a large number of tablets bearing documents belonging to different textual genres. Among them are more than 600 texts in the Hurrian language, many dating to the reign of Tuthaliya III, who resided in Šapinuwa. Unfortunately, most of the tablets are still unpublished.

More recently, a significant archive of cuneiform tablets has been unearthed at Kayalıpınar, which is been under excavation since 1999 and was recently identified with the Hittite city of Šamuha. One hundred fragments were published in DAAM 1 in 2019, including festivals, oracular inquiries, cult inventories, and a couple of letters. Quite remarkable is a small collection of seven Middle Hittite tablets in the Hurrian language, which should probably be dated to the time of Tuthaliya III. These include a fragment of the Hurrian version of the Song of Silver and an account of military campaigns in Kizzuwatna and northern Syria. $^{60}$ 

Sporadic findings of Hittite tablets have occurred at different sites of Anatolia, although no extensive archives have been found. Six fragmentary tablets were found at Uşaklı Höyük, perhaps to be identified with the ancient Zippalanda, including a mythological text perhaps related to the Kumarbi cycle, a fragment of the AN.TAH.ŠUM festival, a MS oracular document, and three letters; a festival fragment and a letter were found at Alaca Höyük, which may correspond to the ancient city of Arinna; two Middle Hittite letters and a historical fragment were located in Büklükale; and a *Landschenkungsurkunde* and a bulla with the seal of queen Puduheba were discovered at Tarsus in Cilicia.

Besides cuneiform tablets, Anatolian hieroglyphic documentation exists for the second millennium BCE, including two major typologies of inscriptions: 1) sealing impressions on bullae and cuneiform tablets that contain personal names and titles, sometimes accompanied by a cuneiform legend; and 2) more or less extensive monumental inscriptions, dating to the Empire age, which are written in a variety of Luwian that was spoken in the court of Hattuša (known as Empire Luwian or Hattuša Luwian; cf. Chapter 11, § 1.2).<sup>61</sup> Since the secondmillennium hieroglyphic corpus is not particularly relevant for language contact, Hieroglyphic Luwian will be dealt with in Volume 2.

#### 3.2 Peripheral Archives

Several documents relevant to the history and cultures of ancient Anatolia, written in Hittite and other languages (Akkadian and Hurrian above all), have been found in archives peripheral to the core of the Hittite world, especially in Amarna, Alalah, Ugarit, and Emar (Fig. 6.3). In 1887, approximately 300 cuneiform tablets were found amid the ruins of the city of Amarna, the ancient Akhetaten, which was founded by Amenhotep IV/Akhenaten and served as the capital of Egypt from 1347 to 1332 BCE. The textual corpus mostly consists of diplomatic letters exchanged between the Egyptian pharaohs and the kings

<sup>60</sup> Cf. Wilhelm 2019.

<sup>61</sup> See Hawkins 2003:139–145. This is valid for longer inscriptions such as SÜDBURG, NİŞAN-TAŞ, EMİRGAZI, and YALBURT, as well as some of the shorter ones (e.g., FIRAKTIN and ALEPPO 1), that include phonetic complements. Other inscriptions (e.g., BOĞAZKÖY 1 and 2) are fully logographically written and could be read in any language. Hieroglyphic legends identifying divine figures at YAZILIKAYA are in Hurrian (also note the phrase *tisupi hubiti* 'calf of Teššub'). The small group of hieroglyphic inscriptions from western Anatolia may belong to a different writing tradition than that of Hattuša (see Oreshko 2013).

of the great Mesopotamian, Syrian, and Anatolian polities, as well as Egyptian vassals in Syria and Palestine. Almost all texts are in Akkadian, although some include Hurrian and West Semitic glosses. The few exceptions include two letters in Hittite: EA 32, sent by the king of Arzawa to the pharaoh,<sup>62</sup> and EA 31, sent by Amenhotep 111 to Tarhuntaradu of Arzawa, as well as the so-called Mittani letter in Hurrian, which was sent by King Tušratta (EA 24) and until recently was the only text in Hurrian confirmed to come from the kingdom of Mittani.<sup>63</sup>

Excavations by Sir Leonard Woolley between 1937 and 1949 in the site of Tell Açana, corresponding to ancient Alalah, the capital city of the kingdom of Mukiš in northern Syria, have unearthed more than 450 cuneiform tablets written in the local Akkadian dialect and one Hittite oracular inquiry. The texts belong to two different stratigraphic levels: Alalah VII, dated to the 18th to 17th century BCE, and Alalah IV, dated to the 15th century BCE.<sup>64</sup> Alalah is crucial to Hittite studies, especially because, as previously discussed and recently shown by van den Hout (2012), the cuneiform script in use at Alalah VII was probably the closest paleographic variant of Hittite cuneiform script, and the chronology of Alalah level VII, whose destruction seems to have coincided with the Syrian military campaigns of Hattušili I, makes it likely that this cuneiform syllabary was the direct source of Hittite cuneiform. Furthermore, Alalah texts are important for the history of the Hurrians, because many Hurrian words and personal names occur in texts from level VII, attesting to an earlier and substantial penetration of Hurrians in the area.<sup>65</sup>

In 1929 French excavations began at Ras Šamra, corresponding to the ancient city of Ugarit, where thousands of cuneiform tablets were discovered in several findspots, including not only the archives of the Royal Palace but also private buildings that belonged to officials and prominent participants in the cultural life of the city.<sup>66</sup> Other texts have been found at the neighboring site of Ras Ibn Hani. The texts generally date to the 13th century BCE, and many different languages are attested: Ugaritic (both in standard cuneiform and the local alphabetic cuneiform script), Akkadian, Hurrian (also in alphabetic cuneiform),

<sup>62</sup> The letter includes a post-scriptum by the scribe, who asks to his Egyptian colleague to always write him in Hittite. On the basis of the Arzawa letters, Knudtzon 1902 was the first to suggest that Hittite was an Indo-European language.

<sup>63</sup> The standard edition of the Amarna tablets is that by Knudtzon 1907). A more recent comprehensive analysis of the letters can be found in Liverani 1998b and 1999.

<sup>64</sup> Alalah texts have been published by Wiseman 1953.

<sup>65</sup> For an extensive treatment of this topic, cf. Draffkorn 1959.

<sup>66</sup> On the private archives of Ugarit, cf. del Olmo Lete 2018.

and Hittite.<sup>67</sup> Furthermore, a few Egyptian, Cypro-Minoan, and Luwian hieroglyphic texts have been found.

Excavations directed by J.C. Magueron at Meskene between 1972 and 1976 allowed the identification of the site with the ancient city of Emar, the capital of the land of Aštata, which in the 13th century was under the control of the Hittite viceroy of Karkemiš. A large library, including hundreds of cuneiform tablets belonging to several textual genres and written in Sumerian, Akkadian, Hittite, and Hurrian, was found in Temple  $M_1$ . Smaller tablet collections were found in other temple buildings, and a number of mostly legal and administrative documents were discovered in three private archives.<sup>68</sup> Occasional findings have been made at other peripheral sites. For example, Tell Afis in Syria has yielded nine tablet fragments, including three Hittite letters, three administrative documents (an inventory and two lists of people), and three fragments in Akkadian.<sup>69</sup>

#### 4 Concluding Remarks

The diffusion of cuneiform to Anatolia occurred in waves. The first, which occurred during the Old Assyria phase of the Middle Bronze Age, played a very limited role in the future development of Hittite literacy, which can be characterized in general as a Late Bronze Age phenomenon. Beginning in the 16th century BCE, and increasingly over the following three centuries, Anatolia was one of the most important peripheral areas to fully adopt the koiné of the cuneiform world. By the final Bronze Age (late 14th and 13th century BCE), the Hittite scribal culture even began to influence extra-Anatolian archives, to which reference will be made in the core chapters of this volume.

<sup>67</sup> Texts from the Royal Palace were published in the series PRU; for the alphabetic texts, cf. KTU<sup>3</sup>. On Hurrian texts, see also Giorgieri 2013.

<sup>68</sup> Emar texts in Sumerian and Akkadian are published in Arnaud 1985–1987; six Hittite tablets in Salvini and Trémouille 2003, and Hurrian tablets in Salvini 2015.

<sup>69</sup> Cf. Archi and Venturi 2012.

# PART 2

# The Foreign Languages of the Hittite Archives and Textual Evidence for Interference

•••

# Sumerian Literary and Magical Texts from Hattuša

M. Viano

## 1 Corpus, Scripts, and Findspots

When Sumerian texts reached Anatolia during the Late Bronze Age, Sumerian had been a dead language for over half a millennium. The Hittite capital Hattuša has yielded one of the largest corpora of Sumerian texts from the western periphery. Sumerian texts found at Hattuša include wisdom compositions, hymns, and literary letters, but incantations represent by far the largest group.

The Sumerian literary and magical texts were found in two main areas of the city: the citadel of Büyükkale and the lower city. Most of the tablets unearthed in Büyükkale came from Building A, a palace situated in the southeast corner of the citadel that housed a large library with a small archive.<sup>1</sup> Some Sumerian texts were found in the area of Building D, the largest palace of the citadel, located on the northwestern slope. This building did not house a library, but an archive of sealed clay bullae was found in the magazine area. Because Sumerian texts were not stored in this building those discovered at Building D probably came from elsewhere as most of the fragments were discovered over the ruins of the palace in post-Hittite levels. A single fragment was found in the area of Building K, on the southeastern slope of the citadel, which housed a small library containing a selection of literary texts. Other fragments were discovered in the area of Building C and on the west side of Büyükkale.

Sumerian texts found in the lower city stem from either the Temple I or the so-called Haus am Hang (House on the Slope). Temple I was the main temple of the city, located northwest of the citadel, and housed a large library and an archive.<sup>2</sup> The Haus am Hang, southeast of Temple I was a multifunctional building that included a scribal school and a library. These two buildings were part of a single religious and administrative district as some of the tablets copied in the Haus am Hang were later stored in Temple I.<sup>3</sup> The Sumerian literary and magical texts found at Hattuša can be summarized in Table I.

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<sup>1</sup> Košak 1995.

<sup>2</sup> Pedersén 1998.

<sup>3</sup> Torri 2008:780–781; Torri 2010:384. There seems to be a chronological difference between documents stored in Temple I, which were mostly from the period of Tuthaliya IV, and those housed in the Haus am Hang that mainly date to the reign of Šuppiluliuma II (van den Hout 2008).

CTH	CTH Composition	Manuscripts	Findspot	Script	Language	OB	OB First millennium
		Litera	Literary texts				
314	The Hymn to Iškur-Adad	KUB 4.6 (+) KUB 4.8	ż	NS	S  PhS  A  H	I	I
314 214		KB0 12.72 KUB 4.4	HaH ?	NS N	(S)  (PhS)  A  H (S)  (PhS)  A  H		
314		KUB 4.5 + KB0 12.73	HaH	NS	(S)  PhS  H		
315	The Message of Lu-diĝira to his Mother	KUB 4.2	ح.	NS	(S)  PhS  (A)  (H)	+	I
315		KUB 4.97	<b>~</b> .	NS	(S)  (PhS)  A  H		
315		RS 25.421	Ugarit:	NS	S  PhS  A  H		
			Lamaštu Archive				
807	Edubba E	KUB 57.126	۰.	NS	S  PhS  (A)  (H?)	+	I
807	The Letter of Lugal-ibila to Lugal-nesaĝ	KUB 4.39 <sup>4</sup>	~.	NS	S  (A)	T	+
801.3	Nergal D	KUB 4.7	~.	NS	S  (A)	+	+
819	Hymn to Nergal (?)	KUB 4.41	~•	NS	S-A(?)	~.	~.
795	Dumuzi text (Dumuzi-Inana R?)	KUB 37.41	Bk. A	(¿)	S-A	+	I

Two fragments found at Ugarit in the Bibliothèque du Lettré, RS 17.10 and RS 17.80, contain The Letter of Lugal-ibila to Lugal-nesaĝ in phonetic Sumerian and Akkadian respectively (Viano 2016:267–271).

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TABLE 1

(cont.)	
TABLE 1	

CTH	Composition	Manuscripts	Findspot	Script	Language C	OB ]	First millennium
801	Hymn or incantation $(?)^5$	HT 13 (+) KUB 4.26B (+) KUB 37.112	۰.	NS	s		
819	Unidentified text	KBo 19.98	Т. I	MS	S–A ?		
		Magic	Magical Texts				
800.1	Incantations against witchcraft	KUB 30.1	Bk. A	LOB/MB	s +		
800.4		KUB 37.109	Bk. A	LOB/MB	S ?		
800.2		KUB 30.2	Bk. A	LOB/MB	S ?		
800.4		KUB 30.3	Bk. A	LOB/MB	S ?		
800.3		KUB 30.4	Bk. A	LOB/MB	S ?		
800		KBo 36.13	Bk. K	LOB/MB	S S		
800		KBo 36.15	Bk. M	LOB/MB	S ?		
800		KBo 36.16	Bk. D	LOB/MB	s s		
800.4		KUB 37.108 + KUB 37.108 +	Bk. A	LOB/MB	s .		_
800		KB0 40.103	Bk. A	LOB/MB	S ?		l
812		KBo 36.19	Bk. M	LOB/MB	S ?		
801	Unidentified incantation	KBo 36.21	Bk. D	LOB/MB(?)	S 3		

KUB 4.26 fragment A contains an Akkadian *šuilla* to Adad (Schwemer 2001.671–674). According to Zomer (2018:324–325), HT 13 (+) KUB 4.26B (+) KUB 37.112 contains a Sumerian incantation prayer, but the text is so fragmentary that other genres are not excluded.

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CTH	Composition	Manuscripts	Findspot	Script	Language	OB	First millennium
805.1 <sup>6</sup>	Collection of Incantations against Udug-hul a) Marduk-Ea Incantation nam-erim <sub>2</sub> -bur <sub>2</sub> -ru- da (= Muššu'u v1) b) Marduk-Ea Incantation c) Udug-hul Incantation d) Udug-hul V/e	KBo 36.11 (KUB 37.100a Bk. A + 103 + 106 l. col. + 144) + KUB 37.100a rev. + KUB 37.106 r. col. + ABoT 2.255	Bk. A	Ass-Mit	S  A	a) + b)? c)? d) +	a) + b)? d) +
805.2 805.2 805.2	Udug-hul v11/a Udug-hul incantation Udug-hul incantation ~ Udug-hul 111/v1, Bīt	KUB 37.143 KUB 37.101 KUB 37.102	Bk. C Bk. D Bk. D	Ass-Mit Ass-Mit Ass-Mit	S  (A) S  A S  A	+ 1	+ +
812 794	rimki 111 Udug-hul v1/d, g Collection of Incantations a) Marduk-Ea incantation <sup>7</sup> b) Kiutu incantation (Bit rimki 11)	KUB 4.16 KBo 7.1 + KUB 37.115 (+) KBo 7.2	? Bk. D	Ass-Mit Ass-Mit	(S)  A S-A	+ b) -	+ a) - b) -
819 806.3		KUB 37.127 KUB 37.95	Bk. A Bk. A	Ass-Mit Ass-Mit	S:-A S (A?)	~ ~	~ ~

Zomer 2018:87 fn. 380 regarded KUB 37.107 as a ritual text and not an incantation, correcting Schwemer's classification (2013:154).

9

- According to Zomer (2018:207), this incantation is related to Šurpu or nam-erim<sub>2</sub>-bur<sub>2</sub>-ru-da.
   According to Zomer (2018:159), this is a Hittite script tablet; she has also suggested (p. 221)
  - According to Zomer (2018:159), this is a Hittite script tablet; she has also suggested (p. 221) that this fragment might belong to KUB 37.111.

(cont.)

TABLE 1

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CTH	CTH Composition	Manuscripts	Findspot	Script	Language	OB	First millennium
793	Incantation to Utu	KUB 4.11	ć.	NS	S-A	+	+
806.2	Udug-hul II/b <sup>9</sup>	KUB 4.24	ć	NS	S	(+)	+
801.4	Udug-hul incantation (~ Udug-hul rv)	KUB 37.111	Bk. D	NS	S-A	+ ~	+ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
806.1		KBo 1.18	ć	NS	S	1	I
819		KUB 4.23	ۍ	MS/NS	S-A	~.	ć
813	Prophylactic incantation	KUB 34.3		NS	S:A	Т	I
813	Marduk-Ea incantation	KUB 34.4	Bk. A	NS	S:A	ۍ.	ۍ.
806	Incantation	KB0 36.20	НаН	NS	S	~.	۰.
806.4		ABoT 1.43	ح.	NS	S (  A?)	~.	د.
801	Incantation	KBo 36.17	Т. 1	NS	S-A	~:	ۍ.
819	Unidentified Text	KUB 4.10	۰.	NS(3)	S  A(?)	ۍ.	د.
819	Incantation	KBo 36.24	? (Lower City)	$NS(?)^{12}$	S (  A?)	~:	۰.
813	Collection of unidentified incantations	KBo 13.37 <sup>13</sup>	НаН	(;)	SA	~.	~.

The fragment contains other two Akkadian incantations; see Zomer 2018:336–337.

6

This tablet contains several other Akkadian incantations; see Zomer 2018:19.
 Zomer (2018:100 fn. 410) believes this tablet does not contain incantations.

12 It was previously suggested that the script is Hittite based on the shape of the sign IL

nian should be referred to more generically as being in an unknown script or non-Hittite. However her description of the incantation as solely Akkadian is incorrect in light of the According to Zomer 2018157, the tablet script previously identified as generally Babyloclearly Sumerian forms in rev. 10′–12′, [...] munus-sikil-la he2-te-na-[...] // [...] x-še3 he2-Viano 2016:281). Zomer (2018:161) conversely has suggested an Assyro-Mittanian script. en-ta-d[u] // [... <sup>d</sup>Asa]r-lu<sub>2</sub>-ḫi ḫe<sub>2</sub>-ti-x [...]. 13

CTH	CTH Composition	Manuscripts	Findspot	Script Language		OB First mille	First millennium
813	Collection of incantations a) Unknown incantation b) Saĝ-geg v1 <sup>14</sup>	KBo 14.51	Bk.	(3)	S	a)? 8 b)- 1	a)? b) +
813 819	cantations	KUB 37.92 KBo 36.14	Bk. A Bk. D	(¿)	s s	~ ~	
819	Unidentified text	KBo 36.18	Bk. A	(¿)	S:-A	~.	
= pai	= parallel column format; – = interlinear format. := Sumerian and Akkadian separated by <i>Glossenkeile</i> .	merian and Akkadian sep	arated by <i>Glosser</i>	ıkeile.			

This incantation is also preserved on a tablet from Ugarit, RS 17.155 = AuOrS 23 21 (Armaud 2007:77–88); this tablet is written in non-Hittite script (Zomer 2018:157). A possible Baby-lonian origin was suggested by the author of the present chapter, but the script is certainly different from those labeled LOB/MB in the table.

14

(cont.)

TABLE 1

The Sumerian literary and magical texts from the Hittite capital were written in three scripts: Babylonian, Assyro-Mittanian,<sup>15</sup> and Hittite. In addition, a few tablets were written in non-Hittite scripts that cannot be identified.<sup>16</sup> This is a clear indication that foreign scribes were involved, although it is not always possible to determine whether tablets in non-Hittite scripts were imported or written by foreign scribes in the Hittite capital. The three scripts are associated with different text types and findspots. All of the Babylonian script tablets were found in Büyükkale, in particular in Building A, and only include incantations. The Assyro-Mittanian tablets were also found in Büyükkale and present the same repertoire as the Babylonian script tablets. The findspots of many Hittite script tablets remain unknown, but those of known provenance mainly came from the lower city. One tablet in Hittite script (RS 25.421), containing the literary text The Message of Lu-diĝira to his Mother, was found in the Lamaštu archive in Ugarit but was either imported from Hattuša or written by a Hittite scribe in place. Most of the Hittite script tablets were written in New Script; they include literary compositions in addition to medical-magical texts.

The Babylonian script tablets stand out because they contain nothing but Sumerian unilingual incantations written in phonetic orthography. Except for a few exceptions, these tablets are cataloged under CTH 800.17 The Assyro-Mittanian tablets only contain bilingual texts, mostly in parallel column format, but the interlinear format is also attested. In the Assyro-Mittanian tablets, phonetic writings occur only occasionally. Most of the Hittite script tablets contain bilingual texts in both the parallel column and interlinear formats; a few monolingual Sumerian texts are also attested. A distinction must be drawn between literary texts and incantations in Hittite script. With the exceptions of the Dumuzi Text (KUB 37.41), the unidentified text KBo 19.98, and possibly the fragment KUB 4.41, the literary texts were written in parallel column format. In addition to the Sumerian and Akkadian columns, most of these sources contain versions in phonetic Sumerian and Hittite. In contrast, unorthographic writings occasionally appear in the Hittite script incantations, but none of these texts contain a separate version in phonetic Sumerian or is written entirely in unorthographic Sumerian. Only HT 13(+) contains an unidentified Sumerian text entirely written in phonetic Sumerian.

<sup>15</sup> For the definition of Assyro-Mittanian, see Wilhelm 1992a and Schwemer 1998 and, for a critical assessment, Weeden 2012a and 2016.

<sup>16</sup> Zomer (2018:157) suggests that these tablets might come from Syria.

<sup>17</sup> For the sake of simplicity, the incantations in Babylonian script will be referred to as CTH 800.

#### 2 The Purpose of Texts

Script, content, format, and findspot are indications of the function and purpose of the texts from the Hittite capital. Apart from a single exception, KUB 37.41, all of the tablets with recorded findspots in Büyükkale contain incantations and are almost exclusively written in non-Hittite scripts.<sup>18</sup> In addition, despite their recovery in different buildings, all of the tablets found in Büyükkale were most likely stored originally in Building A.<sup>19</sup> The tablets recovered in this building are mostly of foreign origin, date from early periods of Hittite history, and are of a scholarly nature.<sup>20</sup> Therefore, the Sumerian texts from Büyükkale were part of a collection of tablets that were purposely collected and stored together for cultural reasons and served as a reference library. The fact that none of the Sumerian texts from Büyükkale have duplicates suggests that they did not serve an educational purpose, although possibly some tablets were copied in Building A. Most likely the Sumerian incantations in non-Hittite scripts reached the Hittite capital together with foreign specialists  $(\bar{a}\check{s}ip\bar{u})$  and were used in medico-magical rituals. Later they were stored in Building A (see below).

The texts from the lower city have different natures and purposes. Unfortunately, only a few tablets have been recorded as coming from the lower city. Apart from a single exception, KBo 13.37, all of the tablets containing Sumerian texts with recorded findspots in the lower city were written in Hittite script. Winckler's early excavations (1906–1907 and 1911s–1912) included Temple I and the House am Hang, and the findspots were unrecorded or lost.<sup>21</sup> Several Sumerian texts in Hittite script with Bo and VAT numbers that were found during these early excavations<sup>22</sup> possibly can be associated with the lower city<sup>23</sup> as

<sup>18</sup> Only three Hittite script tablets with recorded findspots are from Büyükkale: KUB 34.3, KUB 34.4, and KUB 37.111. Note, however, that KUB 37.111 might be a Hittite copy of an Assyro-Mittanian manuscript (see Viano 2016:278).

<sup>19</sup> The tablets from Building A were scattered in various locations, in particular near Building D (Košak 1995:48, Pedersén 1998:50). The single Sumerian text from Building K, KBo 36.13, was found in Phrygian debris and thus probably was originally in another place, most likely Building A, because it belongs to the group of monolingual incantations in phonetic writing CTH 800. The fragment KUB 37.143 from Building C is possibly related to KUB 37.101 and 102 that were found in Building D. For the details, see Viano 2016:351.

<sup>20</sup> Archi 2007:192–196, see also Lorenz and Rieken 2010.

<sup>21</sup> Alaura 2004:140–141; Alaura 2006:117

<sup>22</sup> KUB 4.5, KUB 4.6 (+) KUB 4.8, KUB 4.4, KUB 4.2, KUB 4.97, KUB 57.126, KUB 4.39, KUB 4.7, KUB 4.41, KUB 4.11, KUB 4.26(+), KB0 1.18, KUB 4.24, KUB 4.10.

<sup>23</sup> Another area excavated by Winckler, Building E in Büyükkale should be excluded because no Sumerian text was found in this building.

suggested by the fragment KUB 4.5 (Bo 503) that joins KB0 12.73, which was found in the House am Hang. A scribal school or a scriptorium is known to have been located in the area of Temple I and the House am Hang.<sup>24</sup> An educational purpose perfectly fits the format of the multicolumn tablets used for literary texts that include orthographic Sumerian, phonetic Sumerian, Akkadian, and Hittite versions. The addition of phonetic Sumerian and Hittite versions to Sumero-Akkadian bilingual texts can be understood in the context of scribal training for advanced students and scholars. Weeden convincingly suggested that the Hittite versions of these texts derived from the application of speculative hermeneutical principles that were so common in Mesopotamian learned scribal circles.<sup>25</sup> The curricular setting of some literary texts (see below) and, most importantly, the attestation of several duplicates of the same text also point to a teaching environment.

As Table 1 shows, the Hittite capital yielded only a very small number of Sumerian literary texts. None of the preserved compositions belonged to the core of the Old Babylonian curriculum.<sup>26</sup> Nevertheless, some texts likely had a curricular setting. Edubba texts, of which one exemplar is known from Hattuša (Edubba E), were part of the scribal training;<sup>27</sup> the same function can be attributed to literary letters<sup>28</sup> such as The Message of Lu-diĝira to his Mother.<sup>29</sup> The Letter of Lugal-ibila to Lugal-nesaĝ may be added here, although it was certainly not used in the Old Babylonian curriculum because it is likely a post-Old Babylonian composition. It is based on the Letter of Inim-Inana to Lugal-ibila (Sumerian Epistolary Miscellany [SEpM] 22)<sup>30</sup> that is attested on a prism, which is a tablet format used in schools.<sup>31</sup> Other texts appear to be isolated or poorly known compositions but perhaps were similarly used in the scribal training. The addition of the phonetic Sumerian and Hittite versions suggests that even a composition such as the Hymn to Iškur-Adad, which is unknown outside the Hittite capital, was used with an educational purpose at Hattuša. This mirrors what we know from Emar and Ugarit, where texts little known from the

28 Kleinerman 2011:75–94.

30 Kleinerman 2011:181–182.

<sup>24</sup> Torri 2008; Torri 2010; Gordin 2010.

<sup>25</sup> Weeden 2020a:512–14. See also Crisostomo 2019.

<sup>26</sup> For the Old Babylonian curriculum see Tinney 1999, Tinney 2011, and Robson 2001; see also Veldhuis 1997.

<sup>27</sup> Vanstiphout 1999:83.

<sup>29</sup> This composition is preserved on OB *imgida* tablets, and an extract tablet comes from Susa (Michalowski 2011:42).

<sup>31</sup> Note that this prism contains the Letter of Sîn-iddinam to Utu, which is known from an Emar source (Viano 2016:361–362).

Old Babylonian documentation became part of the local curriculum. We can conclude that the Sumerian literary texts from the Hittite capital were short compositions used in the intermediary phase of the curriculum.

All of the Sumerian literary texts are bilingual, which indicates that they were written in the post-Old Babylonian period. Only The Message of Lu-diĝira to his Mother, Edubba E, Nergal D, and perhaps the Dumuzi Text are known from Old Babylonian sources, and only Nergal D and the Letter of Lugal-ibila to Lugal-nesaĝ have first-millennium duplicates. Thus the Sumerian literary texts from Hattuša reflect an intermediate stage between the Old Babylonian models and the first-millennium recensions.

The largest group of Sumerian texts from the Hittite capital consists of incantations that were used in Mesopotamia in magical rituals performed by incantations priests, āšipū. Because the Hittites were likely unable to perform these rituals, the incantations were used by foreign experts who reached Hattuša and probably were responsible for the transmission of these texts. Most of the incantations are written in non-Hittite scripts and are of the Udug-hul type. Probably these experts traveled with their tablets, which later entered the collection of Building A. Given the fragmentary nature of the manuscripts, only a few tablets have earlier or later duplicates; a handful have both. Incantations from the Hittite capital differ from both the extant Old Babylonian and firstmillennium duplicates. Some tablets contain incantations that entered the following canonical series: Udug-hul II, III, V, VI, VII, Saĝ-geg VI, Mušš'u VI, and Bīt rimki House II. Compared with first-millennium sources, the texts from Hattuša represent an older stage and the same can be found in comparison with Middle Assyrian sources. Although incantations served a very different purpose than literary texts, it cannot be excluded that some were used as learning tools in scribal schools. This might be suggested by the use of the prism format for KB0 1.18.32

#### 3 The Reception of Sumerian Texts at Hattuša

The Sumerian texts did not arrive at the Hittite capital at a single time but rather in waves. A way to look at the textual tradition is through the study of phonetic or unorthographic writings. Phonetic orthography was an alternative way of writing Sumerian that is mostly found in Old Babylonian texts from northern Babylonia. The unilingual incantations written on Babylonian

<sup>32</sup> For this text see Viano 2016:279 and Zomer 2019.

script tablets (CTH 800) are among the oldest of the Mesopotamian texts that were transmitted to Anatolia. As argued elsewhere,<sup>33</sup> these incantations provide more than half of the phonetic writings attested in Sumerian texts from the Hittite capital and exhibit a high degree of similarity to the Old Babylonian unorthographic texts, in particular, the incantations from Meturan. Sumerian incantations written entirely in phonetic orthography are unattested at Nippur in both the contemporaneous Middle Babylonian documentation and that of the Old Babylonian period. The few texts drafted in phonetic orthography that are known from the Middle Babylonian period come from northern Babylonia.<sup>34</sup>

A common type of phonetic writing is the syllabification of logograms, i.e., logograms are spelled phonetically with no phonetic changes of the words (e.g., dumu > du-mu). However, unorthographic writing may produce phonetic alterations of various types that can be called 'effective alterations.' These may include the replacement of voiced consonants with corresponding voiceless consonants or vice versa, the substitution of vowels, the addition of vowels, and other changes.<sup>35</sup> Although the unorthographic incantations in Babylonian script CTH 800 represent the primary source for syllabifications of logograms, they have fewer effective alterations than the Hittite script tablets.<sup>36</sup> The Babylonian script tablets from Hattuša exhibit a conservative nature similar to the Old Babylonian unorthographic texts.<sup>37</sup> On paleographic grounds, these tablets cannot be precisely assigned to any period as they do not exhibit specific Kassite traits.<sup>38</sup> Given the certain antiquity of these tablets compared to the rest of the Sumerian material from Hattuša, one might speculate that they were brought as booty to the Hittite capital during Muršili I's military raid in Babylonia.

The so-called Assyro-Mittanian texts are usually regarded as the product of northern Mesopotamian scribal circles<sup>39</sup> and were possibly written in Mittanian-dominated Assyria.<sup>40</sup> It is likely that these tablets were imported after Šuppiluliuma i's conquest of Mittani in the mid-14th century. Arguably, the

<sup>33</sup> Viano 2015, Viano 2016:141–228, and Viano 2019.

<sup>34</sup> See Incantation to Utu, Alster 1991 and Viano 2016:73–75.

<sup>35</sup> For a complete list, see Viano 2016:225 fn. 1047.

<sup>36</sup> Viano 2016:224–225; Viano 2019:118–119.

<sup>37</sup> The resemblance of the Babylonian script incantations from Hattuša to the Old Babylonian incantations from Meturan is further suggested by a parallel passage in KUB 30.1 and a tablet from Meturan (H 97) (Viano 2016:232–233).

<sup>38</sup> Viano 2016:234-235.

<sup>39</sup> Schwemer 1998:50.

<sup>40</sup> Cf. Weeden 2012a, who regarded the Assyro-Mittanian script as early Middle Assyrian.

fact that virtually all Assyro-Mittanian tablets (containing both Akkadian and Sumerian texts) were found in Büyükkale speaks in favor of their importation. If they had been written locally by foreign scribes, they would probably have been more widespread within the city. A further hint at the northern Babylonian tradition of these incantations is the Šamaš prayer attested in the *Kiutu* incantation contained in KBo 7.1+: most known Šamaš prayers have been found in northern Babylonia.<sup>41</sup> In the process of transmission of Sumerian literature, the Assyro-Mittanian incantations reflect a later stage than the unilingual Babylonian script incantations because they are bilingual and because many of them have duplicates in the first-millennium canonical series (cf. Table 1). Additionally, the very presence of a *Kiutu* incantation supports the later stage of the Assyro-Mittanian texts because this type of incantation is mostly documented in post-Old Babylonian sources.<sup>42</sup>

The tradition and reception of the incantations preserved on the Hittite script tablets are difficult to understand due to the fragmentary nature of the sources. Only three tablets have known duplicates from other periods (KUB 4.11, KUB 4.24, and KUB 37.111). KUB 4.11 contains a bilingual version of the Incantation to Utu that is known in Mesopotamia from monolingual manuscripts only. The Incantation to Utu is attested in Old Babylonian, Middle Babylonian, and first-millennium tablets, but because it was never standardized the sources show a high degree of variation. KUB 4.11 most likely reflects a Middle Babylonian recension composed by the Kassite scribes who also added the Akkadian translation. Because the compositions related to the Sun god originate in northern Babylonia, as discussed above for the Kiutu incantation, it is likely that the recension of Incantation to Utu that is preserved on KUB 4.11 reached the Hittite capital from the same area. This is supported by the fact that all of the known manuscripts of the Incantation to Utu likely come from Sippar.<sup>43</sup> KUB 4.24 is a monolingual forerunner of Udug-hul Tablet 11 but has several variants compared with the first-millennium recension, representing an older stage in the process of standardization. Unfortunately no Old Babylonian manuscript is known so far. Finally, KUB 37.111 contains Udug-hul incantations that are not directly paralleled in either Old Babylonian or first-millennium sources but show some similarities to Udug-hul Tablet IV. KUB 37.111 reflects therefore a different textual tradition that did not become part of the canonical recension.44

<sup>41</sup> Viano 2016:75-76.

<sup>42</sup> For Kiutu prayers see Baragli 2022.

<sup>43</sup> Viano 2016:73-75.

<sup>44</sup> See also Zomer 2018:220–222.

More complex is the situation of the literary texts, which are only preserved on Hittite script tablets. As mentioned above, none of the texts found at Hattuša was part of the core of the Old Babylonian scribal curriculum. In addition, none of the compositions attested in the Hittite capital, and more generally in the western periphery (i.e., Emar and Ugarit), is duplicated in Middle Babylonian and Middle Assyrian sources known to date. A few texts—The Message of Ludiĝira to his Mother, Edubba E, and the Letter of Lugal-ibila to Lugal-nesaĝ can be attributed to the 'mainstream of the Sumerian literary tradition,' which is known predominantly from the Nippur documentation.<sup>45</sup> In The Message of Lu-diĝira to his Mother, Nippur is the residence of Lu-diĝira's mother, and at least one Old Babylonian manuscript stems from Nippur (Ni 2759). Nevertheless, this composition was well known outside Nippur, including in Sippar in the north.<sup>46</sup> The Edubba texts are very common in Nippur. Edubba E consists of extracts from other texts, including Edubba A, which is one of the House F Fourteen.<sup>47</sup> In addition, one of the Old Babylonian manuscripts (TLB 2, 7) that is possibly from Nippur contains both Edubba A and Edubba E. Finally, the model of the Letter of Lugal-ibila to Lugal-nesaĝ is the Letter of Inim-Inana to Lugal-ibila, which is virtually known only from Nippur sources and, like the entire SEpM, is a product of the Nippur scribal milieu.<sup>48</sup> Perhaps one could add here the Dumuzi composition KUB 37.41 because the majority of the manuscripts of the Dumuzi-Inana hymns come from Nippur, but the source is very fragmentary.

The traditions of other compositions are far less clear. The Hymn to Iškur-Adad is an isolated text with no Old Babylonian duplicates. The hymn Nergal D (KUB 4.7) has duplicates in an Old Babylonian unilingual version from Sippar (CT 58, 46) and one Neo-Assyrian bilingual recension and is mentioned in the Catalogue of Texts and Authors.<sup>49</sup> This appears to be a composition that did not belong to the 'mainstream of the Sumerian tradition' but cannot be assigned to a specific tradition. KUB 4.7 appears closer to the Neo-Assyrian version in its line order and bilingual format.

The fact that some of the compositions reflect the mainstream of the Sumerian literary tradition does not imply that the models transmitted to Anatolia

<sup>45</sup> For this concept, see Viano 2016:29–30.

<sup>46</sup> Manuscript CBS 1554 likely comes from Sippar as it belongs to the Khabaza collection, which represents the first 2000 pieces of the CBS collection and includes pieces unearthed in Sippar (Civil 1979:93 and Tinney 2011:586).

<sup>47</sup> These are the fourteen texts with the highest rate of duplication found in House F at Nippur; House F Fourteen had a curricular setting; see Robson 2001.

<sup>48</sup> Kleinerman 2011:22–23, 84.

<sup>49</sup> Lambert 1962:64: IV 3-4.

came from Nippur. For instance, The Message of Lu-diĝira to his Mother was known in Sippar. The literary texts from the Hittite capital appear to belong to a repertoire that was widely used in the intermediary phase of the curriculum. Because the incantations seem to have originated in northern Babylonian centers, the literary texts probably followed the same path of transmission, regardless of the textual traditions that they manifest.

Although virtually all of the manuscripts of Sumerian literary texts are written in Hittite New Script, there are hints that at least some of the Sumerian compositions may have arrived in Hattuša at an earlier phase. KBo 19.98 is a six-sided prism written in Middle Script which contains the Cuthean Legend of Narām-Sîn and an unidentified Sumerian text in interlinear bilingual format. This tablet was likely written by Hanikkuili, the son of a Mesopotamian scribe working in the Hittite capital,<sup>50</sup> and can be dated to the 15th century. Another probable older attestation of a Sumerian text is represented by the source KUB 4.4 of the Hymn to Iškur-Adad as it contains an older edition and is possibly a late copy of an older tablet.<sup>51</sup> Further attestation is provided by the Hittite prayers to the Sun god that are preserved on manuscripts in Middle Script dating to the Early Empire or even an earlier period.<sup>52</sup> As demonstrated by Metcalf,<sup>53</sup> these Hittite prayers were based on Sumerian models and/or Akkadian intermediaries, which, given the antiquity of the preserved manuscripts, reached Anatolia before the 14th century. The recently published Akkadian prayer to the Sun god from Šapinuwa may be considered one of these intermediaries.54

To sum up, the Sumerian texts from the Hittite capital represent different stages and were transmitted at different moments. The oldest witnesses to Sumerian texts are represented by the unorthographic incantations in Babylonian script which reflect an Old Babylonian stage. The Assyro-Mittanian incantations represent a later stage of Sumerian literature as shown by the bilingual format and the presence of a *Kiutu* incantation that is mostly documented from the Middle Babylonian period onwards. The literary texts also represent a post-Old Babylonian stage.

Phonetic orthography is extensively used in Sumerian texts from Hattuša and, more generally, from the western periphery. As already mentioned above, phonetic writings from the Hittite capital are primarily found in two text types:

<sup>50</sup> See Viano 2016:280–281, with a bibliography of the literature.

<sup>51</sup> See Viano 2016:252.

<sup>52</sup> Schwemer 2015.

<sup>53</sup> Metcalf 2011. For the Sumerian text, see Cavigneaux 2009.

<sup>54</sup> Schwemer and Süel 2021:17-31.

Babylonian script incantations (CTH 800) and phonetic versions of literary texts in Hittite script. Only a few examples of phonetic writing are found among the Assyro-Mittanian texts. The purpose of phonetic orthography differed according to the text type. In incantations phonetic writings were produced by Babylonian scribes for texts that were meant to be performed by the *āšipus*. In contrast, the phonetic versions of Sumerian texts were added to the original bilingual texts and were produced by local scribes as part of their training. Because phonetic writing was typically used in scribal schools from northern Babylonia, of which the unilingual incantations are a product (see above), the knowledge and concept of phonetic orthography were probably acquired by Hittite scribes through the same path of transmission. This implies that Hittite scribes were educated in northern Babylonian orthographic conventions during their study of cuneiform script. As has been discussed previously,<sup>55</sup> lexical lists were the primary sources of this knowledge. The lexical lists from the Hittite capital show the same types of alterations that are found in the literary texts.56

In his discussion of the phonetically written Sumerian laments, Delnero argued that phonetic writing was not an alternative orthography typical of northern Babylonia.<sup>57</sup> He adduced the phonetically written sources from Girsu that date to the early second millennium—approximately two to three centuries before the Old Babylonian sources from northern Babylonia were written. However, the existence of phonetically written sources from the south does not contradict the fact that phonetic writings were mostly used in northern Babylonia during the Old Babylonian period. Although the sources from Girsu are the oldest examples of texts entirely written in phonetic orthography, phonetically writings are known from the Early Dynastic period.<sup>58</sup> Therefore, if northern Babylonian scribes cannot claim to have invented phonetic orthography, they certainly adopted this convention to a larger extent.<sup>59</sup> Most impor-

<sup>55</sup> Viano 2019:121-127.

See, for instance, the replacement of the voiced consonant *g* with the voiceless *k* in Erimhuš D (KB0 1.41), (a 5) gi : ki-i : *ši-ip-t*[*u*<sub>4</sub>], (a 6) gi-šu<sub>2</sub> : ki-i-šu : *pu-ru-u*[*s-su*<sub>2</sub>-*u*<sub>2</sub>], (a 7) gi-gi : ki-i-ki : *ma-ha-a-*[*ru*<sub>1</sub>/<sub>3</sub>]. See also the use of the Zv sign for saĝ in Urra I (KB0 26.5 + KB0 26.6), (C I, 19) <sup>[geš]</sup><sup>[</sup>zag<sup>1</sup>-gu-la-nu<sub>2</sub> : saĝ-an-dul-nu<sub>2</sub>, which is commonly attested in literary texts, -za-an-qa-ak-ke ~ -saĝ-ĝa<sub>2</sub>-ke<sub>4</sub> (CTH 315—AuOrS 23 50 II, 33); za-aG-pa ~ saĝ-ba (KUB 37.111 rev. r. col. 14); zi-iG-pa ~ saĝ-ba (KUB 37.111 obv. r. col. 5, 7).

<sup>57</sup> Delnero 2020:259-273.

<sup>58</sup> Civil 1984; see also Viano 2016:141-142.

<sup>59</sup> The extended use of phonetic writings in northern Babylonia should not be interpreted to imply that this alternative orthography was locally invented as argued by Delnero (2020:272): "an orthography that was developed in a specific time and place to record the correct pronunciation of the laments so that it would not be lost."

tantly, because the texts from Girsu cannot have influenced the scribal schools from the western periphery,<sup>60</sup> the only place that could have served as a source of knowledge during the Late Old Babylonian period was northern Babylonia.

Delnero's primary argument for rejecting the geographic nature of phonetic writings is their inconsistency. He argued that phonetic writings 'were intended to aid in the pronunciation of Sumerian laments when these compositions were sung or recited in performance'61 and stressed that the inconsistencies in the texts were indicators of their performative nature.<sup>62</sup> He was probably right to highlight the performative nature of certain writings (e.g., Sandhi writings).<sup>63</sup> But it can be difficult to associate other types of writings with performance. Vowels are typically stressed in recitative or singing contexts, but at least in the Emesal texts, plene writings are rare.<sup>64</sup> Most importantly, it is difficult to see the changes in consonant voicing (e.g., the replacement of a voiced consonant with a voiceless one), as performative notations, especially when writings are inconsistent.<sup>65</sup> Indeed this could result in changes of words.<sup>66</sup> The inconsistency of phonetic writings is an indication of a way of writing rather than a method to aid performance that is expected to be consistent to be useful, although it seems likely that certain types of writing such as Sandhi helped performance. One should not demarcate too rigidly the difference between an alternative spelling that was primarily (but not exclusively) used in certain areas (i.e., northern Babylonia) and the use of phonetic writing as an aid to per-

<sup>60</sup> Note also that orthography underwent a process of standardization towards a logographic system during the Old Babylonian period that is evident in the literary texts from Nippur (Rubio 2000:215–219).

<sup>61</sup> Delnero 2020:278; see pp. 278–287 for the full discussion.

<sup>62</sup> Delnero 2020:273: "the difficulty and inconsistency of the phonetic writings in these sources presupposes that the compilers and intended users of the sources already knew their content, and were not concerned with preserving the pronunciation of the laments for future generations, but instead to elucidate and call attention to how the laments were pronounced for more immediate and practical purposes." See also p. 294: "the attention devoted to replicating the general sound of words and not their exact pronunciation is further underscored by the inconsistency with which the same words and morphemes are written phonetically, often even within a single source."

<sup>63</sup> Delnero 2020:293.

<sup>64</sup> Delnero 2020:276.

<sup>65</sup> Different spellings of the same consonant of the same word in the same text are clearly not indicative of regional or dialetical variants.

<sup>66</sup> Note that in *Cantus Firmus* vowels are typically stressed but consonants are not changed. The author wishes to thank Mo. Christian Lavernier for pointing this out. One also may observe that the change of sound should not have been particularly problematic for an audience that likely had insufficient knowledge of the language to understand the content, but the same cannot be said for the performer.

formance. Both of these hypotheses agree with a limited acquaintance with the Sumerian tradition which was less at home in the north. In sum, Delnero's three possible explanations for the compiling of phonetically written laments<sup>67</sup> are not mutually exclusive but rather complementary.

Therefore, it will be maintained that the convention of writing Sumerian phonetically was transmitted to Anatolia from some northern Babylonian center where the practice was more developed and commonly used than elsewhere. Local scribes in Anatolia learned this convention and broadened its usage by exploiting the potential of the cuneiform writing system. This resulted in the production of the phonetic versions of Sumerian literary texts that had a larger number of effective alterations than the Babylonian script tablets.<sup>68</sup> Thus the phonetic versions of Sumerian literary texts result from an incomplete knowledge of Sumerian and the extensive use of conventions that local scribes learned from the Babylonian tradition.

<sup>67</sup> The three possible explanations are that the texts were compiled by unskilled scribes, phonetic writings were an alternative orthography developed in northern Babylonia, and phonetic writings were intended to aid performance (Delnero 2020:246).

<sup>68</sup> Viano 2016:224–228; Viano 2019:118–121.

# Akkadian and Akkadian Texts in Hittite Anatolia

F. Giusfredi and V. Pisaniello

## 1 Previous Studies on the Akkadian of the Hattuša Archives

Akkadian is one of the famous *acht Sprachen* of the Hittite archives that were identified by Forrer (1922). Its role, however, is by the very nature of the ancient Mesopotamian scholarship different from that of most of the other idioms that are represented in the Hattuša archives. Indeed, while Palaic, Luwian, and Hattian have a specific local significance in the mixed cultural environment of Bronze Age Anatolia, and Hurrian and 'Boğazköy Indo-Aryan' are introduced through a historically specific and well-defined pattern of interactions with the Mittanian world, both Akkadian and Sumerian are fundamental elements of the cuneiform koiné that constitutes the core of the historical object that we generally call the ancient Near East.

The original introduction of Akkadian (and, in general, of the Sumero-Akkadian Mesopotamian cultural tradition) in Anatolia has been discussed in Chapter 7. But after the first cultural 'quasi colonization' during the Middle Bronze Age phase of the Old Assyrian markets and the complex and still foggy circumstances of a reintroduction at the origin of the history of Hatti, the role of Akkadian in the Hittite archives does not appear to be monolithic and homogenous over time. Of course, Akkadian does have features that appear consistently in the different types of documents and diachronic stages (cf. Wilhelmi 2011:260-273). These include the inverted order of genitive and noun, with the reduplication of the marker of possession, which seems to calque very closely the structure of Hittite, and some peculiarities that emerge in different varieties of peripheral Akkadian, such as the confusion of case endings in nouns and especially pronouns, mistakes in the use of dual number and gender, imperfect agreement in noun phrases, and inconsistencies in the use of the subjunctive and ventive in verbal forms. Although these commonalities may give the impression that a single grapholect of Akkadian existed, they are relatively trivial features. Some are defined sociolinguistically by the non-native competence of the scribes or authors of the texts and others arise from very general mechanisms of imperfect learning.

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## 1.1 Boğazköy Akkadian and Peripheral Akkadian

The study of the Akkadian of Boğazköy began relatively early.<sup>1</sup> Only a few decades and years after the attention of the scholars was drawn to the existence of peripheral Akkadian archives from Nuzi and Ugarit, respectively, and before those of Mari and Alalah were even unearthed, R. Labat (1932) devoted his doctoral dissertation to the Akkadian texts coming from the Hittite archives. His work represents a solid effort to describe the writing conventions, phonology (wisely separated from the previous category), morphology, and syntax of the texts. For nearly forty years after this outstanding seminal effort, the works on 'peripheral Akkadian' were mostly focused on the Syrian archives, and studies of Boğazköy Akkadian were chiefly philological. One should, of course, mention F. Sommer and A. Falkenstein's edition of the Political Testament in 1938. In the same year, G. Meier published an Akkadian healing ritual (KUB 29.58, Meier 1938), thereby inaugurating the study of the non-bilingual Akkadian documents that are more directly linked to a Mesopotamian tradition. The 37th volume of the Keilschrifturkunden aus Boghazköy by F. Köcher (1953) was influential in introducing this meta-genre to scholars. Lexical lists have been known since the 1910s and were discussed in some early volumes of the Materialien zum sumerischen Lexikon (MSL), but they were generally and reasonably examined from an Assyriological perspective. Although linguistic studies of Boğazköy Akkadian were not entirely absent, they tended to be unsystematic. Two very important contributions were E.H. Sturtevant's 1938 study of the Sumerian and Akkadian words used in Hittite and W. von Soden's 1973 comparative analysis of the iterative verbal forms in Akkadian and Hittite. However, comprehensive studies were not attempted.

The second extensive work on the Akkadian of the Hittite capital as a grapholectal phenomenon (even if the term 'grapholect' is a bit anachronistic for that stage, it is theoretically appropriate) was once again a dissertation. It appeared in 1976 and was authored by John W. Durham. While the dissertations by Labat and Durham are superficially similar in structure, Durham's work is significantly longer and much more detailed than Labat's, but, at a closer look, it is less structured from a theoretical standpoint. Almost 450 pages are devoted to graphemics and phonology, which is hardly unexpected: not only is the structure of the syllabary the first barrier when one tries to examine an extinguished corpus language, but also the relationship between graphemic

<sup>&</sup>lt;sup>1</sup> We are referring here only to the Hittite archives from Boğazköy; the Old Assyrian phase in Anatolia was discussed in Chapter 4. Cf. also Chapter 6 for the problem of the reintroduction of Cuneiform in Anatolia.

and linguistic competence in the culture of the cuneiform world is highly complex. In comparison, Durham devotes only 60 pages to the grammatical aspects of Akkadian. These pages consist of an overview of nominals and nouns (verbs are treated earlier in the book, in a section dedicated to the graphophonemic treatment of vowels and semivowels). Half a century later, Durham's work still represents a precious source of information and examples; however, its biggest shortcoming is the lack of a general theorization. It contains a short introduction and some brief 'comparative notes' at the end of significant sections, but no proper 'synthetic' conclusions. References to other corpora are frequent, but there is no obvious attempt to cross-reference them to identify tendencies, patterns of influence, or similarities between central and peripheral scribal praxes.

Entirely different is the work that M. Marazzi (1986) dedicated to the use of Akkadian in the Old Hittite texts. Rather than considering all of the available examples, even for the earlier phases, the author concentrates on only three texts: the Political Testament, the Siege of Uršu, and the Annals of Hattušili I. Marazzi's work is scientifically more daring than Durham's and does not neglect theorization: it investigates interference-driven mistakes both from the linguistic and philological perspective, including the linguistic identity of the authors/scribes and the direction of translation (in the cases in which a translation may or must have occurred).

In 1976, when Durham completed his dissertation, 43 volumes of the KUB series and 23 volumes of the KBo series had been published. More volumes were to come, and, from the 1980s, more and more Akkadian texts were published in hand copies in the main series of Hittite epigraphy. The KBo volumes 28 (1985, by H.M. Kümmel) and 36 (1991, by G. Wilhelm) contain nonliterary and literary texts from Mesopotamian traditions. Texts of different types appeared in other volumes of both series, as well as in other minor series of cuneiform hand copies. In this phase, research in the field became more specialized. By then it was clear that the different genres of Akkadian documents had to be addressed in different ways.

Finally, in recent years a doctoral dissertation was dedicated to the problem of Akkadian in the Hittite scribal world. L. Wilhelmi's work (2011) is still unpublished but was kindly made available to us by the author, whom we wish to thank. It concentrates mostly on those documents that are *certainly* local productions (political documents, historical materials, and, above all, diplomatic texts such as letters and treaties).<sup>2</sup>

<sup>2</sup> After Wilhelmi's dissertation, two more important works appeared. Beckman (2021) dedicated an article to a general presentation of the problem of Boğazköy Akkadian. The con-

It would be unproductive here to sketch a history of the publications and editions of the different monolingual or bilingual documents in Akkadian: an attempt at cataloging the documents based on their genre will be made in § 2. What should not be neglected, however, is the presence of Akkadian texts produced from the Hittite scribal schools that have been found in archives outside Hatti. These texts exhibit some features in common with those of the central Hittite archives, whereas other features appear to be local. The texts from Karkemiš and Ugarit were the object of Huehnergard's 1979 doctoral dissertation, which was the basis for his 1989 monograph on Ugarit Akkadian. This was followed, some twelve years later, by a book on the same subject by van Soldt (2001). An important, although often overlooked, follow-up article was authored in 1992 by H.J.M. van Deventer and P.J.J. Huÿssteen. This 1992 article has the merit of providing comparative information about several peripheral varieties of cuneiform Akkadian and a useful overview of the types of material.

A few general observations are in order. First, many of the main studies that are dedicated to Boğazköy Akkadian (Labat 1932; Durham 1976; Huehnergard 1979 and 1989; van Deventer and Huÿssteen 1992) focus on orthography and morphophonology, as well as the differences that emerge in the different peripheral traditions. Huehnergard places more emphasis on the peculiarities of the syntax: in his dissertation, after comparing some features that differ in Karkemiš and Ugarit, the author speaks of *dialects*, implicitly assuming that the western peripheral varieties are to be regarded as (admittedly elusive) dialectal varieties of the main language. In his 1989 work on Ugarit Akkadian, however, the sociolinguistic perspective is much more refined, and the concepts of local substrata and superstrata become much more relevant in the theoretical framework. As regards Hatti, reflections on the local peripheral varieties of Akkadian are also frequent in Durham's dissertation, with references to corpora such as those from Alalah and Nuzi.

In general, neither a purely philological/historical nor purely linguistic approach can be expected to provide a fair representation of the Akkadian production in Boğazköy. In the next sections, we will discuss the problems inherent in categorization and then propose a categorization of the texts that compose the corpus (or corpora). After that, we will outline the characteristic features of the different Akkadian traditions.

tribution is informative, although very synthetic. Middle Babylonian features are observed in the corpus, and the author hints at differences related to document age and type but fails to carry the discussion further. Wilhelmi (2022), on the other hand, summarizes several aspects of the contextualization of Boğazköy Akkadian as a specific grapholect.

# 1.2 Problems of Categorization

Given the large number of Akkadian documents in the Hittite archives, a presentation of the material cannot be attempted without attempting a categorization. Categorizing the Akkadian documents in the Hittite archives, however, is no trivial task. The simple fact of belonging to the Hittite scribal production would produce a large set of 'local' texts and very few documents that may have been composed elsewhere, a distinction that, due to the overwhelming majority of the former group, is not conducive to a comfortable presentation.<sup>3</sup> The bilingual vs. monolingual criterion is more promising but is essentially epigraphic and weaker than other options, especially because the presence of more languages is directly correlated with specific types of compositions, as will be evident in the next section of the present chapter.

As for the paleographic criterion, it poses as many concerning issues as promising features. The oldest Hittite documents display a rather consistent type of cuneiform that mostly patterns with the ductus of Old Babylonian Alalah (Alalah VII).<sup>4</sup> The evolution toward the Late Script (or New Script) ductus is paralleled beginning in the late 15th or early 14th century by the emergence of documents written in an Assyrian or Mittanian ductus. Furthermore, non-Hittite sign types that correlate with the Upper Mesopotamian and Syrian Mittanian traditions contribute to the syllabary of the latest version of the Late Hittite ductus (the so-called ductus IIIc).<sup>5</sup> These ducti distribute in a fashion that still appears irregular with respect to text types. For instance, in a few cases a Middle Assyrian ductus emerges in the Hittite-Assyrian correspondence but does not prevail and is not limited to this subcorpus. Similarly, the very rare documents that present a Middle Babylonian ductus carry texts from the Mesopotamian literary and cultural tradition, but not all of the literary and cultural Mesopotamian texts found in Hattuša exhibit this kind of ductus.

All in all, research on the paleography of the Hattuša cuneiform has progressed, but the correlations among language, text, and script are still partly obscure, especially for the documents in foreign languages. Therefore, in the next section of this chapter, we will attempt a categorization of the Akkadian texts from the Hittite archives based on textual macro-categories, providing linguistic and, occasionally, paleographic information as necessary.

<sup>3</sup> Bilingual documents in Akkadian and Hittite generally form a relatively small subset of the first group of A-type texts according to the categorization proposed by van den Hout (2005:286–287), and date to an early phase.

<sup>4</sup> See van den Hout 2009c.

<sup>5</sup> On the origin and main features of the Hittite IIIc ductus, see Klinger 1996:32–29 and, more recently, Weeden 2016.

#### 2 The Akkadian Texts from Boğazköy: A Categorization

The Sumerian and Akkadian texts present in the Hattuša archives, or found in the Hattuša excavations, represent several different texts and collections. Many studies are dedicated to the Mesopotamian literature found in Boğazköy but, with very few exceptions (e.g., Viano 2016 on the Sumerian texts), most are unsystematic in discussing the sources and significance of the texts. Furthermore, not all of the texts in Akkadian belong to a Mesopotamian literary tradition. Instead, most are locally produced historical, political, or diplomatic documents.

The Akkadian texts from the Hittite archives correspond to the following textual categories:

- 1. Political and administrative Akkadian:
  - a. Old Hittite political texts
  - b. Diplomatic texts
  - c. Landschenkungsurkunden
- 2. Akkadian of the cultural tradition:
  - a. 'Scholastic' texts belonging to the scribal curriculum
  - b. Texts concerning magic and medical technical knowledge
- 3. Royal inscriptions on votive objects

The first group includes the Akkadian version of the Annals of Hattušili I (CTH 4.1),<sup>6</sup> the Political Testament of Hattušili I (CTH 6), the Siege of Uršu text (CTH 7),<sup>7</sup> and the Akkadian version of the Edict of Telipinu (CTH 19.1).<sup>8</sup> These are obviously local productions and are all, to different degrees and in different ways, bilingual. The Political Testament of Hattušili I is recorded on a bilingual tablet, with columns i and iv containing the Akkadian version and columns ii and iii the Hittite version. In contrast, the Hittite and Akkadian versions of the Annals of Hattušili I and Edict of Telipinu are recorded on separate tablets. Finally, the Siege of Uršu text is an Akkadian text is one of complementarity rather than correspondence. It is a matter of debate whether the Siege of Uršu is a translation of a Hittite original (Kempinski 1983:34; Beckman 1995:27; Archi 2010:40–41) or rather one of the first attempts to adapt the cuneiform script to the Hittite language (van den Hout 2009a:92).

Two diplomatic texts dating to the Old Kingdom—the letter sent by Hattušili I to Tunip-Teššub of Tikunani (CTH 187), probably coming from Tiku-

<sup>6</sup> See Devecchi 2005 for an edition.

<sup>7</sup> Edition by Beckman 1995.

<sup>8</sup> Edition by Hoffmann 1984:58-62.

nani,<sup>9</sup> and the treaty between Telipinu and Išputahšu of Kizzuwatna (CTH 21.1), of which three Hittite versions are found in the archives of Boğazköy—can also be placed in this group.

Akkadian was used as a lingua franca for diplomacy. Diplomatic texts written in Akkadian (particularly a peripheral Middle Babylonian dialect) include treaties with non-Anatolian partners and international correspondence. The Akkadian treaties that were found in Boğazköy are the treaty with Paddatiššu of Kizzuwatna (CTH 26, variously dated to the reigns of Alluwamna, Hantili II, or Huzziya II),<sup>10</sup> as well as the treaties between Tahurwaili and Eheya of Kizzuwatna (CTH 29), Tuthaliya I and Šunaššura of Kizzuwatna (CTH 41.I), Tuthaliya I (?) and Tunip (CTH 135), Šuppiluliuma I and Aziru of Amurru (CTH 49.I), Šuppiluliuma I and Šattiwaza of Mittani (CTH 51.I), Šattiwaza of Mittani and Šuppiluliuma I (CTH 52.I), Šuppiluliuma I and Tette of Nuhašše (CTH 53), Muršili II and Tuppi-Teššub of Amurru (CTH 62.AA), Muwattalli II and Talmi-Šarruma of Aleppo (CTH 75), Hattušili III and Ramses II (CTH 91), and Hattušili III and Bentešina of Amurru (CTH 92).

We can add to this list some documents found at Ugarit, such as the treaty between Šuppiluliuma I and Niqmaddu II (CTH 46) and that between Muršili II and Niqmepa (CTH 66), as well as some royal verdicts or decrees on several local issues.

Akkadian treaties were recorded on monolingual tablets, but corresponding Hittite versions sometimes exist on separate tablets.<sup>11</sup> Letters were also monolingual, although Hittite copies (drafts or archival copies) are found sporadically. Akkadian international correspondence has been found both in Hittite and non-Hittite (especially Ugarit and Amarna) archives. It includes letters exchanged by Hittite kings or dignitaries and foreign addressees (both kings and vassals). The texts in this category mainly include correspondence with Ugarit (CTH 77, 110, 112–114), Egypt (CTH 153–170), Babylon and Assyria (CTH 172–174), Mittani (CTH 179), and Amurru (CTH 193).

Royal land grants or *Landschenkungsurkunden* (CTH 222) are paleographically Middle Hittite documents dating from the reign of Telipinu to that of Arnuwanda I. Those issued from the reigns of Telipinu to Muwattalli I are written in Akkadian, specifically, in an Old Babylonian dialect (with sporadic Hittite lexemes, which are mostly technical terms and topographical indications). The only land grant composed under Arnuwanda I and Ašmunikkal (KBo 5.7) main-

<sup>9</sup> See edition and discussion in Salvini 1994.

<sup>10</sup> Cf. G. Wilhelm (ed.), hethiter.net/: CTH 26 (INTR 2014-02-25).

<sup>11</sup> CTH 41, 49, 51, 52, 62.

tains a formulaic Akkadian framework but contains more details in Hittite.<sup>12</sup> All of the land grants are original documents bearing a cuneiform seal of the king and display a fixed set of formulas: 1) an introductory clause mentioning the seal of the *tabarna*; 2) the grant formula with the name of the recipient; 3) a vindication clause; 4) a curse formula; and 5) a final clause indicating the place where the document was written, the name of the scribe, and the list of witnesses. Such a structure represents a Hittite re-elaboration of Syrian mod-

els: the verb *našûm* in the grant formula probably calques the Hittite *šarā*  $d\bar{a}$ -,<sup>13</sup>

and the curse formula is only attested at Boğazköy.14 Among the Akkadian texts belonging to the cultural tradition, two major subgroups can be singled out. The first includes texts that were probably mainly (but perhaps not exclusively) used by Hittite scribes to learn Sumerian, Akkadian, and the cuneiform script, to a more or less extent degree. This subgroup includes lexical lists, hymns and prayers, epic narratives related to the Sargonic kings, mythological narratives (of both Mesopotamian and Hurrian origin), wisdom literature, and, tentatively, omen series, although the technical knowledge they contained might also have been relevant. These texts usually have translations in Hittite, either alongside Akkadian (and when present, Sumerian) on multilingual tablets (as is the case with lexical lists and many omen series) or on a separate tablet (as occurs with mythological narratives). In some cases, only the Hittite version is preserved, although an Akkadian model should be assumed. Furthermore, some of these compositions-particularly hymns and prayers—were probably used mainly as models from which new original texts in Hittite were drafted.

The second major subgroup consists of magic and medical texts, including rituals and incantations, medical treatises, pharmaceutical texts, etc., which we believe were mainly employed for the transmission of specific technical knowledge rather than for mastering the cuneiform script and Akkadian language (which, however, cannot be entirely excluded). Some of the rituals were also probably performed on specific occasions. Indeed, these compositions were only sporadically provided with Hittite translations, although they sometimes provided models for the composition of new texts in Hittite.

<sup>12</sup> Cf. Rüster and Wilhelm 2012:72-73.

<sup>13</sup> Cf. Rüster and Wilhelm 2012:36.

<sup>14</sup> awāt tabarna LUGAL.GAL ša AN.BAR ša lā nadīam ša lā šebērim ša ušpahhu SAG.DU-su inakkisū "the word of the tabarna, the great king, (is) of iron, (it is) not to be rejected, not to be broken. Whoever changes (it), his head will be cut off." See also KBo 1.6 obv. 6–7 (CTH 75.A; Treaty between Muwattalli II and Talmi-Šarruma of Aleppo) and KBo 6.28+ rev. 28–29 (CTH 88; Decree of Hattušili III regarding the exemption of the *hekur* of Pirwa from taxation). See also WIlhelmi 2011:107–108.

The compositions included in the two subgroups of the cultural tradition were generally foreign in origin although often drafted locally by Hittite scribes. Nevertheless, some imported tablets have been found. Therefore, these documents do not form a consistent and homogeneous collection, from the perspective of chronology, provenance, and paths of transmission; each document would require a separate discussion.

The last group of Akkadian documents includes brief royal inscriptions on votive objects, which are generally short and bear limited information relevant to this research. Only three documents belong to this category: the inscriptions on the dagger of Anitta, axe of Ammuna, and sword of Tuthaliya I. The dagger of Anitta, found at Kültepe, only bears the short Akkadian inscription É.GAL *Anita ruba'im* "the palace of Anitta, the king."<sup>15</sup> The inscription on the bronze axe of Ammuna (findspot unknown) shows the same ductus found on the Old and Middle Hittite seals, and the curse formula against forgery is the same (barring small variants) as the formula found on the *tabarna* seals on the *Landschenkungsurkunden*.<sup>16</sup> Finally, the bronze sword of Tuthaliya I, found at Hattuša, was dedicated by the Hittite king to the Storm god after the victory over Aššuwa, as stated by the text of the inscription: *inuma* <sup>m</sup>Duthaliya LUGAL.GAL KUR <sup>URU</sup>Aššuwa uhalliq GÍR<sup>HI.A</sup> annûtim ana <sup>d</sup>IŠKUR *bēlišu ušeli* "When Tuthaliya, the Great King, destroyed the land of Aššuwa, he dedicated these swords to the Storm god, his lord."<sup>17</sup>

Akkadian texts	Origin	Hittite versions
Old Hittite political texts	Local	Yes
Dipl. texts A: treaties	Local	Yes
Dipl. texts B: letters	Local/foreign	Drafts/archival copies
Land grants	Local	No
Scholastic texts A: Scribal	Foreign	Yes
Scholastic texts B: Magic	Foreign	Sporadic
Votive inscriptions	Local	No

<sup>15</sup> Cf. Özgüç 1956.

<sup>16</sup> Cf. Salvini 1993. The inscription says: tabarna Ammuna LUGAL.GAL ša išar [I]NIM ušpahu BA.ÚŠ "Tabarna Ammuna, Great King. He who forges the right word will die!"

<sup>17</sup> Cf. Ünal et al. 1990–1991; Ertekin and Ediz 2003; Ünal 2003.

#### 3 The Akkadian of Politics and Administration

### 3.1 Old Hittite Political Texts

Old Hittite political documents, written in Akkadian or presenting an Akkadian version are, as previously discussed, a heterogeneous set. Most resist being ascribed to one of the typical genres of the later Hittite tradition. Telipinu's text (CTH 19, MS), despite being labeled an edict, is a complex historical narrative; the Uršu text (CTH 7) and Hattušili's political testament (CTH 6, NS) are *unica*, and the annals of the first Hittite king (CTH 4, NS) are the only decently preserved specimen of an Old Hittite annalistic tradition. However, despite their unique textual features, they are linguistically consistent, at least if we consider those that derive from the scribal activities of Hattuša (thus excluding the Tikunani letter, which was in all likelihood composed by a Syrian scribe).<sup>18</sup> Old Hittite 'political Akkadian' is a variety of Old Babylonian that exhibits few or no significant traces of Middle Babylonian or Middle Assyrian traits.<sup>19</sup>

One of the oldest documents found in Hattuša is probably the Uršu text. It presents paleographic and graphemic similarities to the Alalah VII tablets (Klinger 1998:370–372; Archi 2010:40), while its language has been described as a variety of Old Babylonian with some forms that are attested in the archives of Mari (e.g., Beckman 1995b:28–29 on the form *emqet* for *emqēta*, *neti* for *niati*). The language of the Uršu text supports the important role of the Syrian cultural interface for the setup of the Hittite scribal praxis after the hiatus that separates the first historical Hittite dynasts from the Kārum and post-Kārum ages. As is well known, however, while its language could be labeled a form of North

<sup>18</sup> We fully support the interpretation offered by Archi (2010:39). Therefore, the Tikunani letter cannot be considered a document issued by a Hittite archive. It may, of course, offer material for comparison regarding the origin of the scribal praxis in Hattuša. These issues, however, are dealt with in Chapter 6 of the present book.

<sup>19</sup> For the Middle Babylonian features, we refer to Aro 1955. On its use in Akkadian magical texts, cf. also Schwemer 1998:47–50. Middle Babylonian elements are also found in the Akkadian of the international treaties, cf. Beckman 1996:2 and below. Middle Assyrian elements seem to be more circumscribed in the Hattuša production, with certain examples emerging in two letters exchanged with the Assyrian court (Mora and Giorgieri 2004:40, 57–75, 145–149). Here, however, other elements also emerge, including writings that are reminiscent of other peripheral Akkadian corpora (especially from Syria) as well as regular Old Babylonian or Babylonian forms. This variability seems to indicate that the Akkadian letters from the Hittite court to Assyria represent linguistically unique products that were probably quite artificial and represented an effort to adapt the language to the audience. The mixed ductus that is employed for KB0 1.14 would confirm the unusual nature of these linguistically isolated scribal products.

Syrian Old Babylonian, the Uršu text contains some traces of Hittite interference. These are not very indicative of the use of a linguistic mixed code by the speakers but belong to the easiest kind of contact phenomena identifiable in corpus languages. Most of the interference consists of lexical insertions of Hittite words in the Akkadian context. They should be described not as 'loanwords' but as 'foreignisms,' which are not integrated into the target language but rather represent artificial cases of code-switching. This pattern is consistent with a translation from Hittite to Akkadian by a Syrian scribe—an interpretation that combines the observations of Beckman (1995b) and Archi (2010). The fact that only one case of syntactic interference can be detected (obv. 18 *ša šunūti țemšunu*, calquing a Hittite double-marked possessive structure) is also consistent with this scenario as a single instance points to an occasional mistake rather than the linguistic predisposition of a native Hittite scribe.

With its atypical paleographic, graphemic, and linguistic profile, the Uršu text may have represented an exception to the usual relationship between Hittite and Akkadian in the Old Hittite documents. The most difficult problem, however, is trying to describe this relationship in the other, less peculiar political documents of this early phase. What complicates the issue is the impossibility of dating the available linguistic material precisely. Indeed, leaving aside the Uršu text, the extant manuscripts of the other Old Hittite political documents are generally relatively late. The Akkadian version of Telipinu's edict may predate the Hittite ones but does not seem to have originated any earlier than the Middle Hittite paleographic *facies*.<sup>20</sup> The Akkadian versions of the Annals of Hattušili I and that of his Political Testament are both preserved in New Hittite copies. The available fragments of the Akkadian version of the Išputahšu Treaty (CTH 21) are also older than the Hittite fragments. They appear to exhibit a Middle Script ductus but according to Devecchi (2015:64) may be regarded as original documents from the age of Telipinu. However, the fragments are too small to permit a linguistic analysis.<sup>21</sup> This complex situation implies that some features of the available documents do not stem from original Akkadian versions (setting aside the problem of the dating of the first Hittite versions, which is discussed in Chapter 6).

<sup>20</sup> Some of the Akkadian versions (KBo 7.15+ and 19.96+) show a mixture of typically Old Script and typically New Script signs (in some cases, the two variants of the same sign, e.g., IG, co-occur).

<sup>21</sup> We have no clear examples of how the Hittite cuneiform ductus must have looked like at the time of Telipinu, apart from the mixed ductus of the edict and the two fragments of the treaty. Other texts that might go back to this phase (CTH 20 and 22) are only preserved in later copies.

However, some features that must derive from later stages of the tradition can be identified confidently. For example, the use of writing conventions that are typically late, such as the syllabograms labeled by Devecchi (2005:86-87) as 'non-babilonesi,'<sup>22</sup> and the Middle Babylonian use of ŠÚ to write the third person singular pronoun can be regarded as modifications that occurred when Hattušili's annals were copied in the pre-imperial and imperial ages. Other traits connect the language and writing of the Akkadian of the OH political bilinguals to earlier or peripheral Akkadian traditions (Devecchi 2005:84–109). Although Hittitisms are rare in the syntax and morphosyntax, they do exist (e.g., double-marked genitival appositions, following both a Hittite and non-Hittite word order).<sup>23</sup> However, Hittite loanwords or foreignisms (comparable to those in the Uršu text) are nowhere to be found.

Formulaic calques from a Hittite cultural environment do exist: one may consider, for instance, the form *pahru ibbašu*, which is used to render the Hittite *taruppanteš ešer* in Telipinu (e.g., KBo 3.1+KUB 11.1 i 4, 15, 25–26), or the expression *ana sunišu iškunšu* in the annals (KBo 10.1 obv. 13), which occurs only in the Old Assyrian corpora from Anatolia and therefore probably has a Hittite or other local, non-Mesopotamian origin. However, some formulas are typically Akkadian, as are some *topoi* that were collected and discussed by Steiner (1999) and Devecchi (2005:111–116). These include the use of the LUGAL GAL title (obviously Mesopotamian, at least formally), the epithet 'beloved by the god' (Akkadian *narām* DN, maintained as an Akkadogram in the Hittite Version KBo 10.2 i 27), the expression 'my city GN' (URU-*ya* GN in KBo 10.1 obv. 6), the *topoi* of the enemy king who is tied to the chariot (KBo 10.1 rev. 24–25), the god running before the king on the battlefield (KBo 10.1 rev. 13–14), and the designation of the king as a 'lion' (KBo 10.1 obv. 35).<sup>24</sup> It must be stressed, however,

It deals with the variants BÁ, PÁ, DÁ, TÁ, KÀ, and QÁ for sylllables containing a stop and a vowel. They seem to have originated in an Old Assyrian and Old Akkadian tradition and do not belong to the graphemic inventory of the local cuneiform system used for Hittite. In the Akkadian version of the Annals of Hattušili I, they represent minority variants with respect to the signs BA, PA, DA, TA, KA, and QA that are expected to prevail both in Old Babylonian and the Akkadian of Hattuša.

<sup>23</sup> Devecchi considers the construction ša GÉME<sup>MEŠ</sup>-šu ŠU<sup>MEŠ</sup>-šina "of the slaves their hands" a calque of a Hittite syntactic pattern. In contrast, the construction <sup>GIŠ</sup>GIGIR<sup>MEŠ</sup>šu ša KUR <sup>URU</sup>Abbaia "its chariots of the land of Abbaya" employs a double-marking but does not follow a Hittite word order and may be a rare emphatic structure of core Akkadian.

<sup>24</sup> Other *topoi* listed in Devecchi (2005:114–116), such as the presence of a general rebellion, the designation of an exploit of the king as unprecedented, or his representation as someone who frees the peoples oppressed by the enemy are, we believe, mere anthropological universals.

that the presence of formulas from Mesopotamian, Syrian, or local traditions testifies to the fact that the OH annalistic production was derivative *from the literary point of view* but says nothing about the linguistic profile of the scribe and does not provide conclusive evidence about the original language of the OH political texts.

Our view is that it is impossible to attempt to identify a single Anatolian or Mesopotamian tradition and original language for the compositions; instead, each of the main OH political documents may have a unique philological history. The task of identifying an 'original version' is made even harder by the fact that specific expressions or phrasemes present in one version of a text can be drastically modified or reduced in another, which qualifies the production of the text as something more complex than a literal translation.<sup>25</sup>

However, a description of the type of Akkadian employed in these documents is feasible as the code seems to be relatively consistent within the subcorpus. If elements that belong to later stages of the tradition are eliminated, OH political Akkadian can be seen as a form of Old Babylonian that is characterized by influences from the Syrian area. The Annals of Hattušili I, for instance, employ the adjective *kalû* instead of the *gabbu* that prevails in Middle Babylonian. They also contain the formula *ana warduti târu* 'to become a subject again' (KBo 10.1 obv. 22), which, according to Devecchi (2005:66–67) is also known from the Syrian area (as does the writing ARAD<sup>MEŠ</sup> for the abstract *wardutu*). Another formula of Syrian origin is, again according to Devecchi (2015:73), *pānam u bābam ul išû* 'to have neither front nor gate' (KBo 10.1 obv. 36).

In contrast, few features of the language of the OH political texts relate to the local Old Assyrian traditions. Some of these features pertain to the vocalism of inflected verbs (e.g., *itarab* from *erēbu* in KBo 10.1 obv. 48),<sup>26</sup> but could also have come from other peripheral traditions. A more striking case, syntactic in nature, is the use of *raṭābu* with the infinitive, meaning 'to begin to,' which is attested in Old Assyrian and present in both the Annals (KBo 10.1 obv. 14) and the Political Testament (KUB 1.11 obv. 16–17; cf. Devecchi 2005:62); however, this case, rather than indicating a link to the Old Assyrian scribal production, may have represented a calque of an Anatolian serial construction in both traditions. We can only suggest that between the penetration of Old Assyrian in

<sup>25</sup> Cf., on the Annals of Hattušili I, the discussion by Melchert (1978), who argues for a true bilingual text deriving from a Hittite original. More recently Giusfredi (2013) challenged the idea that an 'original version' can be reconstructed.

<sup>26</sup> It should be observed that the form occurs in a very disturbed context in which the Hittite and Akkadian versions seem to differ (cf. also Melchert 1978:19).

Anatolia in the Middle Bronze Age and the introduction of Middle Babylonian cultural elements beginning in the 16th or 15th century, an intermediate phase must have existed, during which Mesopotamian cultural and linguistic material typical of the North Syrian Old Babylonian period was adopted in the Hittite scribal world, possibly in a gradual fashion.

#### 3.2 The Landschenkungsurkunden

The land grants—often referred to by the German technical term *Landschenkungsurkunden* or LSU—represent a very peculiar type of Akkadian documents produced by Hittite scribes. These documents are unique, firstly, for their contents: since they record land assignments from the crown to specific noble families of the kingdom, they represent the main known corpus of administrative tablets that were produced in the Hittite world. According to the material presented by Rüster and Wilhelm (2012, pc. 72), land grants were written in Akkadian until the time of Muwattalli I,<sup>27</sup> a king who reigned in the 15th century BCE. They are chronologically close to some diplomatic documents, in particular, the Kizzuwatna treaties, which likewise date to the 15th century except for the treaty between Tuthaliya I and Šunaššura. Apart from the complex problem of defining a Middle Script ductus (Rüster and Wilhelm 2012:60–64), the paleography of the documents does not contradict that dating.

However, the language and the formulas employed in the LSU are peculiar. While alleged Middle Babylonian traits occur in the diplomatic documents as early as the Paddatiššu treaty (CTH 26),<sup>28</sup> the grants seem to adhere to Old Babylonian principles and forms. To some extent, this may indicate the maintenance of a linguistic tradition closer to that of the Akkadian version of the Old Hittite political documents that would perhaps dwell in the praxis of scribal schools that issued internal official documents. However, it is surprising that a synchronic change in the use of Akkadian between internal grants and international documents was not matched by a clear change in the shape of the signs as the Middle Hittite scribal phase is mostly characterized by a gradual shift from the older ductus to the imperial one. This fact certainly complicates the

<sup>27</sup> In the corpus collected by Rüster and Wilhelm, documents in Hittite exist for earlier rulers. These are texts that list personal names and toponyms without other indications of a Hittite underlying dictation except in the case of a late text, no. 91 (by Tuthaliya I and Ašmunikkal), in which some sentence particles point to proper Hittite syntax.

<sup>28</sup> The treaty, dating to the reign of an unidentified 15th-century ruler (cf. Devecchi 2015:70–71), presents a use of mimation limited to the CV*m*-syllabograms and some instances of non-assimilated nasal consonants (KUB 34.1+ obv. 29, 33). However, other features appear purely Old Babylonian, e.g., the uncontracted *-ia-* diphthong rendered by C*i-a*.

description of the role of a new penetration of the Mesopotamian cultural elements in the Hittite world during the pre-imperial phase. If it happened, it does not seem to have greatly affected the scribal ductus, which continued its gradual and uneven evolution until the 13th century, while the linguistic influence seems more prominent in the international documents than on the internal administrative tablets.

Occasional influences of the Hittite language on the Akkadian are sometimes detectable: besides formulas that seem to derive from a Syrian tradition, occasional *inflected* Hittite loans emerge, and some calques of the Hittite structures appear. Rüster and Wilhelm (2012:73) explicitly refer to the formula (the land, the king) *išši-ma* (the grantee(s)) *iddin*, which would reflect a Hittite construction;<sup>29</sup> however, as no grammatical mistake occurs in Akkadian, this can hardly be considered a form of proper interference and is merely a local formula.

# 3.3 The Akkadian of Diplomacy

As already mentioned, diplomatic texts written in Akkadian include treaties with non-Anatolian partners, international correspondence, and decrees or verdicts of the Hittite kings concerning matters outside Hatti. Akkadian treaties between Hittite kings and their international partners have been found in Hattuša and other important centers, especially Ugarit. The language of these treaties is the so-called 'diplomatic' Akkadian, that is, a peripheral Middle Babylonian dialect used as lingua franca, mostly by non-native Akkadian speakers, across the ancient Near East in the Late Bronze Age.<sup>30</sup> Diplomatic Akkadian was a rather artificial language: texts were written using a standard formulary and display several surprising features. Most of these features can be explained as interference phenomena, although the path of interference was not always linear and unidirectional.

At present, we do not have many original treaties, that is, the official copies that were sealed and deposited in temples. Only three diplomatic documents can be regarded as original, all written in Hittite: the Bronze Tablet Bo 86/299, containing the treaty between Tuthaliya IV and Kurunta of Tarhuntašša (CTH 106.I.1); the MS tablet KUB 31.103, containing the treaty with Pahhuwa (CTH 212.1); and the fragment 544/f, recording a declaration of Kurunta of

<sup>29</sup> The Hittite construction mentioned by Rüster and Wilhelm (2012) would involve the verbal form *sara dai*- followed by another verb. As no clear comparanda exist due to the lack of proper Hittite administrative jargon, the reason for this proposal must lie in the lack of comparable formulae in the peripheral Akkadian one.

<sup>30</sup> On the spread of 'diplomatic' Akkadian, see especially van Soldt 2011.

Tarhuntašša (CTH 96).<sup>31</sup> The only alleged original treaty in the Akkadian language found so far, namely, the MS tablet CTH 29.A (a treaty between Tahurwaili and Eheya of Kizzuwatna), may not be original: the fragment with the seal of the Hittite king cannot be joined to any of the other fragments of the treaty, and the material characteristics of the tablet make it possible that the seal belongs to a different document.<sup>32</sup> Therefore, most of the tablets we have are archival copies, drafts, or scribal exercises.

A different problem that concerns bilingual treaties specifically is the issue of the original text, not to be confused with the problem of original tablets dealt with above. When multilingual documents are involved, most scholarly efforts are directed toward determining which is the 'original' text—presumably that written in the language of its author or scribe—and which the translation. Linguistic idiosyncrasies or idiomatic phrases may reveal which is the secondary version.

The treaty between Telipinu and Išputahšu of Kizzuwatna (CTH 21) is very fragmentarily attested by one tablet in Akkadian in MH script and three fragments in Hittite (one in OS). The tablet KUB 34.1+, recording an Akkadian treaty between an unknown Hittite king<sup>33</sup> and Paddatiššu of Kizzuwatna (CTH 26), was probably drafted by a scribe who did not belong to the Hittite scribal tradition as shown by the shape of some diagnostic signs<sup>34</sup> and other writing features,<sup>35</sup> although the syntax shows Hittite interferences.<sup>36</sup> The text of the treaty between Tahurwaili and Eheya of Kizzuwatna (CTH 29), attested only in Akkadian on two different tablets (one of them allegedly sealed and therefore original; see above), seems to parallel CTH 26, at least in part, but it is too fragmentary to be fully evaluated.<sup>37</sup>

The treaty with Šunaššura of Kizzuwatna (CTH 41), issued by a Hittite king most commonly identified with Tuthaliya I, is attested by five tablets that preserve the Akkadian version and two that contain the Hittite one. The redactional history of the text seems to have been complex because the Akkadian versions present significant divergences and the Hittite and Akkadian manu-

<sup>31</sup> Cf. Devecchi 2015:53–54.

<sup>32</sup> Cf. Wilhelm 2013:348–349.

<sup>33</sup> Cf. Devecchi 2015:70, including the references.

<sup>34</sup> See G. Wilhelm (ed.), hethiter.net/: CTH 26 (INTR 2014-02-25) and Wilhelmi 2011:114.

<sup>35</sup> Cf., e.g., the inconsistent use of the determinative KI after geographical names or the way URUK*i*-*iz*- / :wa-ta-ni is written in lo. e. 22'-22'a, i.e., split and partly placed on a new line (with a *Glossenkeil* indicating that wa-ta-ni belongs to the word that begins on the preceding line).

<sup>36</sup> Cf. Durham 1976:70.

<sup>37</sup> On the treaties with Kizzuwatna, cf. Del Monte 1981.

scripts do not have passages in common. The final version of the treaty seems to be the one recorded in the MS Akkadian copy KB0 1.5 (CTH 41.1.2.A), whereas the MS Akkadian tablet KBo 28.110+ (CTH 41.1.1) possibly consists of the collection of diplomatic documents exchanged by the two partners before the conclusion of the treaty.<sup>38</sup> Some Hittite influences can be detected in the Akkadian versions,—for example, the occurrence of the endyadic phrase ÉRINMEŠ ANŠE.KUR.RA<sup>HLA</sup> 'infantry (and) horses (= chariotry)' (e.g., KB0 1.5 i 20–21), which denotes the whole army and only emerges in MH (probably starting from the reign of Tuthaliya I) and is later restricted to texts in Hittite language. In contrast, Akkadian texts consistently have  $\acute{ERIN}^{MEŠ}(u) GIŠGIGIR^{MEŠ}$  (infantry (and) chariotry' (cf. Giusfredi, Merlin, and Pisaniello [forthcoming], and see below). Another specifically 'Hittite' phrase is NAM.RA<sup>HI.A</sup> GU<sub>4</sub><sup>HI.A</sup> UDU<sup>HI.A</sup> 'people, cattle, sheep' (KBo 1.5 i 22), with the semantic narrowing of NAM.RA from whatever is taken as booty (Akkadian *šallatu*) to deported people only (cf. Watkins 1979). In all other occurrences in this text, the booty is expressed by the phrase maršit URUKI NAM.RAHI.A 'the property of the city (and) the NAM.RA people', which also has clear parallels in the OH tradition. Compare, for example, <sup>URU</sup>Halpaš NAM.RA<sup>MEŠ</sup> āššu=ššet [<sup>URU</sup>]Hattuši udaš "he brought the NAM.RA people and the goods of Aleppo to Hattuša" in the Edict of Telipinu  $(\S_9)$ .<sup>39</sup> A likely calque found in this treaty is also the use of *etēqu* Gt in the phrase 'transgress the oath' (cf., e.g., *nīš* DINGIR<sup>MEŠ</sup> *ītetiq* in i 25), based on the Hittite -kan šarra-. As remarked by Del Monte (1986a:72) with regard to the Syrian treaties, where the same phenomenon can be found (see below), the Akkadian verb usually occurs without the -ta- infix in similar phrases outside the Hittite world. In our view, however, the choice of a Gt form may not depend on its separative meaning, as suggested by Del Monte, but instead be a matter of diathesis: the Hittite *šarra-* 'transgress (an oath)' is usually (and originally) middle (cf. CHD Š:237-238; EDHIL:727-729), although secondary active forms

<sup>38</sup> Cf. Beckman 1996:13–14, Devecchi 2015:73–75, and the introduction of the online edition by G. Wilhelm (ed.), hethiter.net/: CTH 41.1.1 (INTR 2011-12-20).

According to Watkins (1979:274), the semantic narrowing of NAM.RA<sup>(MEŠ)</sup> also involves this phrase because we would have an opposition between NAM.RA [+ human] and āššu-, the latter probably [- animate], thus only referring to inanimate booty (as in the Anitta text and in the Annals of Hattušili I) rather than [± animate] and including livestock (cf. ŠA URUArziya āššu[=ššet? QADU NAM.RA<sup>MEŠ</sup>] GU4<sup>MEŠ</sup> UDU<sup>MEŠ</sup> in the Deeds of Šuppiluliuma I, KUB 14.22 obv. 9'-10', if the restoration is correct). However, it is theoretically possible that NAM.RA retains in this phrase the original feature [± human], thus including livestock, only later expressed by GU4 UDU. KBo 1.5 may reflect a fluctuating situation between the still predominant OH usage and a less common use that became more prevalent later.

are sometimes found. Therefore, an Akkadian Gt form, with its reflexive and reciprocal meanings,<sup>40</sup> may have appeared to be the best match for the Hittite middle. Other likely examples of calques on Hittite are EGIR *paṭaru* in KBo 1.5 iii 56, 62 (< Hittite *āppa lā*- 'release from an obligation') and *šapal nīš ilī* in KBo 1.5 iii 60, iv 10 (< Hittite *linkiya kattan* 'under oath').<sup>41</sup> Furthermore, Hittite influence may explain the mistaken use of the gen./acc.pl. *awati* in place of nom.pl. *awatū* in KBo 1.5 iv 34, 36 because it may have been determined by the fact that the Hittite *uttar* 'word, fact' was a neuter noun.<sup>42</sup>

The treaty between Šuppiluliuma I and Šattiwaza of Mittani (CTH 51) is preserved in three distinct Akkadian versions (A = KBo 1.1+; B = KBo 1.2; C = KUB  $_{3,1a}(+)$ ) and one Hittite manuscript (KUB  $_{21.18}(+)$ ).<sup>43</sup> From a paleographic and orthographic point of view, the Akkadian manuscripts A and C probably belong to the Hittite scribal tradition. B was surely drafted by a Mittanian scribe and differs somewhat in content from A and B, which argues that it was a Mittanian version of the treaty rather than a copy of the Hittite version written by a Mittanian scribe.<sup>44</sup> Some phenomena of interference depending on Hittite can be detected, at least in the versions drafted by Hittite scribes. For example, in KBo 1.1+ obv. 15 we find a relative clause with resumption of the antecedent in the main clause by a demonstrative and the noun repeated, which is a typical Hittite structure (cf. GrHL:424) but uncommon in Akkadian (*anīna* ÉRIN<sup>MEŠ</sup> ša ina ŠU-ya išhițu ÉRIN<sup>MEŠ</sup> annû ina KUR <sup>URU</sup>Išuwa īterub "then, the people who escaped from my hand, those people have entered the land of Išuwa").

CTH 52 is complementary to CTH 51 since it seems to represent an edition of the treaty with Šuppiluliuma I issued by Šattiwaza, although the normative section is absent. The text is preserved both in Akkadian and Hittite, with the Akkadian manuscript apparently being a copy by a Hittite scribe of the original document issued by the Mittanian chancellery. However, although it is presented as a Mittanian edition, Hittite linguistic influence sometimes emerges, especially in the phraseology, alongside typical Mittani Akkadian features. For example, the sentence found in KB0 1.3+ obv. 41, *u* DINGIR<sup>MEŠ</sup> *ša* LUGAL GAL LUGAL KUR [<sup>URU</sup>H]*atti ittalku ana pa*[*nini*] "and the gods of

<sup>40</sup> Cf. Huehnergard 2000:393.

<sup>41</sup> Cf. Wilhelmi 2011:129.

<sup>42</sup> See Wilhelmi 2011:124, where also other examples of the same phenomenon are listed, for which, however, an explanation in terms of Hittite interference is less straightforward.

<sup>43</sup> The Akkadian fragment KBo 68.190, currently listed in the CTH as a separate tablet, may belong to C.

<sup>44</sup> Cf. Beckman 1993 and especially Devecchi 2018 for a more detailed analysis.

the Great King, King of [H]atti, walked bef[ore us]" is a patent calque on the common Hittite phrase *peran huwai*- + dat. 'run before someone', referring to assistance in battle.<sup>45</sup> In contrast, the phrase *ana mārutti epēšu* 'to adopt as son' (obv. 24) is largely attested at Nuzi, as is the term *tertennuttu* 'status of hereditary prince' (obv. 29) with *e*-vocalism (vs. *tartennūtu* in the Hittite tradition).<sup>46</sup>

Five treaties between Hittites and Syrian partners form a structurally consistent group: those between Šuppiluliuma I and Aziru of Amurru (CTH 49; Akkadian and Hittite), Šuppiluliuma I and Tette of Nuhašše (CTH 53; only Akkadian), Muršili II and Tuppi-Teššub of Amurru (CTH 62; Akkadian and Hittite), Muršili II and Niqmepa of Ugarit (CTH 66; only Akkadian), and Hattušili III and Bentešina of Amurru (CTH 92; only Akkadian). Del Monte (1980, 1986a) has shown that the Akkadian versions of these treaties present some unusual features as well as calques that typically point to an original Hittite version or Hittite as the language in which the text was conceived, regardless of whether a version in Hittite versions that seem to be based on Akkadian versions (perhaps back-translations?) as well as manuscripts that seem to involve languages other than Akkadian and Hittite.

An obvious phenomenon of interference in these texts is that almost every sentence begins with the Akkadian conjunction u, calquing the Hittite nu. However, less trivial phenomena can be found. In the treaty between Muršili II and Niqmepa (CTH 66), found at Ugarit and preserved only in Akkadian, we find a construction with a double possessive pronoun, where an independent possessive pronoun precedes the head noun, which is followed by a clitic possessive: RS 17.338+ obv. 2 (restored after RS 21.53 obv. 1') *attuka* ša <sup>m</sup>Niqmepa  $a[na \ S(ES^{MES}=ka)]$  "to your brothers, Niqmepa" (lit. "of you, of Niqmepa, to your brothers"). As shown by Del Monte (1986a:44–45), constructions with resumptive clitic pronouns are rarely attested in Akkadian texts issued outside the Hittite world.<sup>47</sup> Because such forms correspond to the OH split genitive,<sup>48</sup> they seem to be calques on this typical Hittite structure. Furthermore, in these treaties the use of *etēqu* Gt is found in the phrase 'transgress the oath,' probably calquing the Hittite *-kan šarra-* (see above).

<sup>45</sup> Cf. Del Monte 1986b:62; Devecchi 2018:77.

<sup>46</sup> See Devecchi 2018:78 for other possible examples of Hurrian influence.

<sup>47</sup> Cf., e.g., the structurally identical *tuel ŠA* <sup>m</sup>*Kupanta*-<sup>d</sup>LAMMA DUMU<sup>MEŠ</sup>=*KA* "your children, Kupanta-Kurunta" in the Hittite treaty between Muršili II and Kupanta-Kurunta of Mira and Kuwaliya (KBo 5.13 ii 11'; CTH 68.C).

<sup>48</sup> See GrHL:251 (cf., e.g., *ammel tuēggaš=miēš* "my members" in VBoT 58 i 24).

Another clear phenomenon of interference can be found in the treaty between Šuppiluliuma I and Tette of Nuhašše (CTH 53): in KBo 1.4+ i 9, the Hittite army is referred to with the endyadic phrase ÉRIN<sup>MEŠ</sup> ANŠE.KUR.RA<sup>HI.A</sup> 'infantry (and) chariotry' (lit. 'infantry and horses'). As shown in Giusfredi, Merlin, and Pisaniello (forthcoming), such a sumerographic phrase in which the chariotry is metonymically expressed by horses is specifically Hittite and generally only occurs in texts in the Hittite language. The corresponding phrase consistently found in Akkadian texts from Boğazköy is ÉRIN<sup>MEŠ</sup> (*u*) <sup>GIŠ</sup>GIGIR<sup>MEŠ</sup> 'infantry (and) chariotry',<sup>49</sup> which is also found in all of the other passages of the treaty with Tette. Therefore, a single occurrence of the 'Hittite' phrase in the Akkadian version of this treaty can be explained as a scribal mistake deriving from either a Hittite version used as a model (although such a model is yet to be found) or the fact that the text was originally conceived in Hittite, regardless of whether a Hittite version existed.

Other features of these treaties seem to have resulted from the intervention of other languages or different scribal traditions. For example, in the incipit of the treaty between Muršili II and Niqmepa of Ugarit, the Hittite king is referred to with the title <sup>d</sup>UTU (RS 17.338+ obv. 1) instead of the expected <sup>d</sup>UTU*ši*. According to Del Monte (1986a:38–39), this could be explained as the direct intervention of an Ugaritic scribe because the corresponding Ugaritic form *špš* is usually employed without the possessive clitic pronoun.

Although the interference phenomena found in these texts mostly point to Akkadian versions depending on Hittite, KBo 10.12+, currently the only Hittite version of the treaty between Šuppiluliuma I and Aziru of Amurru (CTH 49.11), probably derived from an earlier Akkadian text that is preserved on six tablets. Several idiosyncrasies show that the Hittite text should be regarded as a (back-)translation of an Akkadian version: 1) literal translations of Akkadian phrases resulting in uncommon Hittite expressions, such as Akkadian *ištu şābē narkabāti namāšu* 'mobilize with infantry (and) chariotry', translated with the two nouns in the instrumental case and a middle form of the verb *ninink*-(cf., e.g., [*IŠTU* ÉRIN<sup>M</sup>]<sup>EŠ</sup> ANŠE.KUR.RA<sup>MEŠ</sup> *ŪL neniktari* in KBo 10.12+ ii 30'), whereas a transitive construction with ÉRIN<sup>MEŠ</sup> ANŠE.KUR.RA<sup>MEŠ</sup> as the direct object of the active verb *ninink*- would typically be used in Hittite (cf. Del Monte 1986a:65–66);<sup>50</sup> 2) some mistaken translations; see particularly the thorough

<sup>49</sup> Incidentally, such a complementary distribution makes it clear that ANŠE.KUR.RA<sup>MEŠ/HIA</sup> in the 'Hittite' phrase meant 'chariotry' rather than the more generic 'horse troops' (*pace* Beal 1992:6 with fn. 24).

<sup>50</sup> See also išhiulaš lenkiyaš in iii 24' translating Akkadian ša riksi u ša māmīti, while in Hit-

discussion by Del Monte (1980:105–107) on the use of the Hittite *walh*- (vs. expected *zahhiye*-) to translate the Akkadian *mithuşu* in KBo 10.12+ ii 31'; and 3) the use of 'Akkadian' rather than 'Hittite' language-specific writings—for example, ÉRIN<sup>MEŠ</sup> GIŠGIGIR<sup>MEŠ</sup> in KBo 10.12+ ii 26' rather than the typical 'Hittite' ÉRIN<sup>MEŠ</sup> ANŠE.KUR.RA<sup>MEŠ</sup> that is used elsewhere in the text (see above for the opposite phenomenon in the Akkadian treaty with Tette).<sup>51</sup> Furthermore, the manuscript does not record the full text of the treaty because the divine witness list, curses, and benedictions seem to have been intentionally omitted by the scribe (cf. Devecchi 2015:202).

Besides treaties, diplomatic correspondence was also exchanged with non-Anatolian states in Akkadian. Several Akkadian letters have been found in the Hittite archives, including those sent by foreign kings to the kings of Hatti and copies of those sent by the Hittite kings. Some letters are written in Hittite: they should probably be regarded as either archival copies or drafts after which the Akkadian versions were prepared.<sup>52</sup> The language of the letters is the same diplomatic Akkadian used for the treaties and, since they are products of the Hittite chancellery, they present interference phenomena similar to those described above.

The correspondence with the Assyrian kings is limited to two letters in Akkadian sent by the Hittites and several letters—drafts or archival copies in Hittite. The two Akkadian letters were probably drafted by Hittite scribes who were capable of using a different ductus from that employed in the Hittite text; this is suggested by the occurrence of typically Hittite signs alongside non-Hittite sign shapes (Mittanian or Assyro-Mittanian).<sup>53</sup> These two letters in Akkadian feature some Assyrianisms, but also interference phenomena indicating that they were either conceived in Hittite or translated from Hittite drafts. In the Akkadian letter KB0 1.14 obv. 7', the use of the preposition *ultu* 

51 The 'Akkadian' phrase also occurs in a Hittite treaty(?) fragment from Oylum Höyük (Oy. 12–401 obv. 11; cf. Ünal 2015) that is too fragmentary to be fully evaluated.

tite context *išhiul-* and *lingai-* usually occur independently from each other (Del Monte 1986a:69).

<sup>52</sup> Some hints to determine whether they are drafts or archival copies may come from the greeting formulas that usually open the letters and are sometimes absent in these texts. Letters without a greeting formula can be regarded as preparatory drafts, while those including a greeting formula are probably copies or translations of the letters that were sent. The same may apply to letters in Akkadian: they may be copies of the letters sent by the Hittite king, preparatory drafts, or letters that were ready but never sent (see the discussion in Mora and Giorgieri 2004:43–45).

<sup>53</sup> Cf. Mora and Giorgieri 2004:37–38. On the problems connected with the label Assyro-Mittanian, see however the important observations by Weeden (2012a).

in [*ultu ammak*]*a* ... *ultu annaka*—if correctly restored—is unexpected. Mora and Giorgieri (2004:69) suggest that it is a calque on Hittite *kēz* ... *kēzziya* or *kēz* ... *apēz* 'on the one hand ... on the other hand'. Even more striking is the case of KUB 3.125, in which we read *ma-a-an šum-ma* LU[GAL ...] (rev. 11), where *mān* probably represents the Hittite hypothetical conjunction, mistakenly written by the scribe before the corresponding Akkadian conjunction *šumma* (cf. Mora and Giorgieri 2004:149).

# 4 The Akkadian of the Cultural Tradition

Unlike the Akkadian documents dealt with in the preceding sections, which were compositions produced locally by the Hittites in Akkadian (historical narratives, edicts, treaties, land grants, etc.), the Akkadian texts belonging to the cultural tradition mostly include original foreign Akkadian compositions that were written elsewhere and imported into the Hittite capital city or were composed elsewhere but copied onto tablets locally by Hittite scribes and sometimes provided with a Hittite translation. This heterogeneous group includes texts of different genres, reflecting both the stages of the scribal curriculum and the technical knowledge coming from Mesopotamia. We have tentatively defined these two subgroups as follows:

- texts belonging to the scribal curriculum, including lexical lists, hymns, mythological narratives, etc., that were probably employed chiefly for mastering the cuneiform script and the Sumerian and Akkadian languages.<sup>54</sup> They are generally provided with translations in Hittite, and some were used as models for the composition of Hittite original texts;
- 2) magic and medical texts, including rituals, incantations, medical treatises, etc., perhaps used primarily to master technical disciplines other than the scribal art and thus only sporadically provided with Hittite translations.

Such a distinction is not clear-cut. At least some of the compositions included in the first subgroup could have been used outside the scribal schools. Similarly, ritual and medical texts could have been employed for mastering cuneiform and Mesopotamian languages, and surely some were used as models for drafting original compositions in Hittite.

The lexical lists that were found in the Hittite archives (CTH 299–309) are monolingual (Sumerian), bilingual (Sumerian-Akkadian), or trilingual (Sume-

<sup>54</sup> Cf., e.g., Beckman 1983b.

rian-Akkadian-Hittite) tablets.<sup>55</sup> Most date to the Empire period, although some may be older or have been copied from earlier manuscripts.<sup>56</sup> The majority are copies of standard Mesopotamian lists. The fragments identified so far belong to the following lists: S<sup>a</sup>, Diri, Erimhuš, S<sup>o</sup>, Ura, Izi, Kagal, Sag, Lú = *ša*, Lú.ázlag = *ašlāku*, Ea, and perhaps also An.<sup>57</sup> Besides canonical vocabularies, the Hittite archives also contained lexical lists that do not have a direct Mesopotamian model, perhaps being local productions.<sup>58</sup> Some of the lists belonging to the Mesopotamian scribal curriculum, especially the most elementary ones, seem to be almost entirely missing—for example, the so-called tu-ta-ti lists, of which an example only occurs as a filler in the Akkadian column of an Erimhuš manuscript (KBo 26.20 ii 39–41).<sup>59</sup> Possibly only the advanced lexical lists belonging to the second stage of scribal education were kept as archival materials to be reused, and the more elementary ones were discarded.<sup>60</sup>

The issue of how and when these lexical materials reached Hattuša is very complex. A thorough analysis of the manuscripts found so far suggests multiple directions of transmission.<sup>61</sup> Some orthographic features and the possible sporadic inclusion of West Semitic lexical material and peripheral Akkadian words point to a Syrian path for some of the lists (cf. Weeden 2011:103, 131). An Assyrian stage can be possibly assumed for the Ura 20 fragment KUB 37.145(+) (Weeden 2011:129).

As remarked by Scheucher (2012:228), "Akkadian and Syllabic-Sumerian columns unilaterally refer to the Sumerian column, and the Hittite column unilaterally refers to the Akkadian column" in lexical lists from Boğazköy. This is shown by several mistakes in Hittite translations that reflect misunderstandings of the respective Akkadian entries<sup>62</sup> and by the fact that Hittite translations vary when different Akkadian words correspond to the same, repeated

<sup>55</sup> Two lists, KBo 26.56 and KBo 26.5+, are on prisms.

<sup>56</sup> The oldest manuscript is the late MH Ura fragment Or. 95/3, found at Ortaköy/Šapinuwa (cf. Süel and Soysal 2003).

<sup>57</sup> For a presentation of the lexical lists, see the doctoral dissertation by Scheucher (2012).

<sup>58</sup> Cf., e.g., KUB 37.122, currently under CTH 815 (Giusfredi and Pisaniello 2019a).

<sup>59</sup> Cf. Weeden 2011:91–92.

<sup>60</sup> Cf. Cohen 2013:68.

<sup>61</sup> Cf. Weeden 2011:91–131 and Scheucher 2012.

<sup>62</sup> Cf., e.g., KBo 1.31 obv. n', where the Akkadian entry qa-a- $t\dot{u}$  'finish' is translated by ŠU-[aš́] 'hand' in Hittite (= Akkadian  $q\bar{a}tu$ ). However, as noted by Veldhuis (2014:275), these mistakes should not be simplistically regarded as signs of scribal ignorance: "rather than attribute those wholesale to incompetence, we may well look for signs that indicate that the Hattuša scribes tried their best at decipherment and made an intellectual investment that went beyond mere copying."

Sumerian entry, but this does not happen when different Sumerian entries are matched by a single Akkadian translation (cf. Scheucher 2012:275).<sup>63</sup>

Lexical lists represented the first stages of the scribal curriculum. The students then continued by copying more elaborate and difficult texts such as proverb collections, wisdom literature, epics, mythological compositions, and omens. This advanced stage is witnessed in the archives of Hattuša by compositions in Akkadian in different textual genres. Most are provided with Hittite translations. The Akkadian fragmentary MS five-sided prism KBo 19.98 and perhaps also the four-sided prism KBo 19.99, both listed under CTH 819, preserve the MB recension of an epic of Narām-Sîn, the so-called Cuthean Legend. We also have several tablets of an epic of Narām-Sîn in Asia Minor in Hittite (CTH 311), but their relationships with these Akkadian fragments remain unclear. The scribe of KBo 19.99, Hanikuili, is indicated as the son of Anušar-ilāni (probably a Babylonian scribe residing at Hattuša) who is qualified as BAL.BI, which could be an abbreviation for EME.BAL.BI 'its translator', so a direct link between this Akkadian prism and one of the Hittite compositions mentioning Narām-Sîn is possible.<sup>64</sup> The text is also attested by two OB manuscripts from Sippar and a late recension preserved on six NA copies from Nineveh, one NA tablet from Sultantepe, and one NB tablet from Kiš.65

In the archives of Boğazköy, the composition known as *šar tamhāri* 'King of Battle' (CTH 310), which describes the military campaign of Sargon of Akkad in Anatolia against the city of Purušhanda, is preserved on seven fragmentary tablets in Hittite dating to the imperial period. The text represents a free adaptation of an Akkadian composition attested elsewhere by four manuscripts: a tablet from Amarna written in a western peripheral dialect of Akkadian (EA 359), a fragment from Aššur dating to the NA period that preserves the same recension as the Amarna tablet (VAT 10290), a fragment from Nineveh with a different recension (K. 13228), and another small fragment from Amarna that cannot be fully evaluated (EA 375).<sup>66</sup> The material characteristics of the Amarna tablet, as well as orthography and some linguistic features, suggest that it belongs to the Hittite scribal tradition and was possibly written at Boğazköy in the Middle Hittite period (cf. Westenholz 1997:105–107).

The bilingual Akkadian-Hittite tablet KUB 4.97 (CTH 315.C) contains the OB composition known as 'The Message of Lu-diĝira to his Mother,' while part

<sup>63</sup> However, sporadic examples exist in which the Hittite translation seems to refer to the Sumerian rather than the Akkadian entry (see Scheucher 2012:276).

<sup>64</sup> Cf. Beckman 1983b:103–104 with fn. 37.

<sup>65</sup> Cf. Westenholz 1997:263-368.

<sup>66</sup> Cf. Westenholz 1997:102–139. See Rieken 2001 for the Hittite version.

of the Sumerian version is recorded on a different fragment (KUB 4.2).<sup>67</sup> In this composition, Lu-diĝira asks a royal courier to bring a letter to his mother, Šāt-Ištar, who is at Nippur, and provides five 'signs' (i.e., a poetic description) that will allow the courtier to recognize her. The same composition is attested on the trilingual Sumerian-Akkadian-Hittite tablet RS 25.421, found at Ugarit. The latter tablet was drafted by a Hittite scribe and imported from Boğazköy.<sup>68</sup>

The wisdom literature includes two bilingual Akkadian-Hittite texts listed under CTH 316—the so-called Instructions of Šūpê-amēli (or *Šimâ Milka* 'hear the advice')<sup>69</sup> and the proverb collection KBo 12.128 (a four-sided prism), of which the Akkadian text is almost completely lost<sup>70</sup>—and the Akkadian prism KUB 4.40 that also contains a collection of proverbs (CTH 814).<sup>71</sup> *Šimâ Milka* consists of proverbs concerning several topics in the narrative framework of a dialogue between a father (Šūpê-amēli) and his son. The composition is also attested by manuscripts from Ugarit and Emar. Although no tablet containing it has been found so far in Mesopotamia, it is mentioned in an OB catalog of literary texts (AUAM 73.2402 obv. 15), which proves the existence of an earlier Mesopotamian forerunner.

The two fragmentary proverb collections from Hattuša are probably copies of lost Babylonian compilations. Some of the individual proverbs that they contain are known from other sources. For example, the proverb in KBo 12.128:5', preserved in an incomplete Hittite translation (*hantezzin pahhuenanza karapi* "the fire devours the first one" [the rest of the paragraph was left blank]), is attested in Sumerian and Akkadian in earlier collections.<sup>72</sup>

Turning to the Akkadian hymns and prayers, they were probably used by Hittite scribes as literary models for drafting Hittite original compositions. Whether they were also part of the scribal curriculum is controversial. However, there are hints that some of these texts might have been used in scribal schools as texts for the study of cuneiform, Sumerian, and Akkadian (see, e.g., the discussion on KBo 1.12 below).

The hymns and prayers include Sumerian-Akkadian texts provided with Hittite translations and texts for which Hittite translations have not been found. The first group includes the OB hymn to Ištar (CTH 312.1), with a Hittite transla-

<sup>67</sup> Cf. Civil 1964 and Klinger 2010:324-328.

<sup>68</sup> Cf. Nougayrol 1968:310 and Viano 2015:382 fn. 8.

<sup>69</sup> KBo 12.70+, cf. Cohen 2013:81–128.

<sup>70</sup> Cf. Cohen 2013:201–206.

<sup>71</sup> Cf. Cohen 2013:199–201.

<sup>72</sup> Cf. Cohen 2013:204–205.

tion on a separate tablet;<sup>73</sup> the trilingual hymn to Iškur-Adad (CTH 314), which likely dates to the Kassite period,<sup>74</sup> and probably the OB(?)/MB(?) hymn to Šamaš KBo 1.12 (CTH 792.1; with a partial duplicate found at Aššur, KAR 1.19), although the Hittite translation in the right-hand columns is almost completely lost.<sup>75</sup> The latter tablet includes a section dealing with the treatment of slaves (KBo 1.12 rev. 7'–16') that is seemingly unrelated to the hymn and possibly represents an excerpt from an otherwise unknown wisdom composition. The composite nature of the tablet could perhaps suggest that it was a scribal exercise (cf. Ebeling 1954:210). Also note that KUB 37.36+, the *Sammeltafel* preserving the Akkadian version of the hymn to Ištar (CTH 312.I), was perhaps a school exercise because it contains several mistakes that involve the division of the verses. The Hittite version written on the LNS tablet KUB 31.41 (CTH 312.II) seems to have been produced using a different and better copy, but the scribe was unable to translate some parts of the Akkadian text.<sup>76</sup>

The texts that do not have a Hittite translation are the Akkadian hymn to Šamaš KBo 9.44 (CTH 792.2), a Sumerian-Akkadian invocation to Šamaš (CTH 793), the Sumerian-Akkadian hymn and prayer CTH 794 (in an Assyro-Mittanian ductus), and other fragments that are listed under CTH 795. An OB hymn to Adad is preserved in Hittite translation only on the MS tablet KBo 3.21 (CTH 313), which was probably drafted by a Babylonian scribe living in Hattuša (cf. DUB.SAR *pabilili* in iv 12'); its original Babylonian model is unknown.<sup>77</sup> The MH hymn and prayer to the Sun deity that is commonly known as the Prayer of a mortal (CTH 372), as well as the parallel Prayer of Kantuzzili (CTH 373) and Prayer of a king (CTH 374), also had Akkadian forerunners (perhaps OB), although they are original Hittite reworkings.<sup>78</sup>

As for mythological narratives, we found some Akkadian fragments of the Epic of Gilgameš (CTH 341.1) in the Hittite archives, as well as Hittite and Hurrian versions. The Akkadian fragments belong to three different recensions: one distributed on four MS tablets found in Temple XVI and not written in the typical Boğazköy Akkadian (CTH 341.1.1A–D), the second dated to the Empire period and written in the local peripheral Akkadian variant (CTH 341.1.2), and the third represented by the very fragmentary KUB 37.128 (CTH 341.1.3).<sup>79</sup>

<sup>73</sup> Cf. Reiner and Güterbock 1967. This composition also has a later NB version that includes some additions.

<sup>74</sup> Cf. Laroche 1964 and Cooper 1971:8–9.

<sup>75</sup> Cf. Ebeling 1954.

<sup>76</sup> See Reiner and Güterbock 1967:256, 265.

<sup>77</sup> Cf. Archi 1983.

<sup>78</sup> See Schwemer 2015 for a detailed analysis of this group of texts.

<sup>79</sup> Cf. George 2003:306–326. See also Beckman 2003:42.

By comparing the text preserved in the Boğazköy archives with all of the other sources of the Epic of Gilgameš, Beckman (2003, 2019b) showed that the Hittite recension seems to be closer in content to the SB Twelve Tablet Edition ascribed to Sin-leqi-unnini rather than the OB texts. Therefore, it probably belongs to the stage of re-elaboration of the Kassite period that is poorly known from Mesopotamia,<sup>80</sup> when the epic was revised before developing into the canonical version of Sin-leqi-unnini. A different problem concerns the relationship between the Hittite and the Hurrian versions of the poem. Judging from the seven very fragmentary Hurrian manuscripts belonging to this composition, the Hurrian religious world rather than a straightforward translation.<sup>81</sup> Some hints in the Hittite version and similarities with passages from other Hurrian poems argue that the Hittite text was translated from Hurrian, although a direct match between the preserved Hittite and Hurrian fragments cannot be established.<sup>82</sup>

Given the total absence of references to the figure of Gilgameš in the Hittite world outside of the tablets that describe his deeds, it is probable that the Akkadian text was only or primarily used in the Hittite capital city for training scribes.<sup>83</sup> Nevertheless, comparison of the Hittite Gilgameš manuscripts with OB and MB sources reveals adaptations in the narrative. These were probably made to accommodate the Hittite mindset<sup>84</sup> and allow the text to be recited at the royal court. However, some of the changes could have stemmed from Hurrian intermediation since, as mentioned above, the Hurrian recension was probably the direct model for the Hittite Gilgameš.

A small fragment of the Akkadian Atramhasis (KBo 36.26, CTH 347.1), probably written by a Hittite scribe based on the ductus,<sup>85</sup> was also found at Boğazköy along with some versions in Hittite and two fragments of a still unidentified Akkadian mythological narrative (CTH 796).<sup>86</sup> One of the Atramhasis fragments in Hittite, KUB 36.74, which preserves a few lines of the third column,

<sup>80</sup> Only two small MB Gilgameš manuscripts have been found so far in Mesopotamia (at Ur and Nippur), while other MB tablets come from Megiddo, Emar, and Ugarit.

<sup>81</sup> Cf. Beckman 2019b:23.

<sup>82</sup> Cf. Archi 2007:187–188.

<sup>83</sup> Cf. Beckman 2003:37–38 and Beckman 2019b:1.

<sup>84</sup> Cf. Beckman 2019:5-6.

<sup>85</sup> Cf. Haas 2006:278.

<sup>86</sup> Also note that an Akkadian version of the Tale of the hunter Kešše and his wife (CTH 361.111) has been found at Amarna, while in Boğazköy archives there are only Hittite and Hurrian versions.

might have belonged to a bilingual tablet because the colophon seems to run along the entire length of columns iii and iv.<sup>87</sup> Another fragment, KUB 8.63+, probably represents the Hittite translation of a Hurrian version.<sup>88</sup>

Finally, we provisionally include omen series and oracle texts (CTH 531–560) in the subgroup of the texts belonging to the scribal curriculum,<sup>89</sup> although they cannot be regarded as an entirely homogeneous group because the series differ in how and when they reached the Hittite capital. There may also have been case-by-case differences in why they were copied. Some (almost certainly the liver models, but perhaps also some omen series) might have been of greater interest for the technical knowledge they contained than for their teaching value in training scribes.<sup>90</sup>

Omen series were mostly recorded on monolingual tablets (sometimes with Hittite translations on separate tablets),<sup>91</sup> although bilingual tablets are sporadically found.<sup>92</sup> Some collections are now only preserved in Hittite translation, but the absence of their Akkadian models is probably due to chance. Many series probably reached the Hittite capital directly from Mesopotamia, in some cases by the Old and Middle Hittite period, especially the birth omens, liver models, and *tirānu* oracles. Others could have been transmitted through Hurrian intermediation (e.g., the MH liver oracle KBo 16.97+).93 The picture is further complicated by the difficulty of identifying and assigning to standard Mesopotamian omen series those tablets found at Boğazköy whose fragmentary condition allows multiple solutions. As remarked by Rutz (2012:174), "Identifying the transmission of a given textual tradition relies on being able to observe the distinctiveness and the stability of a text over time." In many cases, individual entries in the series from Hattuša find their exact parallels in series from other places and times, but the vertical dimension, namely, the sequence of entries, seems to be much more elusive.94

<sup>87</sup> Cf. Beckman 2019b:67.

<sup>88</sup> Cf. Archi 2007:186.

<sup>89</sup> For a comprehensive edition, cf. Riemschneider 2004.

<sup>90</sup> Cf. Koch Westenholz 1993:237–240. Also consider that celestial omens were stored in Hittite archives in multiple copies, while non-celestial ones were usually kept in single copies (van den Hout 2002:872).

<sup>91</sup> CTH 532.I, 533.I, 534.I, 537.I (some of them include Hittite glosses in the Akkadian text), 538.I, 540.I, 541, 542, 543.I, 545.I, 546, 547.I, 548, 549.a, 550, 551, 553, 554, 555, 556, 560.I.

<sup>92</sup> Cf. CTH 533, 547, 549.b, 552.

<sup>93</sup> Cf. Beckman 1983b:101–103. Note however that different opinions exist about the path through which the omen series reached the Hittite capital (according to Kammenhuber 1976, for example, Hurrian intermediation is always implied).

<sup>94</sup> Cf. Rutz 2012:176.

In the *Catalogue of Hittite Texts*, the first omen series—the largest group of tablets—are represented by astronomical omens whose Hittite translations can be dated linguistically to the Empire period, later than the Hittite translations of the liver omens (cf. Riemschneider 2004:xli).

CTH 531 only contains a small fragment of the Hittite translation of the introduction to the canonical series Enūma Anu Enlil (KUB 34.12). CTH 532 records omens related to the lunar eclipse: only two Akkadian fragments are preserved, but there are several Hittite translations. The Akkadian tablet KUB 4.64+ (CTH 532.1.1) seems to be an OB original.<sup>95</sup>

The lunar omens are listed under CTH 533. Among these texts, KUB 29.11+ (CTH 533.3.B; NS) is an Akkadian-Hittite bilingual tablet (with a parallel text from Emar, Msk 731041). It was drafted by Pikku, son of Tatta, according to the colophon. The Akkadian text includes some mistakes in word division. For example, *aš-na-an mu-ri-šu* occurs instead of the correct *ina*(AŠ) *na-an-mu-ri-šu* lit. "(if the moon) on its being sighted" (i 14, 16, 18). This is rightly paraphrased in Hittite by *takku* <sup>d</sup>30 *autti* 'if you see the moon', probably showing that the scribe of the tablet, although not able to understand *ina nanmurišu*, was copying from a model drafted by a translator who worked from a correct Akkadian text and understood it.<sup>96</sup>

CTH 534 includes sun omens. The Akkadian manuscript KUB 4.63 (CTH 534.I.I.A) probably is an imported OB tablet<sup>97</sup> as shown by the ductus (different from the ductus of Boğazköy) and the single column divider. The text was then copied several times at Hattuša.<sup>98</sup> Hittite translations also exist, some of them displaying a MS ductus. The star omens cataloged under CTH 535 are only preserved in Hittite translation, although Akkadian models probably existed.

The only assured Akkadian fragment of the terrestrial omen series *šumma*  $\bar{a}lu$  found at Boğazköy is written on the reverse of KBo 36.47, whose obverse is occupied by a recension of the *šumma immeru* (see below). However, some Hittite adaptations are attested (CTH 536). A second Akkadian fragment of *šumma*  $\bar{a}lu$  may be represented by the reverse of KUB 4.53 (cf. Rutz 2012), currently listed under CTH 537 (medical omens).

Medical omens (CTH 537, for which the closest parallel is provided by the later canonical SA.GIG series) were used to interpret medical signs. Most come from Büyükkale and were drafted by scribes belonging to the Boğazköy

<sup>95</sup> Cf. Koch Westenholz 1993:235.

<sup>96</sup> Cf. Güterbock 1997b:168.

<sup>97</sup> Koch Westenholz (1993:235) tentatively ventilates the possibility that this text (and perhaps others) were carried from Babylon to Hattuša by Muršili I.

<sup>98</sup> Cf. Riemschneider 2004:xxxii, 46; Fincke 2009a.

scribal tradition of the Empire period (or perhaps even by a single scribe). Only four tablets were written by Mittanian scribes; one of the latter, KUB 4.53 (CTH 537.1.15), whose inclusion in this group of omens remains questionable, was written by a scribe with a Hurrian name, Agi-Teššub and seems to be a Schülertafel, meaning that it was probably drafted locally rather than imported.<sup>99</sup> The language of the texts is MB with Assyrian influence, as in the kingdom of Mittani and northern Syria, which suggests a transmission from Babylonia to Hattuša through a Syro-Mittanian path. Only two small fragments of medical omens in Hittite are known so far, KBo 13.32 and KBo 13.33 (cf. Burde 1974:48), although Hittite-Luwian glosses sporadically occur in Akkadian manuscripts—for example, *:taršiyai* (KUB 37.193+ obv. 2), *:tarpalli*[š] (KUB 37.193+ obv. 5), :paptartanzi dankuwaeš (KUB 37.193+ rev. 13'), :GIM-an GIG-anza arha dalāi (KUB 37.190 obv. 4'), and :irmananza (KUB 37.190 obv. 6'). As discussed in Pisaniello and Giusfredi (2021), such glosses rarely translate the Akkadian entries in which they occur. Instead, they add further symptoms, possibly based on different entries of the Akkadian text. Given the existence of fragments of medical omens in Hittite, Akkadian manuscripts that include interpolations by the Anatolian scribes in Hittite and Luwian could be regarded as intermediate materials that preceded the production of a complete version in Hittite.

CTH 538–540 contains *šumma izbu* omens. The Akkadian manuscripts belonging to this group derive from Babylonian models and show MB features.<sup>100</sup> Their Hittite adaptations, although surely based on the same models, display the OH ductus. Moreover, many include linguistically archaic features that point to an earlier transmission, maybe via Hurrian, given the existence of a bilingual Akkadian-Hurrian fragment.<sup>101</sup> The striking similarities between the

<sup>99</sup> Thus Wilhelm 1994:6–9. More recently, Rutz (2012) proposed that KUB 4.53 was a Sammeltafel containing a hymn or prayer to Šamaš on the obverse and, on the reverse, the omen series šumma nūru ša rēš marşi, later incorporated in the šumma ālu series but possibly already included in sakikkû.

<sup>100</sup> Cf. Riemschneider 1970:3–4. Only two OB manuscripts of this omen series exist, YOS 10, 56 and CUSAS 18, 12, which are orthographically different from those found at Boğazköy.

KUB 29.12. The Akkadian text in the right column does not seem to match the Hurrian omens in the left column so that it cannot regarded as properly bilingual unless we imagine that the Hurrian column referred to a missing Akkadian column on the left and the Akkadian column had a corresponding Hurrian column on its right (cf. KUB 29:v, with fn. 1). See also Cohen 2007 and Cohen 2017:16. Also note that textual correspondences between Akkadian *šumma izbu* tablets and Hittite ones can only be suggested in a single case (KUB 34.18 ii 9–11, matching KUB 4.67 ii 2'–7'; cf. Riemschneider 1970:70–71) and no bilingual tablets have been found (KUB 37.184 contains *šumma izbu* omens on the

Akkadian *šumma izbu* omens found at Boğazköy and the standard version found in Assurbanipal's library at Nineveh suggest that the Boğazköy recensions belong to the MB period during which the texts were being systematized into what would be the standard versions of the first millennium.

The earthquake omens listed under CTH 541, which were part of the *iqqur īpuš* series,<sup>102</sup> only include three Akkadian fragments: KUB 37.163 and KUB 37.164, which may have belonged to the same tablet, and KBo 36.36, which is a later direct copy of KUB 37.163 (cf. Fincke 2010b). A Hittite version is preserved on the obverse of KUB 8.28 (CTH 535.4; dupl. KBo 47.62), which contains star omens on the reverse. Characteristic of the Hittite translations of these omens is the occurrence of the deity Ninga, elsewhere unattested in the Hittite corpus. This deity was likely created ad hoc to match the Akkadian *figura etymologica rību īrub* 'an earthquake quakes' (= the Hittite <sup>d</sup>Ningaš ninikzi).<sup>103</sup>

KUB 37.198(+) is the only manuscript found at Boğazköy containing oil omens (CTH 542) and the only omen compendium of this type found outside of Babylonia.<sup>104</sup> All of the other oil omens date from the OB period. The Boğazköy tablet shows MA script, with sporadic OB monumental signs, perhaps taken from the copy that served as a model;<sup>105</sup> no peripheral spellings are found. Therefore, it was probably imported at Hattuša during the reign of Šuppiluliuma I or was drafted locally by a foreign scribe. Since it is a single copy and no Hittite translations have been found, we may provisionally assume that it was probably not used as a scribal didactic tool.

Physiognomic omens are listed under CTH 543, which includes three Akkadian fragments and two Hittite versions. The only animal omens (CTH 544) are NS Hittite versions from Bk. A and KBo 13.29, the latter being a MS collection of different omens from the House on the Slope. The birth omens listed under CTH 545 may belong to the omen series *iqqur īpuš*. They include one Akkadian fragment and two Hittite tablets: KBo 25.2+ is in OS and KUB 8.35 in NS. The latter fragment was probably drafted by a non-Hittite scribe and contains only

reverse and an unrelated Old Hittite composition on the obverse; KBo 36.46+ has Akkadian omens on the obverse and a Hittite text on the reverse). The Hurrian fragment KBo 27.215 (CTH 774), containing *šumma izbu* omens, has been proven to be an exact parallel of the Hittite text KUB 8.83 (CTH 538.II.1; MS), although they are probably independent translations of the same post-OB source (cf. Cohen 2017).

<sup>102</sup> Cf. Riemschneider 2004:133 fn. 1 and Fincke 2010b:10.

<sup>103</sup> Cf. Riemschneider 2004:246.

<sup>104</sup> Cf. Anor and Cohen 2018:200.

<sup>105</sup> Cf. Anor and Cohen 2018:206.

one paragraph that matches one of those preserved on the Akkadian fragment KUB 37.118, showing that the translator probably had other Akkadian versions available.<sup>106</sup>

Some Akkadian tablets of hemerologies (CTH 546), which contained rules and prohibitions guiding actions that could be taken on different days of the year, are also attested at Boğazköy. The tablet KUB 43.1(+), which records rules for 'crying out laments' ( $\dot{s}ig\hat{u}$   $\dot{s}as\hat{u}$ ) and 'cleansing of his clothes' (sub- $\bar{a}ssu$  ubbubu), shows orthographic and paleographic features that suggest that it is a local product written by a Hittite scribe based on a Babylonian or Assyrian model, probably during the MH period.<sup>107</sup> Hittite translations have not been found yet, but the Hittite ritual CTH 432, which has a Babylonian background (see below) contains a hemerology with a  $\dot{s}ig\hat{u}$ -lament (in Hittite, *duddu halzai-*). Five other tablets contain 'Offering bread hemerologies' (Fincke 2010a); one of them, KUB 4.45, belongs to a tradition that seems to have no parallel elsewhere.<sup>108</sup>

The liver models (CTH 547) include both monolingual Akkadian models and bilingual Akkadian-Hittite ones. The latter group is represented by four models with complementary texts in the two languages: the protasis in Akkadian, and the apodosis translated into Hittite. Akkadian models are linguistically OB and display an archaic (or archaizing) ductus,<sup>109</sup> whereas some of the bilingual ones are in OS. The liver models may be connected with the northern Syrian or southeastern Anatolian areas because most liver models have been found in the west periphery rather than in Mesopotamia.<sup>110</sup>

Liver models were pedagogic tools to teach hepatoscopy<sup>111</sup> and may have been connected to the presence of Babylonian haruspices in the Hittite capital. The analysis of the script reveals no Hurrian influence: they belong to the Babylonian tradition, with some Syrian or northern influence. The technical

110 Cf. Mouton 2015b:232.

<sup>106</sup> Cf. Fincke 2004:238.

<sup>107</sup> Cf. Fincke 2009b:115-117.

<sup>108</sup> Cf. Fincke 2010a:143.

However, they cannot be dated as a group because cuneiform signs employed are not consistent. According to De Vos (2013:80–108), their dates range from the 16th to the end of the 15th century. It is generally assumed that the bilingual liver models in OS predate the monolingual Akkadian ones, but De Vos (2013:105–106) has suggested that monolingual Akkadian models were transmitted first and used to draft the bilingual models.

<sup>111</sup> See Mouton 2015:229, including the references. Note that liver models were probably stored in libraries; they were not archival documents (cf., e.g., Mouton 2015b:215 on KUB 37.218).

terms occurring in these texts are always written in Akkadian or as Sumerograms, whereas in the Hittite liver oracle reports—which were archival documents and did not have a pedagogic function—they are written consistently in Hurrian, proving Hurrian intermediation in the transmission of the practice of hepatoscopy.<sup>112</sup>

It should be noted that the Hittite apodoses in the bilingual liver models were not originated by Hittite scribes, as is shown, for example, by KUB 4.72 rev. 6-7, in which ÉRIN<sup>MEŠ</sup> *ITTI* DINGIR *hingani wekzi* almost perfectly calques the OB apodosis in YOS 10, 46 iii 41, *ummānī itti* DINGIR-*lim ana dâkim eršet* "with the god (i.e., divine approval) my army was demanded to death", mechanically matching *ana dâkim* with a dative and converting the stative form *eršet* into the active present *wekzi*, resulting in a syntactically odd Hittite sentence.<sup>113</sup> According to De Vos (2013:80), the translations were made by Akkadian speakers,<sup>114</sup> which would explain why only the apodoses were translated and account for mistranslations and unusually structured Hittite sentences. This is possible, but other solutions can be envisaged. For instance, Cohen (2015:124) posits that "the technical language of the protases was intentionally left un-translated, as much as Hurrian terminology was retained in Hittite SU-oracles and the *šašta*-omens: the basic keys of interpretation, like in spells or incantations, were intentionally left untouched."

Besides liver models, Akkadian and Hittite omen series treating signs of the different parts of the liver are also attested at Boğazköy. CTH 548, relating to gall bladder omens (ZÉ, *martu*), includes two Akkadian fragments, KBo 7.4 and KUB 37.180. CTH 549, about signs of the 'position' (KI.GUB), contains various fragments in Akkadian and Hittite, as well as two bilingual tablets, KUB 8.34+ (perhaps MS)<sup>115</sup> and KBo 34.133(+). CTH 550, concerning the 'yoke'  $(n\bar{r}ru)$ , includes the Akkadian tablet KUB 4.66, which was possibly imported (Riemschneider 2004:58). Two Akkadian tablets are listed under CTH 553, signs of 'well-being' (*šulmu*), and four Akkadian fragments are included in CTH 554, omens of the 'weapon' (*kakku*). CTH 555 includes two Akkadian fragments that treat the signs of the 'palace gate' (*bāb ekalli*); they may belong to the same tablet, which was written by Tarhuntaziti under the supervision of Anuwanza. Finally, diverse fragments of Akkadian liver omens are listed under CTH 556.

<sup>112</sup> Cf. Mouton 2015b:207, 230. Note that Hurrian translations of hepatoscopy treatises exist.

<sup>113</sup> Cf. Güterbock 1997a:159 and Riemschneider 2004:280-281.

<sup>114</sup> See already Riemschneider 2004:xli.

<sup>115</sup> But 'alter Duktus' according to Riemschneider 2004:99.

Two Akkadian tablets and one Hittite fragment, showing ancient ductus (OS or MS), concern entrail omens (CTH 551) that involve observation of the coils of the intestines ( $t\bar{t}r\bar{a}nu$ ). Kidney omens (CTH 552) are preserved in an Akkadian-Hittite bilingual recension in the *Sammeltafel* KUB 4.1, together with the ritual text CTH 422 (Incantation at the enemy's border).<sup>116</sup>

Finally, CTH 560 includes several Hittite and Akkadian omen fragments. Notably, KB0 36.47 has been recognized as an Akkadian fragment of the *šumma immeru* omen series, with a recension of *šumma ālu* on the reverse (see above). The recension of *šumma immeru* is identical to that found at Emar (Emar 698), indicating that the two manuscripts belong to the same stage of elaboration and transmission of the text. Both show traces of an OB stage, especially in spelling conventions, although some post-OB linguistic features can be identified; therefore, they were probably created during the MB stage when this material was being standardized. Hittite translations have been not identified so far, but, as recognized by Hoffner (1993), the Hittite *šašt(a)*- oracles (CTH 576) can be traced back to the Akkadian *šumma immeru*, although the presence of Hurrian technical terms points to an intermediated transmission, perhaps through older forerunners.<sup>117</sup>

Unlike the scholastic texts belonging to the scribal curriculum, which were mainly although not exclusively used for mastering the cuneiform script and the Sumerian and Akkadian languages, magic texts—including rituals, incantations, and medical and pharmacological texts—were probably employed primarily for the study and transmission of technical medical and ritual knowledge and the execution of ritual performances. That they were found in the Hittite archives is probably related to the presence of Babylonian experts (physicians, exorcists, etc.) at the royal court.<sup>118</sup>

It appears that Sumerian and Akkadian magic texts were rarely translated into Hittite. Aside from the medical omens listed under CTH 537, which had Hittite translations (see above), only two Hittite rituals, CTH 432 (see below) and the medical text CTH 461.L, could be regarded as translations of lost Akkadian originals.<sup>119</sup> Furthermore, Hittite substitution rituals for the king (CTH 419–421) depend on Babylonian models (possibly with Hurrian intermediation), although they are not direct translations of Akkadian ritual texts.<sup>120</sup>

<sup>116</sup> Dupl. Bo 3476, with the same two compositions.

<sup>117</sup> As mentioned, this may also be the case for the *šumma izbu* omens (see above).

<sup>118</sup> On Akkadian magic texts at Boğazköy, cf. especially Schwemer 2013.

<sup>119</sup> Cf. Schwemer 2013:158–162. The other medical rituals in Hittite found in the archives of the Hittite capital city, published by Burde (1974), seem to be local products (cf. Beckman 1990:630).

<sup>120</sup> Cf. Schwemer 2013:162–164.

The ritual against depression (CTH 432)<sup>121</sup> and the 'babilili ritual' for Ištar-Pirinkir (CTH 718),<sup>122</sup> preserved in several copies, are bilingual texts in which more or less extensive Akkadian recitations are embedded in a Hittite ritual framework. The Akkadian passages of CTH 432 are in good Middle Babylonian (but with a west peripheral syllabary) and show a more sophisticated vocabulary in comparison to the other Akkadian texts found at Boğazköy,<sup>123</sup> whereas the ductus is typically New Script. Beckman (2007:81), observing that the Hittite instructions are fluent and do not seem to be translated from an Akkadian original, suggested that "this text represents the collaboration of a Hittite student and his foreign teacher, a Babylonian scribe resident at the Hittite capital."124 Conversely, as mentioned previously, Schwemer (2013:158-159) regards this ritual as a Hittite translation of a lost Akkadian original text. The Akkadian of CTH 718 is also different from the common Boğazköy Akkadian of diplomatic texts, despite its west peripheral syllabary. It is generally more correct in the use of verbal forms and feminine pronouns, but there are also several Assyrianisms, as well as elements that seem to point to an Old Babylonian dialect.<sup>125</sup> The fact that these texts are characterized by Hittite instructions and Akkadian recitations—thus being structurally similar to the Hittite rituals with Luwian, Palaic, and Hurrian formulas-strongly points to their use in ritual practice rather than as mere tools for mastering cuneiform and Mesopotamian languages.

Conversely, other rituals and incantations are original Mesopotamian compositions without any Hittite translations or adaptations. These include the Sumerian-Akkadian incantations listed under CTH 801, the ritual against impotence listed under CTH 802 (type ŠÀ.ZI.GA), the Akkadian incantations *šumma amīlu kašip* (CTH 803) and *ana pišerti kišpī* (CTH 804),<sup>126</sup> the Sumerian-Akkadian bilingual incantation UDUG.HUL.A.MEŠ (CTH 805), and the Sumerian-Akkadian incantations mentioning the deity Asalluhi (CTH 806).<sup>127</sup>

KUB 37.1, listed under CTH 808, is an Akkadian medical text that concerns the application of poultices. Because of the poor quality of the script and the presence of several Hittite and Luwian glosses, it was formerly identified by Köcher (1952–1953) as a student exercise<sup>128</sup> but is now more precisely inter-

- 125 Cf. Beckman 2014:5–6.
- 126 Cf. Abusch and Schwemer 2011:27–64.
- 127 Cf. Zomer 2019 for the prism KB0 1.18.

<sup>121</sup> Cf. Beckman 2007.

<sup>122</sup> Cf. Beckman 2014.

<sup>123</sup> Cf. Beckman 2007:79.

<sup>124</sup> Beckman 2007:81.

<sup>128</sup> See also Beckman 1990:630: "the product of an Anatolian student under an Assyrian master."

preted as an exercise of a student in medicine (Giusfredi 2012). Other Akkadian medical texts include seven copies of an ophthalmological treatise (CTH 809), some imported and others copied locally;<sup>129</sup> the incantation known as 'the Moon-god and the cow' (CTH 810), in non-Hittite ductus; two non-identical copies of a ritual and prescriptions against fever (CTH 811), both written in non-Hittite script;<sup>130</sup> and other fragments belonging to different compositions (CTH 812).<sup>131</sup>

#### 5 Concluding Remarks

Because Akkadian was used widely in the Hittite scribal world, many texts share local similarities, especially interference with local Hittite or more generally Anatolian substrata that resulted in features such as doubly marked genitival chains with a head noun following the modifiers or confusion in the use of the Semitic gender. However, some differences exist between different Akkadian grapholects. The Old Hittite political documents seem to pattern with a peripheral variety of Old Babylonian that was open to Marisms and to the preservation of sparse formulaic material in common with Old Assyrian. Old Babylonian features with Syrian influences also appear to emerge in the land grants, whereas the Akkadian of diplomacy, from the MH stage onwards, appears to pattern more with Middle Babylonian and standardized international Akkadian. In contrast, most of the literary and technical texts of the cultural tradition seem to have been created during a mature phase of the Hittite scribal history and tend to remain closer to the Mesopotamian cultural and linguistic milieu of origin even when they are almost certainly copies produced locally.

<sup>129</sup> Cf. Beckman 1990:630.

<sup>130</sup> Cf. Meier 1939 and Schwemer 2013:155.

<sup>131</sup> Some of them edited by Schwemer 1998.

# Hattian Texts and Hattian in the Hittite Archives

A. Rizza

## 1 Denomination and Identity

The Hittite documents contain expressions such as hattili, nešili, hurlili, luwili and *babilili*. These are examples of a typical adverbial form that probably originated from the dat./loc. of adjectives in -*li*-1 and has the formal meaning of 'in the manner of.' The formation is widely used to refer to linguistic behavior: for example, hattili means 'in Hattian,' nešili, 'in Nesic,' hurlili, 'in Hurrian,' luwili 'in Luwian' and babilili, 'in Babylonian.' Hattili generally introduces texts or portions of texts written in the non-Indo-European isolate language that is now called Hattic or Hattian. The term Proto-Hattian (German, prohattisch; Italian, *protocattico proto(k)hattico*; French, proto-hittite) is common in the older secondary literature.<sup>2</sup> It arose from the idea that Hittites, as Indo-Europeans, could not be treated as an autochthonous Anatolian population. It was too easily believed that people speaking a non-Indo-European language that was attested only in Anatolia must have been the autochthonous population of at least the central part of modern Turkey.<sup>3</sup> Thus 'Hattian' became the name used for both a language and a population. Yet historically the Hittite kingdom was known as the 'land of Hatti.' So, in the historical kingdom that we know as Hittite, people wrote on cuneiform clay tablets using the Indo-European language that we call Hittite as their main language but identifying their territory and institutions with a name that referred to the territory whose language should have been the non-Indo-European language Hattian (hattili). The relationship between the original Hatti and the Hatti of the Hittites is a fascinating case, not only for cultural and linguistic contact research but also for research on the value of language in politics and cultural identity. Today we call the main language of

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<sup>1</sup> And/or the nom./acc. ending (cf. Friedrich HE<sup>2</sup> § 227): Hoffner and Melchert GrHL § 19.15. For a different analysis: Kronasser EHS § 179,11 (accepted in Tischler HEG, s.v. *hattili*; Friedrich and Kammenhuber HW<sup>2</sup> 111, s.v. *hattili-*). See also Chapter 11, § 1, on the synchronic use of the forms in *-li*.

<sup>2</sup> The term is already found in Forrer 1919. Cf. Laroche 1947a; Güterbock 1957; Kammenhuber 1969.

<sup>3</sup> For a compelling criticism to this approach, see Klinger 1996:16–24, in part. 17.

the Hittite clay tablets 'Hittite'—using a word deriving from *Hatti*—because of a tradition established when modern scholars began studying the clay tablets found in Hattuša. The political name Hatti survived the fall of the kingdom. Thanks to the so-called Neo-Hittite states, it lasted into the first millennium BCE and entered the Biblical tradition.<sup>4</sup> The expression originally used to refer to Hittite language was *nešili*, that is, 'in the manner of (the people of the city of) Neša.'<sup>5</sup> Attempts made in the first half of the 20th century to rename the Hittite language Nesite or Kanesite failed.<sup>6</sup>

The clearest and most concise summary of this situation was given by H.G. Güterbock in a paper published in 1957, from which the passage below is quoted.

[...] The situation becomes more complicated if cultural manifestations other than languages are taken into consideration: what is Hittite art, Hittite architecture, Hittite pottery, in short, Hittite civilization? Can such names be used at all, and to what kind of Hittites do they refer? [...] If we want to reach some clarity we must strictly separate two spheres: linguistic and cultural. Since the name 'Hittite' has, for forty years been applied to the main language of the Boğazköy archives, we cannot easily abandon it (although there are other names for the same language [...]). The speakers of this language took part in what may be called 'Hittite civilization,' but the latter is a mixed culture and cannot in its entirety be ascribed to a single ethnic group. Consequently, the name 'Hittite' must mean one thing if applied to a language, another thing if applied to a civilization (Güterbock 1957:233–234).

One of the main goals of the research has been to define the contribution of the Hittites to the Hittite civilization. This could be pursued by investigating the contribution of the other 'ethnic groups' that could be projected behind the linguistic denominations and the texts in languages other than Hittite that are recorded in the Hittite tablets.<sup>7</sup> The Hattian contribution, based on the texts we

<sup>4</sup> However, Luwian, as is well known, was the main language of inscriptions in the Neo-Hittite states. This language too was called Hittite for a while—specifically, hieroglyphic Hittite (cf. Güterbock 1957)—but the appellation was later abandoned in favor of the more accurate hieroglyphic Luwian.

<sup>5</sup> With variants, especially (ka)nešummili.

<sup>6</sup> See Forrer 1919 and 1921. Cf. Güterbock 1957.

<sup>7</sup> See Klinger 1996, which includes references. It is important to stress that language and culture and language and ethnicity are not naturally related in terms of identity. Language can

have, was almost exclusively restricted to the cult. Thus Hattian texts are mainly concerned with cult-related performances: music and dance with songs and formulas, recitations, incantations, and narratives (myths). The Hittite word *hattili* is chiefly used in Hittite texts as a description or instruction for specific performances as in the following examples.

KUB 1.17 iii 48–49 = CTH 591.11.A, Klinger 1996. (48) <sup>LÚ</sup>ALAMZU<sub>9</sub> *ha-at-ti-li* (49) *ki-iš-ša-an me-ma-i* "The <sup>LÚ</sup>ALAMZU<sub>9</sub> recites in Hattian as follows"<sup>8</sup> KUB 2.13 v 2 = CTH 591.1V.A, Klinger 1996. (2) <sup>LÚ</sup>NAR <sup>URU</sup>*ha-at-ti-li* SÌR-*RU* "The singer sings in Hattian"

Sometimes, instead of the adverbial form *hattili*, scribes used the adjective *hattili*.

VAT 7683 iii? 11'–12' = CTH 591.IV.D, Klinger 1996.  $[^{L}]^{U.ME\check{S}}$ NAR *ha-at-ti-li-eš* (12') [SÌ]R-*RU* "The Hattian singers sing"<sup>9</sup>

In other instances, the word *hattili* is omitted. This is the case for the main bilingual tablets (CTH 725 and 726) recording the rituals that relate to building activities of the palace.

be a social bond for identity in a given, mainly local, cultural construct. This means that in reconstructing local knowledge, researchers have to be extremely cautious in applying their cultural models, which are as local as all others: one cannot easily map components of a multilingual literacy onto separate cultures or, even worse, ethnic groups. The case of Hattian–Hittite (Old Hittite especially) relations is particularly explicit in this respect. It is very hard to find a pure Hittite (i.e., non-Luwian, Hurrian, or Mesopotamian) historical manifestation that is not connected to the Hattian milieu or *Kultschicht*. A true Hittite contribution (in historical terms), is something built with all or some Anatolian, Syrian and Mesopotamian components (cf. Pecchioli Daddi and Polvani 1990:7–10). One way to represent Hittite culture could be a model using stratification (e.g., Klinger 1996, Rizza 2002). The limits of such a model are discussed in Steitler 2017:2 fn. 5, with references, and in Steitler 2017:3–4, 9–11.

<sup>8</sup> The adverb *kiššan* 'as follows' generally introduces textual portions in Hattian that are reproduced in tablets. Parallel manuscripts lacking *kiššan* generally do not reproduce the Hattian text; cf., e.g., CTH 591.11.A ii 18–19 with 11.B i 10' and 11.D i 6'. Of course *kiššan* is not obligatory.

<sup>9</sup> Caution is required to avoid oversimplified conclusions about ethnic differentiation: the focus is on performance.

- KUB 2.2+ ii 38–39 = CTH 725.A, Schuster 1974
- (38) <sup>LÚ</sup>zi-li-pu-ri-ya-tal-la-aš (39) a-pí-ya-ak-ku a-ni-ya-zi ta ke-e INIM<sup>MEŠ</sup> me-ma-i
- "The Zilipuriatalla carries out (rites) in that place, and recites these words" (i.e., "this story, these facts")

The adverb *hattili* is used with the verbs *mema-* 'speak (of), tell, recite'; *halzai-*'cry, call out, summon, invoke'; malt- 'declaim, recite, vow'; SÌR-RU 'sing' (zamārum in Akkadian and išhamai- in Hittite), and annia- 'perform, carry out, (magically) treat'. The focus on cult performance is evident.<sup>10</sup> Some of the tablets offer guidelines for performances; others also include the text to be delivered. In some cases, the text and the instructions related to them may be preserved on separate tablets.<sup>11</sup> The case of CTH 591 is of particular interest. This catalog entry details multiple manuscripts of the Festival of the month (Fête du *mois*). Some (1.1.A in Klinger 1996) preserve the Hattian texts and others do not. According to Steitler (2014), Ms. I.I.A (KUB 1.17) may reflect a misunderstanding of Hattian recitations. Although the obverse seems to respect the correct connection between Hattian recitations and the "description of the ritual activities [because] the deity honored by a particular rite is subsequently identified in the appurtenant recitation" (2014:301), rites for the Kaneš gods are interpolated on the reverse, disrupting "the original correspondence between rites and recitations" (ibid.). Steitler concludes that even if the Hattian texts were not well understood, they constituted an "expression of the Hittites' own cultural identity" (ibid.).

The presence of the Hattian texts probably implied the existence of a cultural context (mainly religious and ideological) toward which whatever was, or should have been, originally Hittite converged, leaving present-day researchers without a picture of a pure and original (Indo-European) Hittite contribution as distinct from the Hattian one. Klinger (1996) and Steitler (2017) emphasize the historical relevance of Hattian cults during the existence of the Hittite kingdom; thus the Hattian *Kultschicht* (or milieu, following Steitler's analysis) characteristic of the older phases likely survived into later phases.

<sup>10</sup> The adjective *hattili*- is also used to qualify objects such as shoes; see Friedrich and Kammenhuber HW<sup>2</sup> III, s.v. *hattili-*.

<sup>11</sup> Cf. Forlanini 1984.

#### 2 The Textual Documentation

#### 2.1 Writing Habits

Hattian texts are preserved on typical documents of the Mesopotamian tradition, that is, through cuneiform writing on clay tablets kept in archives and/or libraries (in a broad sense). We have no evidence of monumental or display texts. The Hittite culture developed schools and systems of conservation and cataloging,<sup>12</sup> along with textual genres, formats, and layouts.<sup>13</sup> Of particular importance for the Hattian documentation is the format of the bilingual tablets, on which Hattian texts are transcribed with corresponding translations in Hittite (cf. below).

The Hittites adopted a form of cuneiform from the Syro-Mesopotamian tradition, although with idiosyncrasies that diverge from the Babylonian standard (see Chapter 6). The orthographic system applied to texts in the Hattian language reveals further distinguishing characteristics. Some concern the repertoire of signs. The Hattian texts abound in signs built on the cuneiform PI, to which a smaller sign is juxtaposed—generally, but not exclusively, a vowel (e.g., PI<sub>A</sub>). The PI sign has a pure consonant value, so the subscript signs function as an indication of the vocalization of the syllable. In Hittite the syllabic value /pi/ is never rendered with PI, for which BI is used instead; therefore, BI is also transcribed as -pé- and -pí-. The syllabic value of PI is usually /wa/. Therefore, the PI<sub>V</sub> combinations are transcribed as -wV<sub>V</sub>- ( $wa_a$ -,  $wi_i$ -, - $wu_{\mu}$ -, - $wu_{\mu}$ -, etc.). It is believed that the sign PI with subscripts is used to indicate a fricative of the labiodental type, such as [f] or [v]. The Hittite scribes used concordance tables to identify correspondences between signs of this type and simple signs; the tables were practical solutions to cases of variation in spelling resulting from divergent traditions or schools or simplifications. It is not uncommon to find variants in which signs such as BI (-pi/e) and PI<sub>v</sub> alternate. The orthography of Hattian in Hittite documents has been recently reviewed in two important works: Soysal 2004 and Simon 2012.

There is plenty of variation in the documents in Hattian. Many words show graphic variants. Some are the result of mistakes. However, it is important to remember that both the Hittite and Hurrian orthographies include variation. For example, in Hittite, spellings with and without consonant gemination may alternate; the same can be said for vocalic *scriptio plena* or the use of -Ci- and -Ce- syllabograms. Due to the nature and frequency of these spelling variants,

<sup>12</sup> Dardano 2006.

<sup>13</sup> Waal 2010.

it seems reasonable to interpret them, at least to an extent, as real alternatives, that is, instances of some sort of allography.<sup>14</sup>

Hittite documents in Hurrian, for example, diverge from the orthography of the Mittani letter. Mittani Hurrian shows unambiguous spellings in many cases in which ambiguities exist in Hittite Hurrian. For instance, we can consider syllabographic pairs such as KI and GI and KU and GU, which are unambiguously used in the Mittani letter to code vowel quality: KI is /ki/, GI is /ke/, KU is /ko/, and GU is /ku/.<sup>15</sup> In Hittite Hurrian, there are on the contrary many cases of non-strict one-to-one correspondence. For example, according to Giorgieri and Wilhelm (1995), a Hurrian syllable with /e/ could be written using signs of the type -Ci- and -iC- (e.g., NI or IN), -Ce-, and -eC- (e.g., NE or EN); syllables with /i/ could be written only with -Ci- and -iC- sign types.<sup>16</sup> A situation in which one sign has a unique phonemic correspondence, whereas another sign corresponds to both that sound and a different one, may be represented as a contrastive opposition between fully specified vs. underspecified features. Tentatively, the Hittite Hurrian orthographic treatment of /i/ and /e/ with CV and VC syllabograms can be represented as follows:

-Ce- and -eC-: [+front +mid], that is, only the mid-front vowel -Ci- and -iC-: [+front -low], that is, any higher front vowel.

Other variations are not as coherent as these. For example, the GA, KA, and QA signs may alternate in the same text to render a velar plosive with  $/a/.^{17}$ 

Returning to Hattian, it should be evident by now that we face two theoretical pathways for considering variant spellings: comparing manuscripts to identify error patterns and comparing words and word forms to identify functional values. To be sure, we have instances of both cases, but to uncover functional values we need to consider all solutions that are typical of Hittite documents: not only signs that may alternate or seem alternate freely for the same value, but also cases of underspecification, such as the Hittite plene-vowel spellings, which should be treated as more specific than the non-plene ones, or the *scriptio geminata*, which should be treated as more specific than the *scriptio simplex*.

<sup>14</sup> When we speak of 'allography,' we do not mean graphic variants of letters or characters but rather different solutions for graphically conveying the same linguistic facts (whether they are related to phonology or other aspects of language).

<sup>15</sup> See Giorgieri 2000a:181 for other cases.

<sup>16</sup> See Giorgieri 2000a:182 for other cases.

For contextual rules for determining the voice value of the velar, see Giorgieri 2000a:185– 186.

The Hattian situation proves to be rather obscure. A recent and major effort to determine the value of variant spellings is found in Simon 2012, to which we refer the interested reader. Even if the phonological values proposed in that study cannot be taken as definitive, it is very important to stress that scribal mistakes, misunderstandings, uncertainties, and the like are not enough to explain the situation.

A structural analogy among Hittite, Hurrian, and Hattian orthographies must be assumed; a simple transfer of the Hittite and Hittite Hurrian patterns, however, is not convincing, at least not in all cases. Both Hittite Hurrian and Hattian use the same scribal habit in providing the sign PI with a *mater lectionis*. As already stated, the sign PI is never used with value /pi/ or /bi/ in Hittite, Hurrian (including the Mittani letter), or Hattian. The sign PI in the Mittani letter has four values, conventionally transcribed as *-wa-, -we-, -wi-, -wu-* (it works like a consonantal sign and phonologically most likely codes a labiodental fricative, either /f/ or /v/). Hurrian and Hattian in the Hittite documents discriminate values by adding a subscript vocalic sign, PI<sub>V</sub>, (i.e., *-wa<sub>a</sub>, -we<sub>e</sub>, -wi<sub>v</sub>, -wu<sub>u</sub>, -wú<sub>ú</sub>)*. While we notice here a more detailed system, we have to remember that those signs could alternate with signs for labial plosives (PA, BI, PU), a nonadmissible option in the Mittani letter.

As mentioned above, the scribes had at their disposal concordances that listed such alternatives. One example survives on a tablet, which was published as KBo 37.21; the scribe drew a table on the lower edge containing the alternatives.<sup>19</sup> See the picture of KBo 37.21 in this Fig. 9.1.

The signs aligned in table layout at the bottom of the tablet read as follows:

21	$[wa_a]$	ра-а	wi <sub>i</sub>	p[í-i ]
22	$[we_e]$	рé-е	wu <sub>u</sub>	[ <i>pu-u</i> ]
23		vacat	wú <sub>ú</sub>	[pu-ú ]

A similar, complete table is preserved in Emar (Msk 7462).<sup>20</sup> The table in KBo 37.21 is for Hattian, and that in Msk 7462 is for Hurrian. The Hattian and Hurrian texts show further composite signs of the same type but with a VC or CV syllabogram such as  $PI_{AB}$ ,  $PI_{BI}$ ,  $PI_{BU}$ , i.e.,  $-wa_{ap}$ -,  $-wi_{pi}$ -, or  $-wu_{pu}$ - (see HZL for details) that structurally conforms to the situations traced in the tables in KBo 37.21 and Msk 7462. Alternations between the signs noted in the school tables

<sup>18</sup> Moreover, in the Mittani letter, the quality of the vowel could be determined with normally written PI-V strings.

<sup>19</sup> Kammenhuber 1969:443.

<sup>20</sup> Emar VI/4 nr. 601 (p. 181). Cf. Klinger 1996:621-622.



must have been available and accepted alternatives rather than uncertainties. The reason why the scribal community did not develop a more efficient system is not discernible in the surviving data. Nonetheless, we must consider that what may appear dysfunctional to us could have been perfectly functional for the scope and the objectives of the original system.

Another interesting but more obscure example of Hattian orthographic problems is the alternation between vowel plene writing and geminate writing of consonants for the same word or word form (see Soysal 2004 for details). We list just a few significant examples:

te-e-pu-ut	te-ep-pu-ut
up-pí-in	u-pí-i-in
a-ši-i-ia-ú-i	a-aš-ši-ia-ú-i
(Soysal 2004:75).	

This kind of evidence prevents us from transferring the norms of Hittite orthography indiscriminately into Hattian texts.

The issues described thus far should be sufficient to suggest how problematic the study of Hattian orthography can be. Other challenges are detailed in Soysal 2004 (chapter 2).

### 2.2 Texts

The CTH reserved the range 725 to 749 for Hattian texts, with 747 to 749 as yet unassigned.<sup>21</sup> The two major collections of autograph tablets with Hattian text are KUB 28 and KBo 37. Scholars are not in full agreement on the grammar of the language. One may find differences both in the terminology and in the

<sup>21</sup> Cf. hethiter.net/: CTH (2022-02-17).

analysis. The most recent contributions to Hattian grammar are Soysal 2004 and 2018, Kassian 2010, Simon 2012, and Schrijver 2018. Additionally, Berman 1977 and Goedegebuure 2008 have discussed the typology of the language. Hattian is an isolate language; earlier attempts to categorize it with the Caucasian languages failed (see Klinger 1994). Hattian most probably shows ergative or active-inactive patterns morphologically marked on the verb (see Goedegebuure 2010).

Hattian texts are deeply rooted in cult activities. Although narratives exist, they appear to be used as constitutive parts of religious rites. Schuster 1974:13–43 provides a classification with a description of the Hattian texts,<sup>22</sup> but it is not easily readable by nonexperts; a complete list of fragments to date is in Klinger 1996. Updated presentations of the Hattian text ensemble are found in Soysal 2004 and Steitler 2018. The texts have been classified applying heterogenous properties: by cult (local cults, kingdom festivals, royal purification, building rituals, and private rituals), textual aspects (songs, recitations, invocations, spellings, and mythological narratives), formal characteristics (such as strophic or alternate songs), and scholarly formats (e.g., bilingual tablets).

Hattian texts, especially recitations and songs (alternate or strophic) were used in major festivals (e.g., the 'festival of the month' CTH 591)<sup>23</sup> as well as in local cults in places such as Nerik, Zippalanda, Tuhumiara, and Tissarulia (CTH 737, 739, 741), and feasts for Hattian deities, such as the one for Teteshapi (CTH 738).<sup>24</sup> There are also prayers (e.g., CTH 735) and invocations for the gods 'in the language of the gods and in the language of the mortals' (CTH 733; see Laroche 1947b and Corti 2010). Magic rites include incantations like the 'sheep spellings' (CTH 729), 'moon and wind spellings' (CTH 730), spellings for priests (CTH 728), and various other fragments listed in the various CTH numbers. In addition, there are hymns and strophic songs (e.g., CTH 742, 746, but also examples in CTH 735, 738, 739, 740, 743, and 745), as well as alternate songs

- 23 Klinger 1996; Steitler 2014.
- 24 Pecchioli Daddi 1987.

The textual groups described by Schuster (1974) are recitations in festivals (including invocations and alternate songs), local cults, invocations of the gods (733), rituals for the king (some performed by the LÚ <sup>d</sup>10), and personal rituals in general, without an explicit reference to an individual or a category. The latter—often, but not necessarily, assembled on *Sammeltafeln*—include incantations, recitations, and ritual narratives such as 'the myth of moon that fell from heaven' (the bilingual CTH 727). Schuster lists then alternate and strophic songs that is, texts defined by formal layout properties which should correspond to formal poetic properties rather than by content or formal appurtenance to parts of ritual compositions (1974:36–37), and bilingual texts (1974:42– 43).

(e.g., CTH 743, but also examples in CTH 627, 639, 738, 741, and 744).<sup>25</sup> Some texts are designed to cleanse and purify, especially the king and the land (e.g., CTH 732). Other texts have etiological and mythological narratives inserted as constitutive parts of building rituals and other types of rituals (CTH 725, 726, and 727). Isolate terms or expressions or lists of terms (e.g., personnel lists) are also scattered in Hittite documents.

Soysal (2004:47 fn. 1) lists the previous attempts at classifying Hattian texts according to the various principles. He uses 9 typologies in his book (2004:17–21): exclamations, technical terms, songs, strophic compositions, prayers, invocations, blessings for the royal family, purification rituals, and bilingual texts. The latter are further classified as narratives, prayers, mythologemes and ritual narratives, and quasi bilingual (i.e., texts with the Hattian and Hittite versions written on separate tablets). The principles used are evidently heterogeneous, but it is not easy to define a uniform ordering principle for a complete list of Hattian texts. Some tablets fit more than one class. For example, the texts in CTH 738 relate to the cult of the local god Teteshapi if classified by their cult function but to strophic and alternate songs if classified according to their layout and formulas.<sup>26</sup>

Interestingly, in Soysal 2004:51 one can find also a list of fragments defined according to the type of Hattian evidence they contain. This ordering system is tightly connected to the material document and its content and can be reduced to three major categories:

- 1) tablets written in Hattian and Hittite (translations written in a bilingual format or alternating Hattian and Hittite texts);
- 2) monolingual tablets;
- 3) tablets with Hittite texts that also have brief invocations, exclamations, or technical expressions in Hattian.

The category of multilingual tablets can be further split into bilingual tablets bearing Hattian texts with corresponding Hittite translations and tablets with different texts in the two languages.

The major bilingual tablets, and thus the major translations, are CTH 725, 726, and 727.

### 2.3 Translations

The Hittite scribal community transmitted translations of some Hattian texts. The translations that we have are most probably copies of original older edi-

<sup>25</sup> Stivala 2006 and 2011.

<sup>26</sup> Stivala 2006, 2011, and 2016.

tions. On a single material document, the Hattian text and the Hittite translation were either placed side by side or arranged in horizontal sections with the original language followed by the translation. Both the originals and the translations probably derived from established editions that had been copied repeatedly over time. This is confirmed by the discovery in Ortaköy/Šapinuwa of translations that are the same as those found in Hattuša. Hittite texts that are arranged in a specific layout along with Hattian versions represent 'apparent/overt' translations.<sup>27</sup> The tablets that bear them can be defined as '(direct) bilinguals.' These translations are of the 'literal' type, to use a term that is perhaps a bit coarse but easily understood and having the advantage of not being too precise: a better definition would require more thorough study.<sup>28</sup> Some other Hittite texts, not inserted in such special layouts or accompanied by Hattian texts, may have been covert translations, that is, not intended to provide a scribe or performer with a side-by-side translation. There are also Hittite and Hattian texts preserved on separate tablets that are evidently in a relationship of translation: these are defined as 'quasi-bilingual.'<sup>29</sup> Some texts appear to share the features of the literal translations but do not have directly witnessed originals. These latter texts may be translations from Hattian as well as from other languages.<sup>30</sup>

To understand the reasons for and functions behind those translations, scholars might look to studies of translation. One theoretical approach, not too sophisticated, is to view translations as problem-solving devices. This is probably the primary function of interpreting but is certainly prominent also in the production of texts in translation. When considered as a problem-solving device, translation is generally perceived as a process that facilitates communication.<sup>31</sup> Translation also has other purposes that can be assumed, such as communicating needs and intentions across cultural and language boundaries (HSK 26.1.3:25a).

In our situation, however, these reasons for translation cannot be accepted *sic et simpliciter*. We have a tradition of translating texts that perhaps started during the Middle Hittite kingdom, but could have begun earlier,<sup>32</sup> and the texts that were handed down show archaic features of Hittite (Schuster 1974).

<sup>27</sup> Here we loosely refer to the concept of overt vs. covert translation introduced in House 1977 and 1986.

<sup>28</sup> Cf. Rizza 2008 and 2009; Rieken 2014 and 2016.

<sup>29</sup> Corti 2010; Soysal 2004; recently Steitler 2018.

<sup>30</sup> Melchert, forthcoming-b (I thank H.C. Melchert for sharing a draft of this paper).

<sup>31</sup> Cf. HSK 26.1.3.

<sup>32</sup> Old script bilinguals are rare. This might be due to chance or because translations were less necessary at an earlier period.

Furthermore, as Klinger 1996 and Steitler 2017 show, Hattian culture, at least that which we see in the documents, is Hittite culture, so cultural boundaries are not in play.

Translations are, in any case, a medium: perhaps they are involved in the dynamics of sacral communication, but this is a point still to be investigated. They may represent different illocutionary and/or perlocutionary acts; but, again, these are topics that must be studied more carefully.<sup>33</sup>

#### 3 The Status of Hattian in Hittite Anatolia

To examine the status of Hattian during the existence of the Hittite kingdom, we have to assume a few initial distinctions. First, we must distinguish between an 'extinct' and a 'dead' language. The former is here assumed to be a language that no longer has speakers, whether native or nonnative. The latter is here assumed to be "[o]ne that is no longer the native language of any community. Such languages may remain in use, like Latin or Sanskrit, as second or learned (e.g., as liturgical) languages" (CODL<sup>2</sup>, s.v. *dead language*).

We can easily exclude that Hattian was an extinct language. There is abundant evidence of performers using Hattian: it may have been a very corrupted form of the original language, perhaps performed without precise knowledge of the original tongue, but it was certainly in use.

Almost all scholars in the field judge, based on the sources, that understanding of the language became quite poor by the era of the Hittite Empire;<sup>34</sup> some researchers believe that it had become a dead language by the Old Hit-

<sup>33</sup> Some hints are offered by Mouton and Yakubovich: "The embedded Luwian passages that avoided translation usually represent incantations, and one can assume that they were recorded in the original language because of their illocutionary force" (2021:26).

Steiler 1996:613–614, including references, and Klinger 2005:128; recently also Steitler 2014 and 2018. Cf., for a critical review and contrary opinion, Simon 2012:1–12, including references. Süel and Soysal (2016:361), on the basis of the new Ortaköy fragments, state that "Hattian was still a spoken, or at least, literary productive language in Hittite periods, and not a dead one as many scholars used to assume" (cited again in Soysal 2018:160). We have, for this present chapter, clearly distinguished between dead and extinct languages, so we cannot accept this conclusion without noting the differences between them. A dead language is usually productive literarily (consider the case of Latin and cf. Soysal 2004:14). The Ortaköy and Hattuša texts are the same, so we cannot infer a lively production of texts in Hattian. What we see instead is a particular care in preserving, transmitting, and performing Hattian texts in crucial moments of the symbolic, religious and cultural life of the Hittites in periods later than the oldest phases. Klinger 1996 and Steitler 2017 reached the same conclusion previously.

tite phase,<sup>35</sup> but others disagree. Soysal (2004:14) finds plausible a scenario in which Hattian was lost over the years that the Hittite kingdom flourished. However, this scenario cannot be proved or disproved because it is based on state official documents produced by Hittites who did not use Hattian outside the cultic sphere. Soysal defines the Hattian preserved in the documents as a "professional language of priests and other cult functionaries, which barely developed and was memorized in trivial phrases and repeated over and over again in liturgical formulas" (2004:15).<sup>36</sup> Moreover, he considers that the language was used incorrectly in the Hittite scribal schools (2004:27). In a 1981 paper, Gerd Steiner went so far as to argue that Hattian was the true native language of the population of the core region of the (old) Hittite kingdom. Hittite (i.e., Nesic), according to Steiner, was a supraregional language, known natively (if ever) only in Kaneš and used as a language of communication that was neutral with respect to the various linguistic components of the kingdom,<sup>37</sup> which were mainly Hattian and, eventually, Luwian.<sup>38</sup>

Although we can be safe in hypothesizing that Hattian as witnessed in the Hittite documents was a learned liturgical language used mainly, if not exclusively, by trained specialists, it is very hard to prove that it was no longer the native language of any community across the entire period covered by the Hittite written documentation. Considering the reports that there were songs and recitations performed in Hattian in certain places in the Hittite territory, we cannot exclude that it remained the native language of some part of the population. However, the Hittite tablets neither state this explicitly nor offer sure contexts where this situation could be inferred.<sup>39</sup>

It is highly probable, however, that Hattian-speaking populations were in contact with Indo-European Anatolian speakers before the era for which documentation exists. In a 2008 study of the language communities of central Anatolia in the Old Assyrian Colony period, Goedegebuure presented a very inter-

<sup>35</sup> Or even before: see Garelli 1963 but also the criticism in Singer 1981.

<sup>36 &</sup>quot;Berufssprache der Priester und anderer Kultfunktionäre, die sich kaum entwickelte und in trivialen Wendungen auswendig gelernt und in liturgische Formeln immer wieder repetiert wurde, wobei auch ihre traditionelle Qualität im Verlauf der Zeit beträchtlich nachgelassen hatte."

<sup>37</sup> The status of Hittite in this hypothesis would be that of a 'learned' language, "whose status is as a language taught to an educated élite; e.g., Latin as spoken or written in Europe from the early Middle Ages" (CODL<sup>2</sup>, s.v. *learned language*).

<sup>38</sup> Cf. Rosenkranz 1938. Goedegebuure 2008 and Simon 2012 take positions similar to Steiner's, but their assessments and conclusions are different.

<sup>39</sup> For proposals methodologically based on linguistics, see Goedegebuure 2008 (mainly diachronic typology) and Simon 2012.

esting hypothesis: that a large population speaking a (proto-)Luwian dialect shifted to Hattian during or before the Old Assyrian Colony period, producing syntactic features in the latter that resulted in typological asymmetries.<sup>40</sup>

Goedegebuure recalls that, when a large population group is speaking a lowprestige language, some people may decide or be forced to learn and use a more prestigious language. Over time, especially in crucial places such as political, administrative, or economical centers, the linguistic habits of the population converge, resulting in a language shift: the wholesale use of the prestigious language. In this scenario, the Hattian language that we know would be a language learned imperfectly by an originally non-Hattian speaking population and used and handed down as such (2008:166).

But we must stress a point that perhaps was not fully highlighted in Goedegebuure's article: another Hattian variant, previously and perhaps also contemporaneously, must have been spoken by communities not descending from the ones that shifted. The Hattian of such speakers would not have shown the asymmetries in question. Thus the Hattian texts we read must have been produced by the 'new' speakers of Hattian (primarily descended from the shifting community), and the new Hattian variant—and this is the main point—must have become more prestigious than the older one.

From the historical point of view, Goedegebuure prefers a scenario in which Luwians (or proto-Luwians) rather than Palaeans or Hittites merged with the Hattian population of central Anatolia before the conquest of the kingdom of Hatti by the Hittites. Many questions remain about this reconstruction. The arguments are coherent linguistically, but the historical attestations are so scanty that to accept this scenario without reservation would be imprudent. To support the theory, Geodegebuure searched for hints that would allow us to postulate the presence of Luwians in the Hatti area during or even before the Colony Period. The role played by Luwians in the Hittite kingdom, however, is not a strong argument. Nor is the establishment of the original location of some dialects witnessed in the archives of Hattuša;<sup>41</sup> Luwian dialects pre-

Please refer to Goedegebuure's 2008 paper for details. We mention here only few important points. The theory is based on Thomason and Kaufman 1988, a work describing two major types of language contact situations: borrowing and shifting. Borrowing involves mainly the lexicon, whereas shifting has consequences for phonology and syntax (Goedegebuure 2008:164). The idiosyncratic features in Hattian syntax that produced typological asymmetries are thus possibly explained by a substratum, i.e., the structures of a language that was abandoned in a wholesale language shift.

<sup>41</sup> See especially the case of the Luwian spoken in Tauriša, which is thought to have been located northeast of Hattuša (Mouton and Yakubovich 2021; see also Chapter 11 in this volume).

served in Hittite documents are unlikely to be those of the communities that shifted to Hattian—if the Luwian of the Hatto-Luwians survived, then the sociolinguistic conditions required for the shifting scenario are not fully met. The various Luwian dialects documented in the Hittite archives must have had sufficient prestige to be preserved, and the Luwian of the hieroglyphic inscriptions is certainly posterior to the shift; none of these dialects are relevant to Goedegebuure's hypothesis. The Luwians that shifted to Hattian should not be confused with those who did not. This fact, unfortunately, makes the Hatto-Luwians rather elusive. Furthermore, while Hittite typological consistency has been thoroughly investigated, comparable research is not available for Luwian.

Returning to Hattian, the clay tablets we have are scribal copies. Although scribes preserved and handed down Hattian texts, it is unclear how well the Hattian language was known. Their handling of the language is far from perfect in the manuscripts that have been preserved; nonetheless it cannot be qualified as totally corrupted.<sup>42</sup> But we should never forget that we see only the scribal witness and what survived, especially from Hattuša, might not have been the best editions.<sup>43</sup>

Curiously, in KUB 28.80 (CTH 737, 'regular' festival of Nerik) the scribe states (iv 1'-11') that the tablet, which is new, bears a text for a *malteššar* recitation that does not comply with the ancient one. In a seminal study by E. Laroche (1947a), this comment was taken to refer to errors in Hattian caused by imperfect knowledge of the language, but the matter is not so straightforward.

KUB 28.80 iv 1'-11'

- 1'-2' "Tablet of the *malteššar* of the festival of Nerik, regular.
- 3' Now (there) is a new tablet.

For a comprehensive treatment of the quality of the tradition, see Schuster 1974:45–55. Cf. also Soysal 2004:27–28, *passim* (particularly Chapter 2), Steitler 2014, and Steitler 2018. In the 2014 paper, Steitler offers an interesting analysis of KUB 1.17 (CTH 591, Festival of the month), which contains a number of recitations, among which those in Hattian are prominent. The organization of the textual material suggests that "the Hittites likely no longer understood the Hattian recitations properly" (2014:301). The point made by Steitler is of relevance as it is based on evidence (the organization of a text) rather than being a projection of abstract linguistic knowledge.

<sup>43</sup> The main ritual texts with Hittite translations on bilingual tablets (CTH 725 and 726) were stored in the royal town of Šapinuwa (Ortaköy). Probably they had been used for the foundation of the palace at the time of Tuthaliya III, just before the beginning of the Empire period that began with Šuppiluliuma. According to the editors of the fragments from Šapinuwa "[...] the Ortaköy versions feature more accurate and reliable texts than those from Boğazköy, especially in the use of Hattian" (Süel and Soysal 2007:7).

- 4'-6' When, during the hostile years, the festival of Nerik started to be celebrated in Hakmiš,
- 6'-8' the man of the Storm god and the GUDU<sub>12</sub>-priest came (relocated) from Nerik,
- 8'-9' and (thus) this *malteššar* has been established/taken for/from them
- 10'-11' It does not conform to the ancient *malteššar*"

There is no agreement among scholars about the correct interpretation of *a-pí*- $e^{-r}da^{1}$ - $a\check{s}$  da-a-e-ir at line 9'. Some interpret it to mean that the recitation was 'placed' (prepared or undertaken) for them; others that it was 'taken' (recorded) from them.<sup>44</sup> We will further analyze this question elsewhere. Here we concentrate on a couple of considerations that can and must be drawn.

- 1. There is no explicit reference to linguistic competence.
- 2. The focus is on conformity to and compliance with some ancient tradition and/or source.

This text can be better interpreted in the light of the problem of conformity or, as Schwemer (2016) puts it, in terms of 'quality assurance.' Schwemer identifies three main factors for text production and conservation:

- 1. "the practice of centrally administering and controlling the regular performances, also outside the capital (especially, but not exclusively, cultic events that involved members of the royal family);"
- 2. "the ideal of preserving and restoring the correct, original tradition;"
- 3. "the necessity of regular, often annual, adaptation and change" (Schwemer 2016:23).

The problem that our scribe faced was more probably conformity, due to the changes that interested cultic performances. Our main question about this text should no longer be the scribe's competence in Hattian but rather how a scribe could determine whether a source was compliant. In this specific case, we have two possible answers: either the scribe could not find a written source with which to compare the version in question or the scribe checked the present version against an 'official' (authorized) source, which was not explicitly men-

W. Waal (2015:507; cf. also 2010:293) summed up the matter in these terms: "The colophon of KUB 28.80 (CTH 737) gives information regarding the genesis of the composition. Apparently, a new tablet was made on the basis of information given by refugee priests from the town Nerik which was in the hands of the Kaska-enemy. It is not specified whether the recitation, which seemingly differed from earlier incantations, was 'taken' from the priests by means of oral dictation, or that they had their version written down" (2015:507).

tioned. We would not take this text as evidence of poor knowledge of Hattian in either scenario.<sup>45</sup> Although a possible cause of the non-conformity could have been poor knowledge of Hattian, this is only one possibility among others. The culturally internal Hittite focus was on compliant performances rather than linguistic (i.e., an abstract lexical and grammatical) competence.<sup>46</sup>

Our view is conditioned by the nature and history of the surviving documentation, which was largely the work of scribes and cult personnel who preserved texts that were selected based on state traditions. We must pay due attention to the fact that we judge specific texts—those restricted to the religious and ideological sphere—above all from their conditions of transmission. We do not have enough historical sources to judge the status of the language outside the state structure and personnel active in the territory. While we can marginalize Steiner's opinion, we should accept that any consideration about the knowledge of the language is dependent on the more or less narrow view that our sources provide. We must also consider the state of knowledge of the texts. KUB 28.80, as previously mentioned, testifies that scribes were aware of the emergence of variant versions of models considered original or official.

Perhaps the most balanced conclusion that we can provide at the moment is that Hattian, among the circle of scribes in Hattuša but perhaps more generally among the cult personnel, became in the course of the history of the Hittite kingdom a residual sacred language that was not acquired natively but rather by explicit instruction. However, we must also accept that what was retained was less knowledge of the language than knowledge of a selection of texts. They were pieces to be performed from memory or read aloud during cult activities, but their contents were no longer easily accessible without the support of the Hittite translations that were handed down in parallel.

<sup>45</sup> See also Simon 2012:7 fn. 13, based on Taggar-Cohen 2006:233–234.

KUB 28.80 is considered and mentioned in Schwemer 2016. Schwemer assumes the interpretation "they took these recitations from them" of *apēdaš dāēr* at line 9′ (Schwemer 2016:13, fn. 29). This leads him to conclude that "two priests who escaped from Nerik are relied on as the source for Hattian *malteššar*-recitations to be performed during the regular festival of Nerik. But [...] oral tradition alone is regarded as deficient in comparison to written records which are considered to be critical for a preservation of the correct cultic tradition" (ibid.). Schwemer further implies that "the original tablet has been lost and the tradition relies on oral authority" (2016:21). In KUB 28.80 there is no mention of ancient tablets being lost. This is an inference drawn from the mention of the 'hostile years' (line 4′) and the well-known military and political problems in the territory of Nerik. As legitimate as this inference may be, it remains unproven, especially if other interpretations of *apēdaš dāēr* should be considered correct, such as "they prepared this *malteššar* for those (two priests)." Further comments about these questions will be made elsewhere.

## Hurrians and Hurrian in Hittite Anatolia

F. Giusfredi and V. Pisaniello

## 1 Hurrians and Anatolia

Judging only from the number of documents and linguistic materials available, Hurrian appears to be one of the most important foreign languages that emerged from the scribal production of Hittite Anatolia. It was the language of magic, the language of ritual practices, the language of literature: the fields in which Hurrian was used, as documented in the Hittite archives, testify to its highly influential status in the Hittite society.

Of course, Hurrian's penetration into Anatolia was a gradual process. As outlined in Chapter 4, the first Hurrian words that arrive from documents produced in Anatolia are found in the Old Assyrian documents of the  $k\bar{a}rum$  society. However, despite Michel's claim that the  $k\bar{a}rum$  "archives contain many words borrowed from early Hittite, Luwian, or Hurrian" (Michel 2014:77), the number of Hurrian words recognizable as foreignisms or loanwords in the Old Assyrian corpora remains limited. Furthermore, most, if not all, that can be identified with a fair degree of confidence also are found in northern Mesopotamian documents (cf. Dercksen 2007), which implies that it is impossible to exclude a borrowing process that occurred in Assyria rather than Anatolia. The presence of Hurrian personal names in the Middle Bronze Age Anatolian corpora is equally modest, although some names have been convincingly identified and analyzed (Wilhelm 2008).

Whatever the extent of the presence of Hurrian in Kārum Anatolia, what was spoken at this stage probably corresponded to the Old Hurrian variety of the early dynasty of Urkeš (see also below, § 2), which is also the stage to which most of the material attested in both the earlier and later onomastics appears to correspond (Giorgieri 2000b; cf. also Wilhelm 1992b on the verbal system and Richter 2016 for a Hurrian onomasticon). This variety of Hurrian is also closer to the Hurrian dialect of the texts composed in Hattuša and Syria (e.g., at the site and in the region of Mari), judging from some features that have been considered suitable for describing linguistic contiguity,<sup>1</sup> than the Mittani

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<sup>1</sup> Cf. Giorgieri 2000a:179-180.

letter (EA 24), one of the few Hurrian documents presumably written by the scribes of the kingdom of Mittani, in this case during the first part of the reign of King Tušratta (around the 13505 BCE). In recent studies, the label Old Hurrian is sometimes used not only for the Urkeš early dialect but for all of the Hurrian varieties that shared features as opposed to the Mittani Hurrian as attested in the Letter.<sup>2</sup>

Although this is not the place to review the criteria of this classification, the 'peripheral' nature of the Hurrian of the Hittite archives is relevant to the present discussion. It allows the penetration of the Hurrian language into the Hittite kingdom to be seen in the context of the historical phase in which political connections between Hatti and the Cilician and Syrian Hurrianized areas are attested.

The phase of intensive political contact between Hatti and the Hurrians of the influential kingdom of Kizzuwatna began with the reign of Telipinu and continued through the transitional pre-imperial phase with periodic stipulations of international treaties,<sup>3</sup> until, toward the mid-14th century, King Tuthaliya I married a noblewoman named Nikkalmadi, who was probably a princess from Kizzuwatna (de Martino 2020:62). Although contacts between the Hittite and Hurrian peoples existed much earlier (see Chapter 5 for the historical context)—Hurrian troops participated in the Syrian campaigns of the earliest Hittite kings (CTH 13)—the *communis opinio* today is that the extensive penetration into Hatti of Hurrian ritual, religious, and literary texts and traditions began, or at least intensified, at this moment. Hurrian deities entered the official pantheon, Hurrian cults and religious praxes joined Hattian-Anatolian cults and praxes, and Hurrian personal names were adopted by several Hittite princes starting with the generation of Tuthaliya III (Tašmišarri); the latter practice would become even more widespread during the 13th century BCE.<sup>4</sup>

The increasing importance of the Hurrian culture, language, and traditions in Hatti is reflected by the numbers and diversity of the Hurrian documents in the Hittite archives during the Late Bronze Age. However, it is necessary to better contextualize the position of Hurrian and the Hurrians among the cultures and languages of the ancient Near East before discussing the presence and role of Hurrian in the Hittite archives.

<sup>2</sup> Campbell 2016b, in particular, employs a very broad definition of Old Hurrian. However, this seems a little idiosyncratic as it presumes that it is possible to generalize a label based on nothing but some morphosyntactic features (in this case, the morphemes employed in the verbal system).

<sup>3</sup> On the treaties with Kizzuwatna, cf. Devecchi 2015:63-92.

<sup>4</sup> On Hurrian onomastics in Hittite Anatolia, see de Martino 2011.

### 2 Areal Relationships of Hurrian and the Hurrians

Hurrian names are attested in ancient Near Eastern texts from Mesopotamia during the Early Bronze Age, far before the Hittite age began. According to Salvini (2000b:27), the earliest, Tahiš-Adili, occurs in an Akkadian year name of Narām-Sîn (MU <sup>d</sup>*na-ra-am*-<sup>d</sup>EN.ZU *subir*<sup>KI</sup> *in a-zu-hi-nim*<sup>KI</sup> *i-ša-ru tá-hi-ša-ti-li ik-mi-ù*).<sup>5</sup> Anthroponyms and some toponyms also emerged during the Neo-Sumerian age. We share Salvini's pessimism (2000b:21) with regard to discussing the geographical origin of the Hurrians during the proto-historical phase (the usual suspects are the Caucasus and the Armenian/Anatolian interface). However, the cultural, political, and linguistic contexts of the Hurrian civilizations can be discussed seriously for the second millennium BCE.

The earliest Hurrian dynasty known from direct epigraphic sources ruled in the North Mesopotamian city of Urkeš (Tell Mozan),<sup>6</sup> probably toward the end of the age of Akkad and during and after the century-long existence of the Neo-Sumerian kingdom. Tiš-adal appears to be the earliest member of the Urkeš royal family whose name survives in a local inscription, while Atal-šen must have ruled around the end of the third millennium.<sup>7</sup> At this stage, the geographical context of the Hurrian civilization seems to coincide with the portion of northern Syro-Mesopotamia known as the Jazira. Urkeš is located at the northeastern periphery of this fertile area, not far from the heart of the kingdom of Assyria (Šubat Enlil/Tell Leilan, the royal city of the northern Amorite kingdom of Šamši-Addu, will flourish no more than 50 km from Tell Mozan).

During the Middle Bronze Age, the Hurrian element spread toward northern Syria and possibly the interface regions of Cilicia and the Hatay (if the kingdom of Anum-hirbe of Ma'ama is to be located there),<sup>8</sup> exposing the local Semitic and Anatolian languages to possibilities for interference and contact. Indeed, during the early centuries of the second millennium, Hurrian presence was visible in the Orontes area (e.g., in Alalah during the 17th century), from which it expanded to the central Levant (including the Ugarit region), and in portions of Anatolia: Cilicia and the Euphratic regions north of the Jazira.<sup>9</sup> The spread of

<sup>5</sup> The associated toponym, Azuhinum, also occurs in texts from Mari and Nuzi. There are a few other sparse mentions as well. It is not clear whether all of the toponyms refer to the same site. For further discussion, see Salvini, 2000b:27–30; see also Sallaberger 2007:425–431 on the age of Akkad.

<sup>6</sup> See Salvini 2000b:36-55; Wilhelm 1989:10-12.

<sup>7</sup> For further details, see the overview and discussions by Wilhelm 1989, Salvini 2000b, and Sallaberger 2007.

<sup>8</sup> See Chapter 4 for the general historical context.

<sup>9</sup> Cf. Wilhelm 1989:12-13. On the western areas of Hurrian penetration, see also Salvini 2000c.

Hurrian generated some of the most fascinating and famous areas of intensive language contact in the Syro-Mesopotamian world: in the city of Nuzi, as early as in the 16th century BCE, the coexistence of Akkadian and Hurrian speakers resulted in Nuzi Akkadian, a variety of early Middle Babylonian that exhibits traces of grammatical influence that bring to mind creolization phenomena known from the modern history.<sup>10</sup>

Northern Mesopotamia is roughly the area in which the kingdom of Mittani emerged, beginning in the late 16th or early 15th century BCE, with its peculiar sociopolitical lexicon that features royal names and titles stemming from an otherwise unknown Indo-Aryan superstrate (see Chapter 13). Mittani's political influence increased until the mid-14th century, propelling a new diffusion of the Hurrian element into the western areas of the ancient Near Eastern world.<sup>11</sup> However, the Hurrian expansion seems to have predated the military exploits of the Mittanian kings and may or may not have been connected with earlier Hurrian political formations of the Upper Mesopotamian regions.

In the Syrian and Levantine areas, Hurrian penetration began during the Middle Bronze Age. Hurrian personal names and toponyms occur in the Mari texts during the reign of Zimri-Lim (18th century BCE).<sup>12</sup> In the principality of Tikunani, probably located somewhere to the east, not far from the area of the future Mittani kingdom (Salvini 2000b:55–66), some members of the new social class of the *habiru* bore Hurrian names as early as the early 16th century BCE. At one of the most significant sites of the Orontes area, Alalah, the local Akkadian vernacular borrowed Hurrian onomastics and words, including, for the Mittani Age (Alalah IV), important cultural loanwords such as designations of the local social classes.<sup>13</sup> Later, during the 14th century, Hurrian was employed in lexical texts in the Syrian harbor city of Ugarit; it was also used in some religious and poetic texts that were occasionally encoded in the Ugaritic proto-alphabetic variety of the cuneiform system.<sup>14</sup> Traces of Hurrian interference in the local Akkadian documents have been detected (van Soldt 1991:375–381, 471, 517–518). Because of the political expansion of the Hurrian empire of

<sup>10</sup> On Nuzi Akkadian, see Wilhelm 1970, Giorgieri 2005:92–97, and Andrason and Vita 2016: 308–316.

<sup>11</sup> On the western presence of Hurrians and their relationship to the expansion of Mittani, see the historical discussions in de Martino 2000 and Salvini 2000c.

<sup>12</sup> See Sasson 1974.

<sup>13</sup> Cf. Dietrich and Loretz, 1969; von Dassow 2008.

<sup>14</sup> Cf. Gioirgieri 2000a:183–184 for a discussion on the importance of the Ugarit alphabetic texts for the investigation of the phonology of Hurrian and Giorgieri 2013 for a discussion of the Hurrian texts from Ugarit.

Mittani during the 15th and 14th centuries BCE, Hurrian names emerge also in the Levantine letters from the Egyptian archive of Amarna, where an Akkadian version of the Hurrian myth of Kešše has been recovered (Wilhelm 1989:58).

Finally, as early as the 15th century BCE, a major Hurrian kingdom situated in Kizzuwatna began to entertain diplomatic and political relationships with the surrounding powers. Given the position of Kizzuwatna, roughly corresponding to Cilicia, one of the diplomatic partners of the Hurrian kings in the area was Hittite Anatolia. However, evidence from the Hittite archives indicates that Kizzuwatna was populated by Luwians as well, meaning that there was intensive contact between Hurrian and Luwian.

Given its extremely wide diffusion during the central and late second millennium BCE, Hurrian came into contact with almost all the languages spoken in the ancient Near East during the Middle and Late Bronze Age. These included Akkadian (with a well-known case of quasi creolization that emerges from the written corpus from Nuzi), West Semitic (with cases of interference, mostly on the lexical level, in several Syrian centers, most notably in Ugarit), and certainly also Luwian (which was spoken together with Hurrian in the liminal Anatolian region of Cilicia). The extent to which Hurrian interacted sociolinguistically with Hittite in the Hittite kingdom will be the topic of § 4; for a discussion of the Indo-Aryan superstrate in Mittani, a relic that probably originated from a phenomenon that predates the historical age under discussion, see Chapter 13.

## 3 Hurrian Texts from the Hittite World: Chronology, Typology, and Functions

Hurrian texts dated to different periods have been found throughout the ancient Near East, in more or less significant amounts for each area.<sup>15</sup> Here we will focus on the Boğazköy corpus and related Anatolian archives, with some remarks on non-Anatolian ones.

In the Catalogue of Hittite Texts, Hurrian documents have their own section (CTH 774–791)—as do texts written in the other foreign languages attested in the Hittite archives—but several Hurrian texts with Hittite translations or adaptations, as well as texts belonging to the Hurrian milieu, are included in other parts of the catalog. Among these are foreign mythological narratives (CTH 341–353), Kizzuwatna rituals (CTH 471–500), and festival texts related to the cult of Teššub and Hebat (CTH 698–706) and Ištar (CTH 710–722).

<sup>15</sup> For an overview, cf., e.g., Salvini 2000a and 2000b.

Before providing a more detailed description of the different Hurrian textual genres attested in the Anatolian archives, we briefly summarize the chronology of Hurrian texts that was established by Giorgieri (2013) and de Martino (2017) based on paleographic data and contextual information in the documents. Limited evidence for the presence of Hurrians in the Old Assyrian *kārum* of Kaneš/Kültepe (19th–18th century BCE) is provided by personal names,<sup>16</sup> but no Hurrian text can be safely dated to the Hittite Old Kingdom. The earliest Hurrian documentation found in the Boğazköy archives consists of some liver omens dated to the first half of the 15th century. Kizzuwatna may have played a role in their transmission, although it was not part of the Hittite kingdom.<sup>17</sup>

The first substantial wave of Hurrian documents, together with the adoption of Hurrian cults,<sup>18</sup> reached Hattuša during the reigns of Tuthaliya I and his successor Arnuwanda I. The annexation of Kizzuwatna, the Syrian campaigns of Tuthaliya I, and his marriage with the Kizzuwatnean princess Nikkalmadi contributed to the Hurritization of the Hittite court. We can date to this period not only the bilingual 'Song of Release'—whose Hurrian text is older, however (17th–16th century)—and the so-called Parables but also the bilingual rituals of Allaiturahhi (CTH 780–781), Šalašu (788), and Ašdu (CTH 490). Kizzuwatna rituals were also copied in this period. Furthermore, some Hurrian fragments that are referred to as edicts can be dated to the reign of Arnuwanda I. KUB 27.42, a Hurrian invocation to the gods, is attributed to Kantuzzili, the son of Arnuwanda I, in the colophon.

Recensions of the purification rituals *itkahi* and *itkalzi*, which were composed in Hurrian for Tuthaliya III/Tašmišarri and his wife Taduheba at the beginning of the 14th century, have been found in both Hattuša and Šapinuwa. The Hurrian prayer to Teššub KUB 32.19+ (CTH 777.8, MS) was also composed for Tuthaliya III/Tašmišarri and Taduheba. The Hurrian texts from Ortaköy/Šapinuwa and Kayalıpınar/Šamuha should also be dated to the reign of Tuthaliya III, who resided in both of these cities. Among these documents, Kp 05/226 (= DAAM 1.11) is exceptional because it seems to contain an account of military campaigns in Syria in Hurrian. In this period, Hurrian personal names at Hattuša seem to have been used only at the royal court and by

<sup>16</sup> Cf. Wilhelm 2008.

<sup>17</sup> Cf. de Martino 2017:152.

<sup>18</sup> See, e.g., the beginning of KUB 32.133, containing Muršili II's reform of the cult of the Deity of the Night: "When my forefather, Tuthaliya, Great King, split the Deity of the Night from the temple of the Deity of the Night in Kizzuwatna and worshipped her separately in a temple in Samuha ..." (translation Miller 2004a:312).

some foreign experts, whereas several people at Šapinuwa bore Hurrian names, which may hint at the existence of a local community.

The bulk of Hurrian mythological texts together with their Hittite adaptations (the Kumarbi cycle, the narrative of Kešše, etc.), as well as the Hurrian adaptation of the Gilgameš epic, are dated to the imperial period (14th–13th century). There is limited evidence for earlier tablets, which may point to a composition or copy during Šuppiluliuma I's reign, possibly as a consequence of the conquest of Mittani. The ritual of Ummaya (CTH 779) can be dated to Muršili II, but no Hurrian text can be safely assigned to the reign of Muwattalli II, although Muwattalli reintroduced the use of Hurrian names among the members of the royal family.<sup>19</sup>

A renewed interest in Hurrian religious traditions marked the reign of Hattušili 111, who married Puduheba, daughter of a Kizzuwatnean priest of Ištar. Puduheba commissioned Walwaziti, the chief scribe, to collect the tablets of the (h)išuwa festival from Kizzuwatna, which were redacted in Hittite, with only limited Hurrian insertions, displaying an almost exclusive liturgical use of Hurrian. We can date the most recent edition of the ritual of Allaiturahhi, which, unlike the older edition, featured no passages in Hurrian language, to the last Hittite king, Šuppiluliuma 11, which provides further evidence that Hurrian was probably no longer in use.

#### 3.1 Mythological Narratives

Hurrian myths probably are the best-known Hurrian compositions because of the numerous parallels between them and ancient Greek epics. In the archives of Boğazköy, they are mostly attested in Hittite versions, but some fragments in Hurrian and Akkadian can be found. Hittite versions of original Hurrian myths, as well as Hurrian and Hittite versions of original Akkadian compositions, cannot be regarded as *Übersetzungsliteratur* because the parallel passages are not direct translations but rather adaptations of the original text.<sup>20</sup> For example, the Hurrian version of the Gilgameš epic (CTH 341.11) was, according to Beckman (2019b:23), "a substantial reworking of these tales in order to adapt them to the religious and mythological world of the Hurrians."<sup>21</sup> It survives in only seven

<sup>19</sup> It is possible that Hurrian texts were stored in the archives of Tarhuntašša.

<sup>20</sup> Cf., e.g., Giorgieri (2001) on the Song of Ullikummi, and see Corti and Pecchioli Daddi (2012), who compare them to the Latin epic literature.

<sup>21</sup> Cf. the presence of Hurrian deities, especially Teššub, who are almost absent in the Akkadian and Hittite recensions. However, some Mesopotamian formulas can be identified, e.g., (*tiwe=na*) al=u=mai(n) kad=i=a "speaking (words), (s)he says", an imperfect calque on the Akkadian pâšu īpuš(a) iqabbi (Beckman 2019b:23).

fragments, whose content is unclear; some of them date to the 14th century (see also Chapter 8).<sup>22</sup> The colophon of KUB 8.61+ suggests that the Hurrian recension covered more than four tablets, but it is also possible that different compositions were present since the colophons are not consistent ( $\check{S}A$  <sup>d</sup>*Bilgames* in KUB 8.60(+) vs.  $\check{S}A$  <sup>d</sup>*Huwawa* in KUB 8.61+).

The most famous Hurrian mythological cycle is that of Kumarbi, which includes compositions referred to as 'songs' (SÌR) in the colophons, which reveals that they were metrical poems. There is no consensus on the origin of the Hurrian poems. The common and most intuitive position is that they were original Hurrian poems imported into the Hittite capital and translated or adapted into Hittite. However, this stance has been variously challenged by scholars. According to Pecchioli Daddi and Polvani (1990:19-21), for example, the Hurrian recensions of the songs could have been a product of the Hittite chancellery because this cycle is so far known from Hittite archives only and Kumarbi, who has a prominent role in the narratives, does not seem to have been particularly relevant in other areas and is absent from Hurrian onomastics, although it featured several theophoric names. Furthermore, the mix of Mesopotamian and Anatolian narrative themes in the songs suggests that they could be interpreted as "reworkings of external cultural traditions linked to typically Anatolian elements that have been set down in an original synthesis" (Corti and Pecchioli Daddi 2012:618).<sup>23</sup> But even if we accept the idea of original foreign compositions transmitted to the Hittite capital, it is not obvious that the original compositions were written in Hurrian. Akkadian versions of these myths are found sporadically, so the original versions of these Hurrian poems could have been written down in Akkadian—perhaps in Mittani, where Akkadian was used side by side with Hurrian and enjoyed high cultural prestige—and the poems transcribed in Hurrian later, in Anatolia.<sup>24</sup>

How these songs were transmitted is also debated. According to Archi (2007), the lack of exact correspondences between Hurrian and Hittite versions strongly points to oral transmission and writing from dictation in a scenario that involves the presence of Hurrian bards at the Hittite court in the 13th century.<sup>25</sup> However, the prevalence of Hittite versions seems to show that the royal

<sup>22</sup> For Hurrian as mediator between Akkadian literature and Hittite, see Archi 2000, who also suggests a Hurrian intermediation for the transmission of the Akkadian *šar tamhāri* to Hattuša.

<sup>23</sup> See also Lorenz and Rieken (2010), who regard the Hurrian-Hittite songs as Anatolian inventions, developed primarily as teaching texts for use as in the scribal curriculum.

<sup>24</sup> Cf. Wilhelm 1989:58.

<sup>25</sup> See also Bachvarova 2014.

court had little familiarity with the Hurrian language, which is consistent with the data emerging from other texts.

The number of songs that were part of the Kumarbi cycle is unknown, and their order in the series can only be hypothesized from their content. Additionally, the Kumarbi cycle may not have been a single coherent narrative, in which every song was necessarily consistent with the others; multiple cycles or narrative nuclei, more or less independent of each other, could have existed.<sup>26</sup> Thus it could have been not a 'cycle,' in the sense of a coherent and cohesive whole, but rather an 'archipelago' of songs, as suggested by Archi (2009:211).

The Song of Emergence, also known as Kingship in Heaven or Theogony (CTH 344),<sup>27</sup> is unanimously regarded as the opening song of the Kumarbi cycle. It is only attested in two NS tablets in Hittite, but the Hurrian fragment KUB 47.56, which is included in the mythological fragments under CTH 370.11, may belong to a Hurrian version of this song (seemingly with a colophon in Hittite). The colophon of the Hittite tablet KUB 33.120+ informs us that it is a copy of an older worn tablet that must have been in Hittite too. Based on this colophon and the Hittite colophon on the Hurrian tablet, Corti (2007:120–121) suggests that the Hittite version may have been based on a Hurrian draft and the Hurrian version translated from an earlier Hittite version. However, the presence of the Hittite colophon on the Hurrian tablet should probably not be emphasized too much because colophons are not part of the text but rather reflect the Hittite archival practice.

The second known composition of the cycle seems to have been the Song of the kingship of the god LAMMA (CTH 343), which is preserved in Hittite on 14 tablets dating to the Empire period.<sup>28</sup> The Song of Silver (CTH 364) came next, attested from 12 NS and LNS fragments in Hittite from Boğazköy, although a MS Hurrian fragment has been found at Kayalıpınar/Šamuha (Kp 07/84 = DAAM 1.14).<sup>29</sup>

Two fragments of a Hurrian recension, both in LNS, are also attested for the Song of Hedammu (CTH 348),<sup>30</sup> whose Hittite version is preserved on 36 tablets of the Empire period. The Song of Ullikummi (CTH 345) is attested on 26 tablets, of which five contain the Hurrian version. Among the Hurrian tablets, KUB 45.64+ (which does not necessarily belong to this composition) shows a

<sup>26</sup> Cf. Trémouille 2000:138, Polvani 2008:623-624, Rutherford 2011:219.

<sup>27</sup> On the original title of this composition, see Corti 2007.

<sup>28</sup> According to Archi (2009:218), "The presence of Kubaba alongside LAMMA enables us to attribute this song with certainty to the Hurrian-Syrian context of Karkamis."

<sup>29</sup> Cf. Rieken 2009:210-211 and Wilhelm 2019:200-202.

<sup>30</sup> Cf. Salvini and Wegner 2004:40-41, 49.

MH ductus, while the others can be dated to the Empire period on paleographic grounds. Furthermore, only the Hurrian fragment KUB 45.61 (345.11.1) bears a passage that matches a section attested in the Hittite version (KUB 33.93+ iii 9' ff.). The comparison between the two passages makes it clear that the Hittite text is not a direct translation of the Hurrian text but rather a reworking, as shown by Giorgieri (2001).

Besides these songs, which are the best-preserved, other compositions can be ascribed to the Kumarbi cycle, although their collocation in the series is debated. Among the fragments listed under CTH 346 (Fragments of the Myth of Kumarbi), the Hurrian tablets KUB 45.63 and VBoT 59 have been recognized as the Song of the Sea, which probably narrated Teššub's victory over the Sea and was thematically consistent with the Ugaritic myth of Ba'al and Yamm, widespread in the ancient Near East.<sup>31</sup> Another text probably belonging to the Kumarbi cycle is the MS Hittite composition Ea and the Beast (KUB 36.32, currently listed under CTH 351, Fragments mentioning Ea),<sup>32</sup> which Rutherford (2011:218) suggests is a narrative hymn to Teššub. According to Archi (2002), "[t]he numerous erasures indicate that we are in possession of the first (possibly the only) Hittite redaction of this 'song' of Hurrian origin." Indeed, we do not know of any other references to this song, and its contents are not fully consistent with the other compositions in the cycle.<sup>33</sup>

The fragment KBo 22.87 seems to be somehow related to the Kumarbi cycle. It contains a mythological tale that refers to the kingship in the sky of the god Eltara, one of the 'ancient gods;' in this regard it recalls the Song of Emergence.<sup>34</sup> The fragment KUB 33.108 (NS, CTH 350.3.A), containing the Hittite version of a Hurrian narrative concerning Ištar and Mount Pišaiša (located in northern Syria), may have been part of the same mythological cycle,<sup>35</sup> along with the NS Hittite tablet KUB 33.118 (CTH 346.5.A), which is the only fragment to preserve a composition about Kumarbi and Mount Wašitta.<sup>36</sup>

The three NS fragments in Hittite referred to as the Cycle of Teššub (CTH  $_{349}$ ) may also be part of the Kumarbi cycle, specifically the Song of Ullikummi.<sup>37</sup> It

<sup>31</sup> Cf. Rutherford 2001. This song was performed in connection with the cult of Mount Hazzi, as emerges from KUB 44.7 obv. 11 (NS, CTH 785.2.B). Furthermore, the tablet catalogue KUB 30.43 mentions a tablet 'of the Sea,' possibly referring to this composition.

<sup>32</sup> Cf. Archi 2002.

<sup>33</sup> See the discussion in Rutherford 2011. See also Archi 2009:213.

<sup>34</sup> Cf. Polvani 2008.

<sup>35</sup> Cf. Rutherford 2001:602.

<sup>36</sup> Cf. Archi 2009:215–216.

<sup>37</sup> Cf. Güterbock 1946:23–24, 49–50.

is far less likely that the composition listed under CTH 776.2, the Song of Oil, belonged to the Kumarbi cycle:<sup>38</sup> although six NS fragmentary tablets in Hurrian belonging to this narrative have been identified,<sup>39</sup> no Hittite version has been found, making it unlikely that it was part of the Kumarbi cycle.

In KBo 8.88 obv. 8 (NS, CTH 785.1.B) is said that a Song of Kingship (*šar-raššiyaš* SÌR) is performed during the ritual for Mount Hazzi, although no fragments of this composition have been identified with certainty and its inclusion in the Hurrian Kumarbi cycle cannot be established.<sup>40</sup> This Song of Kingship might be the Kingship in Heaven song, although, as mentioned, the title provided by the colophon of the latter composition is rather Song of Emergence.<sup>41</sup>

The Boğazköy archives contain several Hurrian fragments of the Tale of the hunter Kešše and his beautiful wife (CTH 361.11), which is also a 'song' (SÌR); two of them are in MS. The composition is also attested by five tablets in Hittite (CTH 361.1), which represent a rewriting of the original Hurrian text,<sup>42</sup> and an Akkadian fragment found at Amarna (EA 341 = CTH 361.111). Although not many lines of this narrative are preserved, the Hurrian text was quite long, covering at least 15 tablets.<sup>43</sup> Also related to the theme of hunting is the Story of the hero Gurparanzah (CTH 362), although the text is difficult to reconstruct because only some fragments in Hittite survive.<sup>44</sup> Conversely, despite some parallels with the songs of the Kumarbi cycle, there is no compelling evidence to assign the Tale of Appu and his sons (CTH 360) to the Hurrian cultural milieu. It is preserved in 12 manuscripts in Hittite that date to the Empire period, although linguistic data show that the composition is older.<sup>45</sup>

Finally, Hurrian mythological fragments that are difficult to identify are included under CTH 370.11 and CTH 775. CTH 776, besides the fragments assigned to the Song of Oil (CTH 776.2; see above), includes five manuscripts of the mythological composition known as Teššub and the rivers (CTH 776.1), which dates to the MH period and is connected to the city of Šapinuwa.

40 Cf. Rutherford 2001:599.

42 Cf. Dijkstra 2008:215.

44 Cf. Wilhelm 1989:62.

<sup>38</sup> See Giorgieri 2009. Cf. also Dijkstra 2014, who suggests that the narrative may be reminiscent of the Sumerian tale of Inana and the Huluppu tree that is included in Gilgameš, Enkidu, and the Netherworld.

<sup>39</sup> Two other fragments, KUB 47.21 and KBo 53.233, included under CTH 370.11 (Hurrian mythological fragments), might perhaps be assigned to this composition (cf. Dijkstra 2014:68).

<sup>41</sup> Cf. Archi 2009:219.

<sup>43</sup> Cf. the colophon of KUB 47.2: DUB.14<sup>KAM</sup> SÌR <sup>m</sup>Kešši NU.TIL.

<sup>45</sup> Cf. Siegelová 1971:33-34.

3.1.1 The Bilingual Song of Release

Among the mythological compositions, the Song of Release (CTH 789)<sup>46</sup> holds a special position because it is the only Hurrian 'song' (SÌR) attested in a bilingual format. The original Hurrian text and the Hittite version—which is not an independent recension, like other Hittite adaptations of Hurrian songs, but a true translation (although perhaps not the original one)<sup>47</sup>—are written side by side on the same tablet.

The tablets of the Song of Release were discovered between 1983 and 1985 in Temples XV and XVI in the Upper City. All of them are MS manuscripts, although the Hurrian text is older as linguistic evidence reveals.<sup>48</sup> Only the small fragment ABoT 2.247 (findspot unknown) is seemingly written in the NH ductus. The existence of this NS fragment, together with the mention of a Festival of Release in the votive text KBo 31.169 (NS, CTH 590) that is perhaps related to this song and the possible mention of the Song of Release in the festival tablet KBo 57.180 (NS, CTH 670.1217),<sup>49</sup> may point to the performance of all or part of the song during festival celebrations as late as the 13th century perhaps in connection with the Hurrian revival promoted by Hattušili 111 and Puduheba.<sup>50</sup>

A fragment of the song has also been found at Ugarit (RS 19.148), containing Teššub's descent to the netherworld.<sup>51</sup> This fragment is the only evidence of the existence of this song outside Hattuša, which has nevertheless been assumed because of the antiquity of the Hurrian text. According to Wilhelm (2008:192–193), the song belonged to the tradition of Igingalliš and was probably composed originally in a city close to Ebla—perhaps Haššu—where Hurrian was spoken.

The Song of Release narrated Ebla's destruction by Teššub because of the city's refusal to release the people of Igingalliš, who were Ebla's subjects. The composition covered at least six tablets, which are sequenced mostly using Wilhelm's (1997) interpretation.<sup>52</sup> The fourth and fifth tablets exist in multiple copies, while others are *unica*. This may be the result of chance or could indicate that some tablets were regarded as more interesting than others and thus copied more frequently.

<sup>46</sup> Editio princeps by Neu 1996. See de Martino 2019.

<sup>47</sup> Cf. Melchert 2015:61, who, however, only discusses the parables and not the text as a whole.

<sup>48</sup> Cf. Neu 1996:5–6, who dates it to ca. 1600 BCE.

<sup>49</sup> Note however that only [...-]*numaš* SÌR can be read.

<sup>50</sup> As mentioned above, other Hurrian songs are known to have been performed at such festivals, e.g., the Song of the Sea, performed during the festival for Mount Hazzi.

<sup>51</sup> cf. Giorgieri 2013:177–178.

<sup>52</sup> Cf. also de Martino 2012 and von Dassow 2013.

Some mistakes in the Hittite translations seem to show that the tablets were written by "a team of scribes, some of them speaking Hittite and others Hurrian, maybe both with a double linguistic competence although at different degrees" (de Martino 2017:154).<sup>53</sup> Other interference phenomena in the Hittite translation—for example, unusual or even incorrect word order in some sentences—represent an effort to maintain the original Hurrian structure as far as possible. Thus they are 'translationese' phenomena rather than the results of true grammatical interference.<sup>54</sup>

Two tablets containing the Parables, which belong to the genre of wisdom literature, are also bilingual (KBo 32.12 and KBo 32.14, without duplicates).<sup>55</sup> In Neu's (1996) reconstruction, these were regarded as the second and third tablets of the song, and  $p[ar\bar{a} tarnuma]$ 's in the colophon of KBo 32.12 was restored. However, such a restoration is not compelling, and the content of the Parables is dissimilar to that of the rest of the Song of Release, leading Wilhelm (2001:84) to rule out their inclusion in it.<sup>56</sup>

According to von Dassow, both the Parables and the Song of Release may have been part of a Hurrian scribal curriculum, "to train Hittite scribes to read and write Hurrian" (von Dassow 2013:130)<sup>57</sup> in the same way that other mythological compositions were used to teach Akkadian.<sup>58</sup> More specifically, they represented two different stages of Hurrian instruction for Hittite scribes who already knew cuneiform: the Parables would have been a more elementary stage, used to teach Hurrian grammar, much like the proverbs in the Mesopotamian curriculum, whereas the Song would have been an advanced stage of the curriculum, like the Gilgameš epic and other poems. This hypothesis would account for the existence of several manuscripts with layout variations and a "grammatically overexplicit" Hittite translation in which there was "a deliberate effort to represent every element in Hurrian with a corresponding element in Hittite" (von Dassow 2013:148).

<sup>53</sup> See also de Martino 1998:40–41, including the references.

<sup>54</sup> Cf. Melchert 2015.

Note that in KBo 32.14, from obv. 23 on, Hurrian and Hittite paragraphs alternate on the entire length of the tablet, without column division. No colophon is found on this tablet, which should probably be regarded as a draft or preparatory version (cf. Wilhelm 2001:84; Archi 2007:189).

<sup>56</sup> According to Bachvarova (2014:92), if they were actually embedded in the Song of Release, they represented "an extended digression in the plot," thematically connected with the main narrative and probably told by Išhara.

<sup>57</sup> See also de Martino 2017:153.

<sup>58</sup> As mentioned (cf. Chapter 8), Gilgameš was probably used at Boğazköy mainly for scribal education. Note that four MS Akkadian tablets of Gilgameš were also found in Temple XVI.

As mentioned, very limited evidence is found for the survival or performance of this composition in the Empire period, which probably points to a lack of interest in the song, whether due to its content or the existence of more attractive works, such as the songs included in the Kumarbi cycle, which had several independent Hittite recensions.<sup>59</sup>

# 3.2 Rituals and Festivals

As is the case for mythological compositions, the 'Hurrian' ritual and festival materials stored in the Hittite archives include original works written fully or partly in Hurrian, Hittite reworkings based on original Hurrian compositions, and texts whose content reveals a Hurrian milieu (although the use of Hurrian is limited to a few borrowings and technical terms as is the case of several Hurro-Luwian rituals from Kizzuwatna). Some of the Hurrian compositions are foreign rituals that were copied or adapted in the Hittite capital city, whereas others seem to be original works composed in Hurrian on specific occasions in Hittite contexts.

The latter group of the texts is represented by the Washing of the mouth rituals *itkahi* and *itkalzi*, called in Hittite *aiš šuppiyahhuwaš* (CTH 777–778). These are attested on several tablets from Boğazköy and Ortaköy/Šapinuwa and also on a fragmentary tablet from Kayalıpınar/Šamuha (DAAM 1.29).<sup>60</sup> The *itkalzi* ritual is attested in two main series, a complete MH edition including 22 tablets and a short recension only including 10 tablets, which is also MH.<sup>61</sup> A third recension is attested by the MS tablets KBo 20.129+ from Boğazköy and Or 90/1473 from Ortaköy, whose colophons provide the title Great *itkalzi* (ritual) (*itkalziyaš* GAL).<sup>62</sup> The text was originally composed in Hurrian at Šapinuwa, as emerges from the tablet Or 90/393 + Or 90/1050 from Ortaköy, the 11th tablet of the complete recension, according to the colophon. This is the only tablet on which not only the recitations but also the descriptions of the ritual actions are in Hurrian; just a short passage and the colophon are in Hittite.<sup>63</sup> All of the other tablets include Hurrian recitations in a Hittite framework that provides

<sup>59</sup> See also de Martino 2017:153: "the interest in these texts was limited to the erudite priests active in these two temples [*scil*. Temples xv and xv1 in the Upper City]."

<sup>60</sup> Cf. Haas 1984 and de Martino 2016. The fragment from Kayalıpınar/Šamuha may be related to the temporary presence of Tuthaliya 111 in this city.

<sup>61</sup> Cf. KBo 21.44 iv 12' [D]UB.22<sup>KAM</sup> *kuit* <sup>URU</sup>Š*apinuwaz ute*[*r*] (13') [*n*]=*ašta kē TUPPA*<sup>HLA</sup>-*TIM apezza* (14') [*arh*]*a hanteurauen* "The 22 tablets that they brought here from Šapinuwa, we have written these tablets as an excerpt from those."

<sup>62</sup> Cf. de Martino and Süel 2017.

<sup>63</sup> Cf. de Martino et al. 2013.

the instructions for the ritual. Several copies date to the Middle Hittite period, but the text was also copied several times in the 13th century, perhaps as a consequence of the Hurrian revival under Hattušili III and Puduheba.<sup>64</sup>

The ritual was originally composed for Tašmišarri/Tuthaliya III and Taduheba, probably on the occasion of their wedding, and the royal couple is explicitly mentioned in several fragments, including the Hurrian version from Ortaköy.<sup>65</sup> However, the ritual patron remains anonymous on other tablets, which seems to point to a generic adaptation of the original text that could be used for any ritual patron. Both the original version for Tašmišarri/Tuthaliya III and Taduheba and the generic recension are attested at Boğazköy and Ortaköy. It is not clear whether the reduced version in 10 tablets was also originally performed for Tašmišarri and Taduheba, like the full edition, or whether the reduction was part of the transformation to a generic ritual.<sup>66</sup> Both manuscripts of the Great *itkalzi* (ritual) include a generic ritual for any ritual patron.<sup>67</sup>

The same CTH numbers are used to catalog other Hurrian compositions related to Tuthaliya III, such as KUB 32.19+ (MS, CTH 777.8), a Hurrian prayer to Teššub by Taduheba for the military success of Tašmišarri/Tuthaliya III, and KBo 9.137+ (MS, CTH 778.1), an 'edict'(?) dated to the reign of Arnuwan-da 1.<sup>68</sup>

As previously mentioned, the earliest versions of the bilingual rituals of Allaiturahhi (CTH 780–781), Šalašu (CTH 788), and Ašdu (CTH 490) can also be dated to the Middle Hittite period and probably reached Hattuša with the annexation of Kizzuwatna. The ritual ascribed to Allaiturahhi (CTH 780–781), a ritual practitioner from Mukiš, in northern Syria, is attested by several manuscripts in the archives of Boğazköy, which can be categorized into three redactional phases. The first is an older recension, featuring recitations in Hurrian in a Hittite ritual framework, and the second is a later bilingual version with Hurrian recitations and their corresponding Hittite translations. In the third, and final, recension, dating to the reign of Šuppiluliuma II (who is mentioned as the ritual patron), only Hittite translations are found, without the original Hurrian was no longer in use at the end of the Empire.<sup>69</sup> Both the Hurrian passages,

<sup>64</sup> Cf. de Martino 2016a:211.

<sup>65</sup> Conversely, in the *itkahi* series only Tašmišarri appears as the ritual patron (cf. Haas 1984:2).

<sup>66</sup> Cf. de Martino 2016b:206.

<sup>67</sup> Cf. de Martino and Süel 2017:17.

<sup>68</sup> Cf. de Martino 2017:155.

<sup>69</sup> Cf. Haas and Thiel 1978:8; Haas and Wegner 1988:48-207.

with several mistakes, and the Hittite translations show that the scribes had difficulties in understanding the Hurrian text.<sup>70</sup> Judging from the colophons, the composition probably covered six tablets.<sup>71</sup> Some characteristics of the earliest texts of the series, such as the use of the second person in the ritual instructions, are quite common in Mesopotamia but very rare in Hittite rituals. They seem to suggest that the recension attested at Boğazköy may represent a direct translation from Hurrian and/or Akkadian.<sup>72</sup>

The ritual of Šalašu (CTH 788), an 'old woman' from Kizzuwatna, occupied at least nine tablets and was quite close in content to the ritual of Allaiturahhi. Like the ritual of Allaiturahhi, the ritual of Šalašu had Hurrian recitations with Hittite translations, but tablets that include only the Hurrian versions are known (KBo 11.19+).<sup>73</sup> Lacking a thorough understanding of Hurrian, the scribes who produced the Hurrian texts made errors similar to those made by the scribes who recorded the ritual of Allaiturahhi.

Hurrian recitations, although without Hittite translation, are also included in the ritual of Ašdu (CTH 490), a 'Hurrian old woman' ( $^{MUNUS}$ ŠU.GI <sup>URU</sup>hurlaš). There are no other indications of the geographic origins of this ritual practitioner. The text is attested by more than 40 tablets, mostly dating to the 13th century BCE, although a couple of manuscripts show the MH ductus.<sup>74</sup> It is difficult to determine how many tablets were included in the series. Furthermore, there were likely two distinct rituals of Ašdu because the colophon of KUB 44.54 indicates that it is the third tablet and completes the ritual text (iv 3'), but KBo 19.144+ is the fourth of the series (iv 25') per its own colophon, and the tablet catalog KUB 30.65+ mentions a seven-tablet ritual of Ašdu (iii 5-6).<sup>75</sup>

The Hurrian ritual for the royal couple KUB 27.42 (MS, CTH 784) can also be dated to the Middle Hittite period as the tablet is attributed in the colophon to the 'priest and prince' ( $^{LU}$ SANGA DUMU.LUGAL) Kantuzzili, son of Arnuwanda I. The text is a long invocation to Teššub and Hebat in Hurrian, in which Hurrian passages, without translations, are introduced by short Hittite clauses.<sup>76</sup>

The medical ritual of Zelliya (CTH 783), which includes Hurrian *Ritualtermini* and some Hurrian recitations in a Hittite ritual framework, appears on

<sup>70</sup> Cf. Haas and Thiel 1978:8–9; Salvini 1980:159–160.

<sup>71</sup> See the discussion in Haas and Thiel 1978:16, 181.

<sup>72</sup> Cf. Miller 2004a:507–508.

<sup>73</sup> Cf. Haas and Thiel 1978:20-21; Haas and Wegner 1988:208-232.

<sup>74</sup> Cf. Görke 2020b:25-31.

<sup>75</sup> Cf. Otten 1986b:171, Haas and Wegner 1988:18; Görke 2010:8.

<sup>76</sup> Cf. Haas 1984:113–119.

four fragments, including one in MS.<sup>77</sup> The ritual of the goddess Išhara against perjury (CTH 782), which also includes Hurrian recitations, is only attested by tablets of the Empire period. This ritual surely consisted of more than one tablet, although only the first tablet of the series is preserved.<sup>78</sup>

The ritual of Ummaya (CTH 779) is recorded on four *Sammeltafeln* dated to the imperial period, together with other ritual compositions. The text includes a Hittite ritual framework with extensive Hurrian recitations but no Hittite translations. The Hurrian text in KBo 15.1 mentions the name Muršili three times (iv 25', 32', 38'), indicating that it was composed during the reign of Muršili II. In KUB 7.58 iv 2, 9 and KUB 45.20 iii 17' Tašmišarruma is mentioned instead. Although the Hurrian recitations are identical, the rituals may have been different.<sup>79</sup>

Under CTH 790, several fragments of Hittite-Hurrian rituals and incantations are listed. The small NS fragment KUB 47.49 can be assigned to the Hurrian ritual of Šapšušu from Kizzuwatna, which also included Hurrian recitations; this fragment is the only known text belonging to that ritual.<sup>80</sup> Or. 97/1, from Ortaköy/Šapinuwa, also listed under CTH 790, is a small tablet in MS containing a ritual for 'Teššub of salvation and well-being(?)' that was performed for Tašmišarri/Tuthaliya III; the incantations are in Hurrian and the ritual instructions in Hittite.<sup>81</sup> CTH 791 ('Hurrian fragments') also includes some Hurrian ritual texts. For example, KB0 8.153 (MS) contains the Incantation of the scorpion (*ŠIPAT* GÍR.TAB).

CTH 700 is labeled Enthronement ritual for Teššub and Hebat. Twelve manuscripts are preserved, one in MS (KUB 11.31+). According to the colophons, the composition, which filled three tablets, was composed for the enthronement of Tuthaliya III and included the celebration of the *šarrašši* ritual for Teššub and the *allašši* ritual for Hebat. Although the two rituals have Hurrian names (from *šarri*- 'king' and *allai*- 'lady'), no passages in Hurrian are found, so the composition seems to be a Hittite reworking.<sup>82</sup>

CTH 701 includes more than 150 manuscripts, some of them in MS, containing rituals celebrated by the AZU priest that have similar Hurrian recitations in common. Among these fragments, some groups can be singled out: 1) the drink offerings for the Throne of Hebat (CTH 701.a), of which several manuscripts

<sup>77</sup> See KUB 30.26 iv 2'-5' (cf. Trémouille 2005:112).

<sup>78</sup> Cf. Haas and Wegner 1988:28-29.

<sup>79</sup> Cf. Kümmel 1967:141–143, Haas and Wegner 1988:15–17.

<sup>80</sup> Cf. Haas and Wegner 1988:248-249.

<sup>81</sup> Cf. Wilhelm and Süel 2013.

<sup>82</sup> Cf. Kümmel 1967:47-49.

feature Hurrian recitations; 2) the *šarra*-offering to Teššub (CTH 701.b), which consisted of at least seven tablets; 3) the *allanuwašši*(*yaš*) ritual of Giziya, man of Alalah, only attested by the MS manuscript KUB 45.3+, which represents the sixth tablet of the series;<sup>83</sup> and 4) rituals for Teššub and Šawuška (CTH 701.d). To these groups we can add some *fragmenta incertae sedis* (CTH 701.e) and various indeterminate rituals performed by the AZU priest (CTH 701.f). Notable among the latter is the Hurrian fragment KUB 47.41 (CTH 701.f.4.B), which has a Middle Assyrian or Assyro-Mittanian ductus; it may represent an imported original tablet from Kizzuwatna.<sup>84</sup>

The ritual for Mount Hazzi (CTH 785), which includes several Hurrian terms, is attested on 13 fragmentary manuscripts; the earliest dates from the late Middle Hittite period.<sup>85</sup> As shown by Corti (2017b), this festival was culturally connected to Šapinuwa and reflected the influence of northwest Syria on this city (the MS tablet KBo 8.86+ probably represents a version of the original composition from Šapinuwa). As mentioned above, some passages provide evidence that the Song of Kingship and the Song of the Sea were sung during the celebration of this festival.

More than 300 tablets preserve the large (*h*)*išuwa*- festival (CTH 628). The composition filled 13 tablets, the first ones including Hurrian recitations and the remainder, beginning at least with the fifth tablet, with Hittite recitations only. This seems to point to a stronger interest in Hurrian culture than language, as is independently shown, for example, by the later reworking of the Allaiturahhi ritual (see above).<sup>86</sup> Most of the tablets can be dated to the reign of Hattušili III. The colophons of the festival indicate that Queen Puduheba ordered the chief scribe Walwaziti to look for Kizzuwatna tablets in the archives of Hattuša and that he compiled the (*h*)*išuwa*- series from those tablets. Older tablets surely existed, as shown, for example, by a passage on KUB 40.102+ rev. 5'-7' (CTH 628.Tfo8.A), "This *zammuri*-(bread) was not in the ancient tablets. Muwattalli, the Great King, later introduced it." The notation points to the existence of a recension dated to the reign of Muwattalli II that was based on earlier materials.<sup>87</sup> Some tablets showing a MH ductus can be identified, including examples in Hittite that were found at Kayalıpınar/Šamuha.

<sup>83</sup> Cf. Bawanypeck and Görke 2007.

<sup>84</sup> Cf. Miller 2004a:526-527 and Homan 2019:257-259.

<sup>85</sup> Cf. Corti 2017b.

Also note that Hurrian recitations included in the first tablets of the series have mistakes and violations of the Hurrian grammatical rules (cf. de Martino 2017:157–158).

<sup>87</sup> Cf. Wegner and Salvini 1991:6.

The Hurrian deity lists (CTH 786) and Hurrian offering lists (CTH 787) are written in a sort of mixed Hittite-Hurrian, with the names of the deities receiving offerings written in Hurrian.<sup>88</sup> Hurrian *Ritualtermini* and Hurrian deity lists can also be found in various festivals in Hittite related to the cult of Ištar-Šawuška and her hypostases (Ištar-Šawuška of the cities Šamuha, Nineveh, Tamininga, Hattarina, etc.), who were also celebrated during the large AN.TAH.ŠUM<sup>SAR</sup> festival.<sup>89</sup> Other Hittite festival compositions whose celebration included the performance of Hurrian songs are listed under CTH 656.

## 3.3 Omen Texts

Just under 50 manuscripts are listed in CTH 774,<sup>90</sup> Hurrian omens. As previously mentioned, these omens represent the earliest documents in Hurrian that reached Hattuša; they arrived during the 15th century BCE, before the annexation of Kizzuwatna (the oldest tablets show an OH ductus).<sup>91</sup> They deal with extispicy and hepatoscopy; no Hurrian ornithomantic texts, snake omens, KIN omens, or dream incubations have been found. Limited evidence for astrological omens also exists.<sup>92</sup>

Among the earliest documents are some liver omens, KUB 8.47 (OS) and KBo 32.223 (MS). They contain a collection of *danānu* omens (literally, 'strength,' probably denoting the *ligamentum teres hepatis* in Babylonian hepatoscopy) based on a Babylonian model.<sup>93</sup> Some fragments, such as KBo 62.54 (OS) and KBo 49.60 (MS), include gallbladder omens. KUB 47.93, also in OS, contains entrail omens.<sup>94</sup>

Two fragments, KUB 47.96 (MS?) and KBo 27.215 (NS), are identified as *šumma izbu* omens. The latter has a parallel in the Hittite omen text KUB 8.83 (CTH 538.11.1; MS); although they are not translations of each another, they probably derive from a common Babylonian source.<sup>95</sup> The bilingual Hurrian-Akkadian KUB 29.12 (NS) is also a fragment of the *šumma izbu* series: its right column contains Akkadian omens, although they do not correspond to the Hurrian omens on the left. Possibly the fragment belonged to a four-column

<sup>88</sup> Similar offering lists that have divine names with Hurrian endings have been found at Ugarit, written in alphabetic writing and mixed languages (cf. Giorgieri 2013:169).

<sup>89</sup> Cf. Wegner 1995 for the compositions.

<sup>90</sup> See de Martino 1992 for a comprehensive edition. Hurrian omen texts were also found in the city of Emar; see Salvini 2015.

<sup>91</sup> Cf. Wilhelm 2010:630.

<sup>92</sup> Cf. Trémouille 2000:145.

<sup>93</sup> Cf. Wilhelm 1987.

<sup>94</sup> Cf. Wilhelm 2010.

<sup>95</sup> Cf. Cohen 2017b. Both versions show parallels to the 11th tablet of the standard series.

tablet, especially because the Akkadian model would be expected to be on the left. Thus, the Hurrian omens on the fragment would have translated Akkadian omens in a lost first column, and the Akkadian omens in the right column would have had Hurrian translations in a lost fourth column.<sup>96</sup> The small fragment KUB 8.32 (MS?) contains two astrological omens.

The influence of Hurrian divination on Hittite divination and the intermediary role of the Hurrians between the Mesopotamian and Hittite mantic traditions emerge in the technical terms employed in Hittite hepatoscopic practices, most of which are Hurrian (with some Akkadian loanwords). Curiously, technical terms occurring in Hurrian omen texts are consistently written with Sumerograms.<sup>97</sup>

# 3.4 Miscellaneous Hurrian Documents

Besides mythological, ritual, and oracular texts, which represent the majority of documents in Hurrian, other textual typologies appear sporadically. Hurrian hymns and prayers can sometimes be found. KUB 47.78 (NS), a hymn to Teššub of Aleppo, listed under CTH 791 (Hurrian fragments), can be added to KUB 32.19+, Taduheba's prayer to Teššub, included in CTH 777 (see above).<sup>98</sup> Hurrian characteristics can also be detected in some Hittite prayers and hymns, including the hymn to Ištar-Šawuška contained in the *Sammeltafel* KUB 24.7 (CTH 717, NS), also containing the Tale of the Sun god, the cow, and the fisherman (CTH 363). The latter composition is seemingly unrelated to the hymn because Hurrian origin cannot be proven for the narrative.<sup>99</sup>

KUB 27.43 (CTH 791, NS) is regarded as an edict and can be dated to the reign of Arnuwanda I, like KBo 9.137+ (CTH 778.I, MS) mentioned above.<sup>100</sup> The MS tablet Kp 05/226 (= DAAM 1.11; CTH 791), found at Kayalıpınar/Šamuha, is exceptional because it contains a historical narrative in Hurrian concerning military campaigns in Syria.<sup>101</sup>

<sup>96</sup> Cf. KUB 29:v, with fn. 1.

<sup>97</sup> Cf. Trémouille 2000:146.

<sup>98</sup> Cf. Rutherford 2001:603–604.

<sup>99</sup> Cf. Güterbock 1983.

<sup>100</sup> De Martino 2017:155.

<sup>101</sup> Cf. de Martino 2017:155, Wilhelm 2019:197–200.

## 4 The Status of Hurrian in Anatolia

## 4.1 Areal Convergence and Local Phenomena of Interference

While the role of Hurrian in the transition of the Hittite culture from protoliterate to literate and in its inclusion in the cuneiform koiné has been emphasized by some authors,<sup>102</sup> there is no evidence of an active status of the Hurrian language in Anatolia before the pre-imperial phase of Hittite history, which roughly coincided with the full penetration of the Hurrian demographic element in Syria and Cilicia and the political expansion of the kingdom of Mittani. The brevity of the phase during which Hurrian texts were written down in Anatolia argues for caution, and the tendency of the Hittite scribes to use very few heterograms (Akkadograms and Sumerograms) when writing in Hurrian (except for oracular texts; cf. Görke 2020) may also be indicative of a lack of familiarity with the language, supporting the conclusion that Hurrian culture was widely accepted in central Anatolia, but the Hurrian language maintained a rather exotic status.

Hurrian would participate in some phenomena of alleged areal convergence in Anatolia, including relative pronouns that behave adjectivally and are inside the relative clause,<sup>103</sup> a morphologically rich Wackernagel position in the clause architecture, and a tendency to exclude sonority at word onset (through the absence of initial trills and the apparent word-initial neutralization of phonemic voiced/voiceless opposition).<sup>104</sup> If these convergent traits are true areal phenomena that affected the known Anatolian languages (but cf. also Chapter 16), Hurrian, and, to some extent, Hattian, the convergence would have occurred far earlier than the era when the Hittite archives were established and would have been reflected there as the result of a previous stage that we can only indirectly and uncertainly observe.

In historical times, inside Anatolia, Hurrian interference behavior was limited in comparison to the integration with local traditions and languages in northern Mesopotamia and Syria. At the level of grammatical interference, Hurrian remains the best candidate model language for the introduction of unexpectedly marked number in Luwian genitival adjectives, which occurred mostly in Kizzuwatna as in the following example (note that the number of the possessed is unexpressed because the ablative-instrumental does not mark the number):<sup>105</sup>

<sup>102</sup> Above all Hart 1983.

<sup>103</sup> The structure of relativization in Hurrian is more complex; cf. the discussion in Giorgieri 2000a:239–242.

<sup>104</sup> Cf. Bianconi 2015:139.

<sup>105</sup> See Yakubovich 2015a for this example. For a critical position, see Simon 2016.

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Expected Luwian

maššan = ašš = ati

god POSS INSTR

with those of the god(s)

Attested Kizz. Luwian

maššan = ašš = anz = ati

god POSS PL INSTR

with those of the gods

Hurrian

en(i) = n(a) = až = (e) = ae

God ART PL GEN INSTR

with those of the gods
```

The position of the number morpheme depends on the structure of the nominal form in the two languages, but the insertion of it in Luwian seems to depend on the influence of the agglutinative grammar of Hurrian in an area of coexistence of the two idioms.

While this hypothesis has been criticized (Simon 2016), we still find it extremely likely, even though the presence of possessive adjectives unusually marked for number has been highlighted in other areas and traditions (for example, in a variety of Luwian used in the city of Tauriša). That is no reason to doubt the Hurrian explanation, which was originally proposed by Yakubovich 2010. Indeed, the vast majority of the occurrences remain connected with Kizzuwatna, as they occur in the ritual traditions of Kuwattalla/Šilalluhi, while the presence of a few cases in Tauriša can be explained by assuming that formulas and materials from the Kizzuwatna tradition circulated widely in Hittite Anatolia, just as Kizzuwatna's Hurrian traditions did (see however Chapter 15, § 3.3, for a longer discussion). Nor can we exclude that Hurrian and Luwian materials circulated together.

One may accept or reject the hypothesis of this interference-driven grammatical innovation in some varieties of Luwian. However, if the reconstruction is correct, this would be the only case of true morphosyntactic interference between Hurrian and an Anatolian language during the Late Bronze Age, implying a lack of evidence for intense interactions, changes in grammar, and language shifts beyond Cilicia.

## 4.2 Lexical Phenomena Involving Hittite and Luwian

Loanwords, which circulate readily, can be traced more easily than grammatical interference. Words of Hurrian origin emerge in the lexicon of Late Hittite, beginning sometime during the 15th century BCE, probably at the same time that Hurrian religious and ritual material spread widely in the Hittite kingdom. It is certainly tempting to propose the reign of Tuthaliya I as a date for this tendency, but phenomena hardly ever begin at a specific point in time, so the onset was probably gradual. This date, although merely approximate, is not only the starting point for the production of copies of Hurrian texts in the Hittite archives but also the terminus post quem for the attestation of Hurrian linguistic material. In other words, if one excludes a limited number of Hurrian loanwords into Assyrian attested in the Middle Bronze Age texts from the  $k\bar{a}rum$  archives, there is no evidence that Hurrian played any role in the area of Hatti before the 15th century BCE.

While lexical items are generously represented in ancient corpora that stem from contact scenarios—certainly more generously than circulating or shared grammatical constructs—they are not very informative per se because loanwords and foreignisms need to be contextualized in terms of variation and function to use them to assess the sociolinguistic status of a code in a multilinguistic and multicultural environment.

Morphologically, as will be discussed in Chapter 14 (§ 5), most Hurrian words that occur in Hittite contexts are adapted to the morphology of the target language. Verbs borrowed from Hurrian have not emerged from the sources. Hurrian nominals, on the other hand, generally end with a vowel that is graphically rendered as an /i/. Although it has been proposed (Giorgieri 2000a:198) that this element was reduced to an indefinite vocoid, it appears that the Hurrian words that were immediately reanalyzed as vowel-themed nouns were treated as *i*-themes. Based on the data collected, these mostly included names of realia or concepts employed in (or related to) ritual or mantic contexts, such as allašši- 'queenship' (as the name of an enthroning ritual), harni- (meaning unknow), hašari- 'oil', and nipašuri- (part of the liver mentioned in omens). These rather rough adaptations are poorly conducive to linguistic or sociological analyses. If they do not occur in the stem form, they tend to appear in a dative-locative case in -iya, which, according to Haas and Wilhelm (1974:130-134), may calque a Hurrian essive with a terminative function that is lost in the Mittanian variety of the language. Since they show no traces of a path of borrowing or adaptation, the only information they provide is that they pertain to religion and probably behave as technical terms in a jargon that might be termed the 'Hurrian of religion and the ritual sphere.'

A little more informative are those loans that derive from Hurrian, either ultimately or as an intermediate step, and exhibit morphological integration into Hittite via Luwian intermediation. The model for most of these words are proper Hurrian nouns, and the integration normally follows the path of an assignment of an *i*-theme and then a reanalysis as a dental stem, based on the Luwian -*it*- dental stems. In some cases, the two adapted inflections, *i*-stem and dental stem, are both maintained. The most typical example is *ahrušhi*(*t*)-'censer', certainly borrowed from Hurrian and attested also as a common gender *i*-stem (*ahrušhi*-) (see Giusfredi and Pisaniello 2020 for further examples and discussion). In very rare cases, such as api(t)- 'pit', the path of adaptation appears to be the same but the language of origin is not Hurrian (in this case, possibly Sumerian ab 'window'; see Chapter 14). These cases allow us to recognize Hurro-Luwian mediation in the acquisition of a limited number of Mesopotamian words into Hittite.

While we will provide more details about the borrowing and morphological adaptation of foreign words into Hittite in Chapter 14, it should be observed here that both the primitive words borrowed from the 'Hurrian of religion and the ritual sphere' and adapted loans that reached Hittite via Luwian are attested from the pre-imperial phase, with no occurrences that predate the historical phase when connections between Hatti and Kizzuwatna intensified. Thus, Kizzuwatna appears the most likely source for the integration of Hurrian words into the Hittite lexicon. Moreover, Hurrian-Hittite lexical interference appears to have been a very circumscribed phenomenon diachronically and sociolinguistically, given that virtually all of the Hurrian loanwords pertain to the fields of religion and magic.

## 5 Concluding Remarks

Hurrians were in contact with the peoples of Anatolia in relatively early phases. However, there is no conclusive evidence of intense cultural or linguistic contact during the Middle Bronze Age or the earlier years of the Late Bronze Age. The situation changed around the 15th century, with the intensification of the relationships between Hatti and the Hurrianized kingdom of Kizzuwatna. This is also the phase during which the first Hurrian texts begin to be composed or copied in Hattuša, with a sharp increase in production in the early to mid-14th century, when queens of Cilician origin began to marry into the royal family of Hatti.

While the Hurrian language and literature were probably mastered by members of the Hittite court during the pre-imperial age, their penetration starts to become indirect relatively quickly. Hurrian culture was generally transmitted by translations into Hittite during the imperial age, although Hurrian materials were still used in ritual practice. This scenario coincides with that proposed by de Martino (2017:158): Hurrian was (...) read and written among small circles of erudite persons, such as those who collected the tablets of the 'Song of Release' and of the Parables (...). The provenance of these people is unknown and we cannot exclude that they were priests or scribes of Kizzuwatnean origin. No element supports the hypothesis that the Hurrian language was also widespread among the population of central Anatolia.

The linguistic evidence is consistent with this interpretation. Hurrian grammatical interference is only attested with Luwian for the Kizzuwatna region, while no shifting features in Late Hittite are conducive to a Hurrian model language. Furthermore, Hurrian foreignisms and loanwords in Hittite—excluding those in Old Assyrian that were probably borrowed outside of Anatolia during the Middle Bronze Age—belong chiefly to the fields of ritual, religion, and magic. No evidence indicates that they were part of the general lexicon of the language spoken in Hattuša or elsewhere in the core area of the Hittite world.

# Cuneiform Luwian in the Hattuša Archives

I. Yakubovich

# 1 What Is (Cuneiform) Luwian and Where Is Luwiya?

## 1.1 The Luwian Corpus in Cuneiform Transmission

Unlike most other languages of ancient Anatolia, the Luwian language is attested in two different writing systems: the Anatolian adaptation of Mesopotamian cuneiform (cf. Chapter 6) and Anatolian hieroglyphs.<sup>1</sup> It was previously believed that these two corpora corresponded to two closely related languages, named faute de mieux Cuneiform Luwian and Hieroglyphic Luwian. By now it has become clear that the differences between some Luwian dialects attested in cuneiform transmission exceed the postulated distance between Cuneiform and Hieroglyphic Luwian, and one of the dialects attested in cuneiform transmission, namely Hattuša Luwian, displays a particular resemblance to the early form of Hieroglyphic Luwian. Therefore, it makes more sense to speak of one Luwian language, and reserve the terms 'cuneiform' and 'hieroglyphic' for the writing systems associated with specific Luwian corpora (Yakubovich 2010:68-73). However, all the Luwian cuneiform texts predate the abandonment of Hattuša, whereas the bulk of Luwian hieroglyphic texts postdate this watershed event in ancient Anatolian history, so the Luwian cuneiform corpus can be used as the basis for the study of areal phenomena involving the Luwian language before the 13th century BCE. This justifies the separate treatment of Cuneiform Luwian and Hieroglyphic Luwian in the present volume. This chapter will address the evidence of Luwian cuneiform texts, while the Hieroglyphic Luwian inscriptions will find a detailed treatment in Volume 2.

As far as we know, the term 'Luwian' does not reflect the name given to the language by its speakers but rather harks back to its Hittite designation. Hit-

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tite cuneiform texts feature the adverb *luwili* 'in Luwian, as a Luwian', formed according to the same model as *nišili* 'in Nesite/Hittite'.<sup>2</sup> Although the adverb *luwili* frequently precedes the direct speech utterances recorded in Hittite, sometimes what follows it is in a different language, which is patently related to Hittite (Mouton and Yakubovich 2021:26). Accordingly, European scholars call this language Luwian, while the variant Luvian appears in the publications of American and some US-trained scholars. The term *luwili* is probably derived from the geographic name Luwiya, which is likewise attested in Hittite transmission and will be discussed in §1.3. Regrettably, exactly what the Luwian speakers called their language, either in the second millennium BCE or later, remains unknown.

Luwian texts are still imperfectly understood, and this holds in particular for those of the second millennium BCE. The bulk of the Luwian passages in cuneiform are embedded in Hittite religious compositions. In some cases, the Hattuša scribes translated the embedded incantations into Hittite. In other cases, they chose not to do so, presumably to preserve the ritual efficacy. The incantations tend to seem esoteric to modern readers, and many of the lexemes used in them are specialized terms deployed in witchcraft or other religious performances. Therefore, our ability to understand the Luwian embedded passages largely depends on the availability of Hittite adaptations or comparison with the Hittite narrative frame, which frequently makes it possible to predict their content. The situation is exacerbated by the fragmentary condition of nearly all of the relevant texts: the incantation may be preserved but the narrative frame lost or both may be preserved only partially. The contrast between lexical and grammatical interpretations must also be highlighted: it may be harder to interpret the content than the grammatical structure of some sentences because our command of Luwian grammar surpasses our grasp of the Luwian lexicon.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> The adverbial suffix *-li* is not limited to the derivatives of language names but also occurs in other Hittite modal adverbs, e.g., *šiunili* 'like a god', UR.BAR.RA-*ili* 'like a wolf'. The adverb  $[GU]_4$ .MAH-*li* 'like a bull' is possibly attested in Ištanuwa Luwic (KBo 4.11 obv. 30). Furthermore, the suffix *-li* may be cognate with the Lydian dative ending *-λ*, which can function, among other purposes, as a marker of *dativus modi*. If so, it is possible that the adverbial suffix \*-*li* could be reconstructed on the Proto-Anatolian level, although this would not imply that one could combine it with language names in those times.

<sup>3</sup> Compare and contrast Hawkins 2003:130: "These Luwian 'texts' are mostly passages of the language quoted in Hittite texts as incantations and cultic songs, thus not especially coherent or intelligible, also not usually well preserved." The more optimistic tone of the present account is meant to reflect the progress in the interpretation of Luwian cuneiform texts achieved in the last decades.

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With very few exceptions, the Luwian embedded passages were not composed by Hattuša scribes, but rather reflected direct speech utterances that they more or less faithfully recorded. Therefore, the cuneiform script of the available Luwian passages is essentially the same adaptation of the Mesopotamian cuneiform that was used in Hattuša for Hittite texts, including those that framed the Luwian insertions (Hawkins 2003;129). There are, however, some orthographic peculiarities. The sparing use of Sumerograms and the extreme rarity of Akkadograms in the preserved Luwian passages correlates with the passive role of scribes in their transmission: presumably the 'stenographers' did not have the time or inclination to transpose the recorded utterances into the complex heterographic code that is typical of the Hittite formulaic passages (cf. Kudrinski 2017:278–279). Numerous instances of multiple plene spellings (vowel replications) in Luwian forms—for example, *da-a-u-i-iš* 'eye', *ta-a-wi*<sub>5</sub>-<sup>1</sup>*ya*<sup>1</sup>*-a-an* 'toward', [*ti*]-<sup>r</sup>*i*<sup>1</sup>*-ti-i-ta-a-ti* 'with the eye pupil(s)' may testify to the care that scribes took in transliterating this less familiar language.<sup>4</sup>

In addition to the embedded passages, the Luwian cuneiform corpus also features isolated forms, likewise mostly embedded in Hittite texts. From the late 14th century BCE onwards, they were commonly marked with special signs that were otherwise used to accompany glosses in certain cuneiform traditions and are therefore known as '*Glossenkeil* words' after the German term for gloss wedge.<sup>5</sup> Furthermore, there are Luwian glosses added to some Akkadian texts (Giusfredi 2012; Pisaniello and Giusfredi, 2021). Some of the texts with *Glossenkeil* words are attributed to the same kings that commissioned the first monumental hieroglyphic inscriptions in the Luwian language. Although the *Glossenkeil* words yield a smaller corpus than the embedded Luwian sentences, they are important for three reasons. First, they frequently complement the lexicon known from other sources, being embedded in texts of various genres, many of them secular. Second, it is often possible to guess their meanings from the surrounding Hittite context. Third, they tend to preserve a different dialect than the bulk of the Luwian incantations and conjurations (cf. § 1.2).

The patchwork character of the Luwian cuneiform corpus explains why its systematic study trails the investigation of Hittite texts by several de-

<sup>4</sup> A different explanation offered for the unexpected word-initial *plene* spellings in Luwian (Simon 2010a)—that they were used as markers of a glottal stop in this position—currently remains sub judice. In particular, one may note the lack of systematic overlap between this scribal device and the use of word-initial  $\langle a \rangle$  in hieroglyphic texts, which likewise has been claimed to represent a combination with the word-initial glottal stop (Kloekhorst 2004).

<sup>5</sup> For an in-depth discussion of this phenomenon and a representative list of *Glossenkeil* words occurring in a variety of textual genres, see van den Hout 2007.

cades.<sup>6</sup> The publication of KUB 35 by Heinrich Otten in 1953 introduced the largest fragments that contained Luwian passages, including those of CTH 758–763, to the community of cuneiform scholars, while Laroche 1959 represented the first Cuneiform Luwian lexicon. Another accomplishment of Emmanuel Laroche was the preliminary classification of the published Hittite-Luwian texts by genre (CTH 757–773 in Laroche 1971). New opportunities for the study of our corpus emerged with Otten's autographic edition of another large group of Hittite-Luwian fragments, which was published as KBo 29 in 1983. This project was coordinated with Frank Starke's attempt to transliterate all of the fragments with Luwian insertions, which culminated in the publication of Starke 1985.

The beginning of the twenty-first century marked a new stage in Luwian studies. The work by J. David Hawkins and Anna Morpurgo-Davies on deciphering Luwian hieroglyphic texts greatly improved our understanding of Luwian grammar and the Luwian lexicon. The first collective monograph devoted to the subject, published in 2003, contains a grammatical survey of the Luwian language based on the entire corpus, regardless of the writing system used (Melchert 2003b). This pioneering paper has not lost its value, although for best results it should be read in conjunction with later surveys (Yakubovich 2015a and Melchert 2020a). The growth of the accessible Luwian cuneiform corpus and improved understanding of Luwian morphology made possible the production of a new Luwian lexicon (Melchert 2022).

#### 1.2 Luwian Dialect Geography

Luwian belongs to the Anatolian group of languages and thus is a close relative of Hittite. The relationship between Luwian and the Palaic language, likewise attested in cuneiform transmission, is even closer. For example, the Luwian Sun god Tiwad and the Palaic Sun god Tiyat are derived from the same stem, whereas the Hittite cognate of this stem is *šiwatt*- 'day'. However, Palaic and Luwian were not mutually understandable and thus represented separate languages. The closest relatives of Luwian are the languages of the Luwic group,<sup>7</sup>

<sup>6</sup> For attempts to address the Luwian language in cuneiform transmission that predated the publication of all of the relevant primary sources, see Hawkins 2003:130.

<sup>7</sup> The term 'Luwic' was coined by H. Craig Melchert for the subgroup of the Anatolian languages comprising Luwian and its closest relatives (Melchert 2003b;177, fn. 7) and has been widely accepted among modern Anatolianists. The earlier term 'Luwian languages,' which had the same meaning, would be confusing in discussing the Luwian dialects treated in this section. A controversial topic is whether the second-millennium dialects of Luwian and Luwic can be differentiated (cf. § 1.3).

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which are best attested through alphabetic inscriptions of the first millennium BCE. The most important among those are Lycian and Milyan, known from the rock-cut tombs and other monuments of classical Lycia, and the recently deciphered Carian language, spoken in Caria in the extreme southwestern part of Anatolia. Previously it was believed that at least some of these languages were direct descendants of Luwian. Now most linguists have embraced the view that the Lycian and Carian languages are more closely related to Luwian than to Hittite or Palaic but are not the direct descendants of the known Luwian dialects. One may wonder whether those who spoke their ancestors in the second millennium BCE would have understood some of the attested Luwic dialects (in particular, Ištanuwa Luwic), but in the absence of any preserved Proto-Lycian or Proto-Carian texts, it is impossible to answer this question.

When we turn to the attested dialects of the second millennium BCE, traditionally classified as Luwian, there are sufficient grounds to distinguish between Kizzuwatna/Lower Land Luwian, Tauriša Luwian, Hattuša Luwian (Empire Luwian), and Ištanuwa Luwian/Luwic. This proposed taxonomy is based on the conventional Luwian corpus (contrast § 1.3) and is by no means exhaustive, given the almost certain existence of cuneiform fragments bearing other Luwian dialects. Future additions to the Luwian corpus may make possible the more precise dialectal identification of some passages. For now, these are the only four dialects that can be defined from their linguistic peculiarities.<sup>8</sup>

The best-known dialect (or dialectal continuum) is associated with a vast area stretching from the Lower Land, situated on the central Anatolian Plateau, to Kizzuwatna, roughly corresponding to classical Cilicia. The texts featuring minor Luwian insertions that are securely associated with the Lower Land are the festival of Huwaššanna (CTH 690–694), a goddess worshipped as the divine queen of Hupišna, and the rituals attributed to the Old Woman Tunnawiya (CTH 409), whose name links her to the town of Tunna (Mouton and Yakubovich 2021:28).<sup>9</sup> Furthermore, the extensive Luwian incantations associated with the earliest layers of the Kuwattalla tradition (CTH 761) show striking parallels to the incantations of the Tunnawiya tradition and therefore must also be associated with the Lower Land (Mouton and Yakubovich 2021:30–31). In

<sup>8</sup> Compare DCL, which treats the dialects of Kizzuwatna and the Lower Land as independent entities and classifies the Songs of Lallupiya as a separate dialect. Melchert's classification appears to be driven by the desire to provide the maximum number of geographic attributions to the available forms. For the earlier research on Luwian dialects, see Rieken 2017a:301– 302.

<sup>9</sup> Although there is only a single, sentence-long Luwian passage attested in a ritual explicitly attributed to Tunnawiya (Starke 1985:43–46), two other fragments with Luwian insertions can be added to the Tunnawiya tradition through textual comparison (Pisaniello 2015b).

contrast, a Hittite-Luwian ritual text that had paramount importance for the initial decipherment of the Luwian language is attributed to Zarpiya, a physician from Kizzuwatna (CTH 757). In addition, there are reasons to think that Old Woman Šilalluhi, who was responsible, at least in part, for the secondary adaptation of the Kuwattalla tradition, hailed from Kizzuwatna.<sup>10</sup> It does not seem possible to discriminate between the Luwian passages emanating from Kizzuwatna and the Lower Land on purely linguistic grounds. A typical linguistic feature of this dialectal continuum is the proleptic construction, which will be addressed in more detail in § 2.2.<sup>11</sup>

The Hittite-Luwian fragments collected under CTH 764-766 can be subsumed under the label of the Tauriša tradition. They feature an unusual divine triad, namely, the Sun god, the goddess Kamrušepa (probably the adaptation of the Hattian Katahzifuri), and their offspring, the Tutelary God of Tauriša (Mouton and Yakubovich 2021:38-40). While the Luwian Sun god Tiwad is also common in the Hittite/Luwian texts from Kizzuwatna/the Lower Land, the other two deities are not grouped with him there. The texts of the Tauriša tradition belong to the genre of conjurations defined by means if Hittite hukmais or Akkadographic ŠIPAT as opposed to the Sumerograms SISKUR(.SISKUR) 'rituals' or EZEN<sub>4</sub> 'festivals'. Their Hittite colophons do not mention a specific performer but specify the occasion of their performance—usually childbirth or children's diseases. The beneficiaries of these performances are known as DUMU.NAM.LÚ.U<sub>19</sub>.LU, meaning 'human child' or 'human being.' The conjurations are usually shorter than rituals, but their Luwian portions may contain not only incantations as such but also historiolae. The town of Tauriša was situated in northern Anatolia, probably to the northeast of Hattuša. The clitic particle /=wa/ is used frequently in Tauriša Luwian but not in Kizzuwatna Luwian,

Old Woman Šilalluhi is probably to be identified with the 'performer from Ziluna' in KBo 29.3+ i 1, a fragment assuredly belonging to the Kuwattalla tradition; the town of Ziluna was situated along a road from Hattuša to Karkemiš, i.e., within or near the borders of Kizzuwatna (cf. Sasseville 2020a:113). Furthermore, the practitioner mentioned in the Hittite-Luwian fragment KUB 35.8, whose name is lost in the lacuna but whose stated land of origin is Kizzuwatna, may be the same Old Woman Šilalluhi.

Noteworthy among the negative innovations that apparently characterize the Kizzuwatna/Lower Land corpus are the elimination of the genitive case forms (Mouton and Yakubovich 2021:47–48), infinitives in /-una/ (Yakubovich 2010:44, fn. 35), and imperfectives in /-tsa-/ (Yakubovich 2010:55). A theoretical possibility remains that the last two negative innovations merely reflect the limitations of our corpus, although the doubts of Sasseville 2020b:439 are probably exaggerated. Note that the few alleged cases of Kizzuwatna Luwian genitives in /-assa/ are amenable to an alternative explanation (Melchert 2012:283–284).

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whereas the clitic particle  $=g^wa$  appears to represent an exclusive feature of Tauriša Luwian (Mouton and Yakubovich 2021:42–43).<sup>12</sup>

The Luwian dialect of Hattuša, which apparently spread through the Hittite Empire during the last century of its existence, was discussed in some detail in Yakubovich 2010:15-73 (but cf. Melchert 2003b:171-175). In cuneiform transmission, it manifests itself in Glossenkeil words and other Luwian foreign words occurring in Hittite texts. Presumably most of these forms reflect code mixing in dictation to Hattuša scribes, but some of them may have entered the scribal jargon. A borderline case consists of isolated Luwian forms in texts of Kizzuwatna inspiration: depending on whether they were written down by Hattuša or Kizzuwatna scribes, such texts may or may not feature Hattuša Luwian forms (cf. Chapter 15, § 5). The lack of cohesive cuneiform passages, or even sentences, written in Hattuša Luwian limits our abilities to investigate this dialect, but an innovation that separates it from both the Kizzuwatna/Lower Land continuum and Tauriša Luwian is the spread of the nom.pl.c. ending /-ntsi/ to acc.pl.c., at the expense of the inherited ending /-nts/. This feature is shared by the Luwian hieroglyphic texts from the Neo-Hittite states of the first millennium BCE, implying that their dialect (Late Luwian) was a descendant of Hattuša Luwian. Therefore, what is empirically observed as the Luwian dialect of Hattuša can alternatively be called Empire Luwian.<sup>13</sup>

The largest group of festival texts with Luwian (or Luwic) insertions addresses the celebrations that are associated with the towns of Ištanuwa and Lallupiya (CTH 771–773). Both groups feature repeated indications that the participants sing (SÌR-*RU*) the Luwian passages, while the form /paju/ 'may he give' represents their common dialectal archaism.<sup>14</sup> The location of the town of Lallupiya is unknown, but Ištanuwa is usually associated with the Sakarya river

<sup>12</sup> For a more detailed discussion of the particle /=gwa/, cf. Simon 2020a.

<sup>13</sup> The necessity of choosing between the terms Hattuša Luwian and Empire Luwian is largely a product of the use of the traditional scholarly designation 'Hittite Empire' for what was locally known as KUR <sup>URU</sup>HATTI 'Kingdom of Hattuša'. At some point, the Luwian koiné formed in or around the town of Hattuša began to spread as the standard written dialect throughout the Kingdom of Hattuša; the term Hattuša Luwian could neutralize the distinction between these two stages. Another resource for studying Empire Luwian is the onomastics of Hattuša in the last century of its existence (cf. Yakubovich 2013 and here, below, the bottom of § 3).

<sup>14</sup> Compare also the fragment KUB 35.133+, which belongs to a festival text mentioning the *ašuša(tal)la*-people (CTH 665). It contains lengthy Luwian incantations, which mention the town of Hattuša but cannot be assigned to the dialect of Hattuša on linguistic grounds. A possible explanation for this discrepancy is the early composition date of CTH 665, which predates the formation of a Hattuša dialect. The *ašuša(tal)la*-people are also mentioned in connection with the festival of Ištanuwa (KBo 4.11 obv. 22).

valley in the northwestern part of Anatolia. The choral singing accompanying the ritual acts in the Ištanuwa and Lallupiya traditions finds parallels in the texts of Hattian festivals and in archaic and classical Greece (Hutter-Braunsar 2022) but not in other Hittite-Luwian texts.<sup>15</sup> Because the Luwian insertions in the texts of CTH 771–773 are overwhelmingly short and only indirectly related to the Hittite matrix text, they are particularly difficult to interpret. Yet, based on what we know, it is highly likely that the dialect of Ištanuwa also represents an outlier among the dialects treated in this section. According to Melchert 2022, its idiosyncrasies concern phonology (the likely absence of the change \**dw*- > /k<sup>w</sup>-/), morphology (3sg.impv. ending -*u*), and semantics (=*mi* 'to me' used in a nonreflexive function).<sup>16</sup> Those three cases must represent archaisms. The sociolinguistic and historical implications of this analysis are considered in the following section.

The discussion above should suffice to demonstrate that Luwian occupies a unique position among the ancient languages of Anatolia in the degree of its attested dialectal variation. The contrast with Hittite should be particularly clear: the matrix language of the texts of all of the four Luwian dialects hardly varies except for the geographically irrelevant distinction between Old, Middle, and New Hittite. The reason for this contrast is the erstwhile oral character of the embedded Luwian passages. The observed dialectal differences demonstrate beyond reasonable doubt that the Luwian language was spoken in several distinct areas of Asia Minor in the second half of the second millennium BCE.

## 1.3 The Location of Luwiya and Luwian Dialectal Filiation

As mentioned in §1.1, the appellation Luwian, as applied to the language, is derived from the geographic name Luwiya. Therefore, determining the location of the land of Luwiya would directly impact the discussion of the Luwian homeland. Unfortunately, the land of Luwiya is mentioned only in the Hittite Laws, which complicates its identification. The laws distinguish between the land of Hatti (Hattuša), which constituted the core of the kingdom, and the lands of Luwiya and Pala, which were subject to certain legal provisions that did not apply elsewhere in the kingdom. For example, the murder of a merchant

<sup>15</sup> References to singing in Luwian also occur in KUB 35.1 and KUB 35.2(+), two apparently related festival fragments, which probably do not belong to the Ištanuwa tradition. Unfortunately, the Luwian insertions in these texts are limited to some isolated foreign words and so these texts can hardly be called Hittite-Luwian; nor can their Luwian dialect be determined.

<sup>16</sup> See the lemmata *dwaya-* 'to fear, be afraid' (?), *pāi-* 'to give' (?), and *-mi* 'for/to me' (?) in DCL for examples of these idiosyncrasies.

was generally punishable by a fine of 100 minas of silver, but the assailant was further expected to replace the merchant's goods in the lands of Luwiya and Pala (Hoffner 1997:19). Abducting a free person from the land of Hatti and taking him or her to the land of Luwiya could lead to the summary confiscation of the abductor's property, whereas the abduction of a Luwian national and the delivery of that person to the land of Hatti could be reversed by law but was not otherwise punished (Hoffner 1997:29–31). The most straightforward interpretation of this discrepancy is that the inhabitants of Luwiya and Pala enjoyed fewer legal protections in Hatti than the populace of its core area.

One consideration that helps to constrain the geographic location of Luwiya is its replacement with Arzawa in a passage of a late version of the Laws. Unfortunately, this cannot be taken as direct evidence, because the core area of Arzawa was demonstrably situated on the Aegean coast, which did not belong to Hattuša when the Hittite Laws were first recorded. It seems likely, however, that it reflects the assumed location of Luwiya on the western periphery of the Kingdom of Hattuša, which was contested with Arzawa at the time that the revised version of the Laws presumably came into being.<sup>17</sup> Furthermore, it is possible that Purušhanda, an important town to the west of Kaneš/Neša and the westernmost destination of Old Assyrian trade, represented an important center of the Luwian-speaking area in the early second millennium BCE (Forlanini 2017:136 with fn. 77). Finally, the Hittite Laws describe Luwiya as a peripheral location under Hittite jurisdiction: the reward for bringing back a runaway slave increased progressively with distance, depending on whether the escapee was returned from a location nearby, this side of the river, that side of the river, Luwiya, or an enemy land (Hoffner 1997:32).<sup>18</sup> The cumulative weight of these arguments supports the localization of Luwiya in the western part of the central Anatolian Plateau.

While the land of Luwiya arguably constituted the Luwian core area in the late third and early second millennium BCE, Luwian speakers must have spread throughout Anatolia by the time the Hittite Laws were composed. The absence

<sup>17</sup> The precise motivation for replacing Luwiya with Arzawa in the late version of the Hittite Laws remains controversial. For possible scenarios, see Yakubovich 2013:111–114. For different approaches to this problem, cf. Hawkins 2013a:4–5, Matessi 2016:138–139, and Gander 2017:263. Another proposal has been made by Stephen Durnford (pers. comm.): Luwiya was replaced by Arzawa because at the time the latter was the most important polity where a variety of Luwic was the main language. Notably, none of these scholars, unlike many earlier researchers, takes this replacement as proof that Luwiya and Arzawa were the same place.

<sup>18</sup> Cf. Chapters 4 and 5 for a detailed discussion of Luwiya as a peripheral region of the Hittite kingdom, with Hatti as the kingdom's core.

of the toponym 'Luwiya' in later Hittite texts arguably reflects its growing anachronism as a result of further Luwian migrations, some of which presumably correlated with the emergence and spread of the attested Luwian dialects. Hattuša Luwian probably developed last. Its first traces can be observed in the 14th century BCE (Yakubovich 2010:33–36). The spread of Luwian across the Antitaurus mountain range from the Lower Land to Kizzuwatna was possibly facilitated by the expeditions of Hattušili I and Muršili I to southeastern Anatolia in the 17th and 16th centuries BCE, although it is risky to link military campaigns to large-scale migrations.

A far more intriguing case is that of Tauriša Luwian, recently identified in Mouton and Yakubovich 2021. Mouton and Yakubovich suggest that Luwian speakers had a presence in the Hattuša region independently from their presence in the town. The Tauriša dialect is distinct from that of Hattuša, and its important isogloss is the high frequency of the particle =wa. This raises the possibility that the Luwian speakers who triggered the language shift in Hattuša in the 14th to 13th centuries BCE were not the newcomers from the Lower Land or Kizzuwatna but rather those who lived next door. The timing of the initial arrival of Luwians in north-central Anatolia is uncertain but possibly could be relegated to prehistory. This is not a new proposition: even before the identification of the Tauriša tradition, Goedegebuure (2008:171-174) argued that Luwian newcomers had triggered the syntactic restructuring of the Hattian language (cf. Chapter 15, § 3.1). An alternative solution would be interpreting the dialect of Tauriša as the outcome of a resettlement (or perhaps transportation) of the Luwian population under the direction of Hattuša in the historical period. The choice between these two solutions must take into consideration the contactinduced features of Tauriša Luwian (cf. § 2.2 below).

The adverb *luwili* introduces the Luwian insertions in the Kizzuwatna/ Lower Land dialect as well as that of Tauriša. The absence of embedded cuneiform passages in Hattuša Luwian need not to imply that the adverb *luwili* was not used in connection with the utterances in the Hattuša dialect. There are texts in which this adverb introduces the direct speech of Hattuša residents, although it is rendered in Hittite (Yakubovich 2010:264–265). The cases of the Songs of Ištanuwa and Lallupiya are different. The lexeme *luwili* is not attested in this corpus, but the adverb *ištanumnili* 'in Ištanuwian' is deployed once in connection with singing in CTH 772, albeit not in a Luwian context (Starke 1985:319 with fn. 117a). The implications of this finding do not seem to have been fully appreciated in earlier studies. The contrast between the expressions "he sings in Luwian," in KUB 35.1 and KUB 35.2(+), and "he [s]ings in Ištanuwian," in KUB 53.15+ ii 15', suggests that the Hattuša scribes did not regard the Ištanuwa dialect as a variety of Luwian. From their perspective, 'the language of Ištanuwa' had the same taxonomic status as 'the language of Luwiya' or 'the language of Pala.'<sup>19</sup>

Naturally, the Hattuša scribes may have been mistaken in their assumptions, but there are independent reasons to give them the benefit of the doubt. On the one hand, as mentioned in the previous section, the dialect of Ištanuwa is the most aberrant and archaic of the attested 'Luwian' dialects. On the other hand, while the land of Luwiya is a plausible starting point for the eastward migrations to the Lower Land and then Kizzuwatna, Luwian migrations to the north, to the Sakarya river valley, require special pleading.<sup>20</sup> Without assuming such population movements, one may hypothesize that the dialect of Ištanuwa and Lallupiya belonged to the Luwic continuum but was distinct from Proto-Luwian, spoken further south in about 2000 BCE. If the region of Ištanuwa did not belong to Luwiya, its inhabitants had no reason to call themselves Luwians (whatever the term was in the Luwian language). If the people of Ištanuwa remained autochthonous at the time of the Luwian migrations, they had no reason to identify themselves with Luwiya at a later point either. The Hattuša scribes who recorded the festival of Ištanuwa may have been aware of this fact, but if they were familiar with Luwian, they may also have reacted to the perceived differences between the Ištanuwa dialect and the Luwian that they spoke/learned at home.

The formal implication of this hypothesis is that the term Ištanuwa Luwic is probably to be preferred to Ištanuwa Luwian. The distinction may seem to be hairsplitting, but the issue is nonetheless important given the parallel with the sociolinguistic situation in Arzawa. The Arzawa core area can be identified with the Meander (Menderes) valley and the region surrounding it, where the Carian and Lydian languages were spoken in the first millennium BCE. The Arzawa personal names transmitted in cuneiform are surely Luwic but structured differently than those associated with Hattuša Luwian, and there are no textual indications that the population of Arzawa spoke *luwili*. Caution dictates that one should not prejudge the question of whether the dialect of Arzawa is more closely related to Luwian or Carian, and therefore Arzawa Luwic was pro-

<sup>19</sup> Note that the adverbs *ištanu-mn-ili* 'in Ištanuwian' and *palau-mn-ili* 'in Palaic' have identical suffix chains. Another similarity between these two adverbs is that neither is used for introducing Ištanuwian and Palaic utterances, even though such utterances are attested elsewhere. Objectively, there are, of course, no doubts about the Ištanuwian dialect clustering with 'mainstream' Luwian as opposed to Palaic.

<sup>20</sup> There is an archaeological interpretation suggesting that the upper Sakarya river valley (classical Phrygia) was a starting point for the spread of a wheel-made pottery to vast areas of central Anatolia in 2200 to 1900 BCE, whether or not it was accompanied by population movements (Sari 2013;310–311).

posed as a neutral label (Yakubovich 2013:116). But if one extends the distinction between Luwian and Luwic to the second millennium BCE, the question of where and how to draw a boundary between the two arises. The only operational test appears to be the elicitation of contemporary judgment: only those second-millennium dialects that can be linked to the adverb *luwili* deserve to be called Luwian. The dialect of Ištanuwa fails such a test and thus emerges as the best-attested member of the Luwic dialectal continuum in the Late Bronze Age.

# 1.4 The Areal Context

The sheer size of the territory inhabited by Luwian speakers makes it impossible to generalize about their linguistic neighbors. Each Luwian community associated with a specific dialect must be treated on a case-by-case basis. The most obscure case is that of Luwiya, the supposed local homeland of the Luwians: we are not aware of other languages that were spoken in west-central Anatolia in the late third to early second millennium BCE. Projecting the situation backward from almost 1000 years later, one could argue that the western part of the Anatolian plateau had been settled by speakers of various Luwic dialects, such as Ištanuwian (cf. the previous section). We do not know whether non-Indo-European languages lingered in this area or whether the ancestors of the Lydians ventured east of the Aegean basin. Proto-Luwian was probably in contact with pre-Hittite in the east, but the effects of this contact are inferable from Hittite rather than Luwian data (Melchert 2020a:245).<sup>21</sup>

We are on firmer ground when we turn to the sociolinguistic situation in southeast Anatolia. Although the Hurrians were newcomers to Asia Minor,<sup>22</sup> they were established in this area by the early second millennium BCE. We know from the archives of Kaneš that part of this territory once belonged to the kingdom of Ma'ama. Its ruler, who bore the Hurrian name Anum-hirbe, corresponded and presumably shared a common border with Waršama, king of Kaneš (Miller 2001). One of the major urban centers ruled by Anum-hirbe was Haššu, probably once situated in the area of modern Gaziantep. There are reasons to believe that Haššu and its vicinity constituted one of the important Hurrian cultural centres (Wilhelm 2008:190–193). Hattušili I retaliated for the Hurrian raids into central Anatolia by conquering and plundering Haššu, and

<sup>21</sup> For Hittite and Hattian loanwords in Luwian dialects, see § 2.1. below. It is unclear whether the respective loanwords were borrowed into common Luwian or spread through the dialectal continuum later.

<sup>22</sup> For the Hurrian homeland in and around the upper Khabur valley in eastern Syria, see Chapter 10, §1.

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his reign may be regarded as the start of substantial Hittite (and presumably Luwian) presence in this region.

We know little about the ethnolinguistic landscape of the Cilician Plains in the first quarter of the second millennium BCE because no indigenous sources are available to us from this period (Novák 2010:401–402).<sup>23</sup> However, it seems probable that Luwian speakers arrived in this area in the first half of the second millennium BCE, an event that may or may not have been connected with the military campaigns of Hattušili I and Muršili I in southeastern Anatolia and Syria.<sup>24</sup> Around 1500 BCE, the Cilician Plains and adjacent parts of southeastern Anatolia gained independence from Hatti and came to be known as the kingdom of Kizzuwatna, which became a dependency of the Hurrian kingdom of Mittani later in the 15th century BCE (Miller 2004:7). The incorporation of Kizzuwatna into Hatti around 1400 BCE sparked interest in Kizzuwatnean religion and culture at the court of Hattuša. The accumulation of Hurrian and Hittite-Hurrian compositions attributed to Kizzuwatna practitioners was a manifestation of this curiosity.

Although we have no evidence for Semitic population groups settled in southeastern Anatolia in large numbers, both Akkadian and West Semitic must have constituted an important part of the cultural context of this region from the early second millennium BCE. The West Semitic (Amorite) population was linguistically dominant in Syria; the kingdom of Yamhad, which had its center in Aleppo, probably maintained close commercial ties with Cilicia.<sup>25</sup> The Assyrian trade network controlled commerce to the east of Cilicia, presumably including the area of Haššu, and to its north (on the other side of the Antitaurus Mountains). The demise of the Assyrian trade in the 18th century and the disintegration of Yamhad a century later may have affected commerce, but by that time Akkadian had become the language of cuneiform literacy in Anatolia. Presumably it continued to play this role, alongside Hurrian, in the short-lived kingdom of Kizzuwatna (Yakubovich 2010:274–275). In contrast,

<sup>23</sup> The Egyptian reference to the Luwian word for 'king' attested in in the tale of Sinuhe (allegedly in connection with events of the 20th century BCE in Cilicia), is doubted with good reasons by Simon (2011:261–262).

<sup>24</sup> The presence of both Hittites and Luwians in Kizzuwatna (and by extension, in southwestern Anatolia generally) derives support from the fact that the local royalty carried both Hittite and Luwian names (Yakubovich 2010:273–274). However, there is no historical evidence directly linking the Luwian migrations to Kizzuwatna with the activities of the early Hatti kings (cf. Trameri 2020:113–117 for the discussion of possible alternatives).

<sup>25</sup> According to Forlanini (2004b:251) the Syrian merchants enjoyed a trade monopoly on the Cilician Plains, which effectively cut off the Assyrian trade from the region in the early second millennium BCE.

Hittite and Luwian had little influence on the West Semitic vernaculars of Syria after Hatti conquered northwestern Syria during the reign of Šuppiluliuma I (mid-fourteenth century BCE) and established residencies in Karkemiš and Aleppo.

The situation in north-central Anatolia must have been quite different. The Hattians are generally believed to have inhabited this area before the Indo-European migrations. An Indo-European population group that settled there in prehistoric times consisted of Proto-Palaic speakers. This is suggested by the cumulative evidence of several interference features between Palaic and Hattian, although few of these features are conclusive individually (cf. Chapter 13, § 2.3). The advance of the Hittites to the area of Hattuša and its surroundings is supported by historical sources. The advance began in the mid-18th century BCE, during the reign of Anitta, who boasted of razing Hattuša to the ground, although the integration of the Hittite and Hattian elites, which culminated in the rebuilding of Hattuša, probably was not achieved until the following century. After Luwian speakers settled in the same milieu, they must also have interacted with their new neighbors. Therefore, it is unsurprising that the Luwian texts of the Tauriša tradition show parallelisms with Hattian, Hittite, and Palaic texts at the level of narrative formulae (Mouton and Yakubovich 2021:44-46) and that the linguistic structure of New Hittite underwent numerous changes under the influence of Hattuša Luwian (Rieken 2006, cf. Chapter 14, § 3.4).

Yet the contact-induced features of Luwian dialects need not conform only to the observed areal configurations: they can also reflect the migration itineraries associated with the speakers of particular dialects or elucidate the status of the respective dialects in multilingual societies. We will address contactinduced features through this lens in the remaining sections of the present chapter.

#### 2 Contact-Induced Changes

## 2.1 Loanwords in Luwian

This discussion of lexical transfers into the Luwian language is based on two recent publications. Simon (2020b) provides a meticulous update on loanwords from Hurrian vis-à-vis the state of affairs described in Starke 1990 and Melchert 1993. Melchert (DCL) accepts most of Simon's conclusions in his new dictionary and offers a parallel revision of data on borrowings from other languages. The list below is based on Melchert 2022, with the omission of some examples whose status is less assured, slight semantic modification of certain others, the adaptation of Luwian nominal stems to the style of the ACLT project.<sup>26</sup>

- Hurrian loanwords: (DUG)āhrušhit- 'censer', allašši(ya/i)- 'of queenship' (EL), *ambaššit-* 'fire sacrifice'? (EL), *anāhit-* 'sample, tidbit', *hamrawann(i)-* 'of the hamrit-', hamrit- 'cult-house, sanctuary' (KL), \*hūprušhit- 'incense burner'?,  $DUGhupuw\bar{a}y(a)$ - '(type of vessel)' (KL), hurlaim(a/i)- 'in the Hurrian style', entašši(va/i)- 'pertaining to entu-priestesshood', GIŠirimpit-/irippit- 'cedar-(staff)' (KL), GIŠkišhit- 'chair, throne' (KL), kunzigannāhit- '?' (EL), kunzit-'(cult object)' (EL), nakkuššā(i)- 'to perform a scapegoat rite' (KL), nakkuššāhit- 'scapegoat rite' (KL), GIŠnathit- 'bed' (EL), nišhi- '(divine attribute)' (EL), GIŠpāinit- 'tamarisk' (KL), purundukarrit- '(part of the exta)', šapuhit- '(feature of exta)', *šarrašši*(*ya/i-*) 'of kingship' (EL), *\*šaur*(*a*)- 'tool/weapon' (KL), EZEN<sub>4</sub>šehell(i)- 'purification ritual' (EL), šilušhit- '(term of extispicy)' (EL), *šūntinna- '?'* (EL), *talpurit- '*(topographic feature)' (KL), <sup>(GIŠ)</sup>*taprit- '*plinth, statue base' (KL/EL), tīšnit- 'bag'? (EL), uzi(va)- '(ritual of) meat-offering' (EL), (GIŠ)zakkit- 'latch' (EL), \*zizzuhit- '(kind of vessel)' (EL), <sup>Ú</sup>zuhrit- 'grass, hay', zurki(ya/i)- 'pertaining to a blood sacrifice', \*zurkit- 'blood sacrifice' (EL).
- Akkadian loanwords: <sup>TÚG</sup>*aduplit* '(festive garment)' (EL, but see also Chapter 14, §4 fn. 52 for critical discussion), haz(z)iz(z)it- 'wisdom, ear (as a symbol in metal or dough)' (EL), *kappit* 'bowl' (or similar container) (EL?), *gāzzit* 'small container for liquid', *kazmit* 'piece, sample (of bread)' (EL), *baštaima/i* 'ornamented, decorated' (EL), *pinkit* 'knob, boss' (EL), *zammitāt*(*i*)- 'meal, grits' (KL).
- West Semitic loanword: halāli- 'pure' (KL/EL).
- Hattian loanwords: <sup>É</sup>arkiwit- 'passageway', \*L<sup>ú</sup>haggazuwašši- 'cup-bearer' (EL), halmaššuitt(i)- 'throne dais' (KL), \*hatiwit- 'inventory', parnink(i)- '(illness of the eye)' (TL), purulliyaššiya/i- 'of the purulli-festival'.
- Hittite loanwords: <sup>GIŠ</sup>*kattaluzzit* 'threshold' (KL), *labarna* '(title of the Hittite king)' (IL), <sup>DUG</sup>*haršit* 'pithos' (IL).
- Loanwords of unclear origin:  $\bar{a}pit$  'sacrificial pit,  $\beta \delta \theta \rho \circ \varsigma'$  (KL/EL),  $^{GAD}(a)l\bar{a}lu$  'cape' or 'veil'? (EL),  $h\bar{a}piri(ya/i)$  'of the bedouin, seminomads' (KL).

This brief survey confirms the impression that Hurrian constitutes the principal source of loanwords in Luwian. As already illustrated in detail in Starke

<sup>26</sup> The following dialectal abbreviations are used: EL = Empire Luwian, IL = Ištanuwa Luwic, KL = Kizzuwatna Luwian (including texts from the Lower Land), and TL = Tauriša Luwian. The dialectal attribution of individual forms owes much to the discussion of Simon 2020b.

1990:210–221, most Hurrian nouns whose stems ended in *-e/i*, were adapted to the class of neuter *it*-stems when borrowed into Luwian (cf. Chapter 14, §5). The same is true of Akkadian loanwords, several of which are suspected of having been borrowed via Hurrian. From the semantic viewpoint, the majority of borrowed nouns designate transferrable artifacts (such as vessels or items of furniture) or refer to technical terms used in rituals and divination. The predominance of inanimate nouns in (a) and (b) must have facilitated their adaptation as neuter stems in Luwian. The adjectives and verbs belonging to these groups are formed using Luwian denominative suffixes, which do not represent obvious adaptations of any source language forms and therefore presumably reflect language-internal derivation.<sup>27</sup>

A lesser-known fact about Hurrian and Akkadian loanwords is the lack of their correlation with the Kizzuwatna Luwian dialect. The number of Empire Luwian loanwords in (a) and (b) is comparable to that of Kizzuwatna Luwian loanwords.<sup>28</sup> If we were to limit our Kizzuwatna Luwian corpus to actual Luwian passages (as opposed to the isolated Luwian foreign words and loanwords embedded in Hittite texts), then the number of Hurrian loanwords in Kizzuwatna Luwian would be even more modest: just one borrowed noun in *-it-*, namely, *hamrit-*, could be assigned to Kizzuwatna Luwian under such a procedure (see below in this section). But, as was already mentioned in §1.2, the Luwian foreign words in Hittite texts primarily reflect code-switching in dictation or adoption into scribal jargon, rather than being vestiges of Luwian texts translated into Hittite.

The conclusion to be drawn is that the nouns in *-it-*, constituting the bulk of Hurrian and Akkado-Hurrian loanwords in Luwian, were primarily transferred in the milieu of the elites and literati, whether in Kizzuwatna or Hattuša. In the light of this, their status is similar to that of the bulk of Hurrian loanwords in Hittite. This implies, however, that the borrowed nominal *it*-stems cannot be attributed to a particular Luwian dialect, but rather represent features of a soci-

<sup>27</sup> This hypothesis implies, for example, that the abstract noun *nakkuššāhit*-, etymologically 'releasing (a scapegoat)' is not directly derived from the Hurrian \**nakk=o/u=šše* 'release(d); scapegoat' but was adopted via an unattested Luwian loanword for 'scapegoat' (cf. Hittite *nakkušši-* 'scapegoat', the base of the abstract noun *nakkuššātar*). The synchronic transparency of the suffix *-it-* was apparently so high that it could occasionally be dropped in derived formations: cf. *hamrit-* and *hamrawann(i)-*.

<sup>28</sup> In doubtful cases the lexemes in the list above were assigned to Kizzuwatna Luwian rather than Empire Luwian, according to the procedure outlined in Simon 2020b:417–418. Thus, the isolated Luwian forms occurring in Hittite texts of Kizzuwatna inspiration are counted as Kizzuwatna Luwian. The label Empire Luwian is reserved for Luwian loanwords occurring in text showing neither Kizzuwatna background nor Hurrian influence.

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olect. The Hurrian technical terms for rituals and divination imply specialized knowledge, while the mobile property items with Hurrian names can be interpreted as luxury goods circulating as wealth finance. Judging by the situation in Hattuša, the literati were primarily recruited from social elites, so there is no contradiction between the two categories. The likely political context for the acquisition of Hurrian loanwords at the court of Hattuša was the annexation of Kizzuwatna between the late 15th and early 14th century BCE.

The residue of the Hurrian, Akkadian, and West Semitic loanwords in Luwian incantations is too meager to draw firm conclusions regarding the circumstances of their transfer. These are  $h\bar{a}piri(ya/i)$ - 'of the bedouin, seminomads', *hamrit*- 'cult-house, sanctuary', *nakkuššāhit*- 'scapegoat rite', *nakkuššā(i)*-'to perform a scapegoat rite', *\*šaur(a)*- 'tool/weapon' (in a compound *wašhašaur(a)*-), *zammitāt(i)*- 'grits', and *halal(i)*- 'pure'. If anything, they show that the Hurrian and Akkadian superstrate influences on Kizzuwatna Luwian were diminishing rapidly outside of royal circles. It is remarkable that all of these lexemes, except for *\*šaur(a)*- and *zammitāt(i)*-, have cognates in Hittite and/or Hattuša Luwian.<sup>29</sup>

The clearest example of an exclusive transfer from Akkadian to Kizzuwatna Luwian is the adaptation of the term for a ritual patron. Its cultural background was the widespread character of privately commissioned rituals that were carried out by reputable practitioners in both Kizzuwatna and the Lower Land. The Akkadian *bēl niqê*, literally 'lord of the offerings,' was translated word for word into Luwian as /malxassassis \*nijas/ (usually spelled *malhaššaššiš* EN-*aš*). The calque acquired the terminological meaning 'ritual patron' (i.e., a private commissioner of a religious performance) and became very frequent in the texts of Luwian incantations. In contrast, a unitary term, *ašhušikkunni*, was coined for 'ritual patron' in Hurrian, while the Sumerogram EN SISKUR had the same role in Hittite scribal jargon but apparently without a stable phonetic reading.<sup>30</sup> The seemingly isolated character of this calque probably results from the fact that Mesopotamian and Hurrian influences on Kizzuwatna Luwian phraseology have yet to be addressed in the same detail as lexical transfers.

Another surprise is the relatively small number of Hittite/Hattian loanwords in Luwian and their lack of correlation with the northern Anatolian Tauriša

<sup>29</sup> Cf. Mouton and Yakubovich 2021:32–37 for a discussion of whether certain Hurrian elements could have been added to Hittite-Luwian rituals during their transmission at the court of Hattuša.

<sup>30</sup> The evolution of the term for a ritual patron in ancient Anatolia is the topic of Appendix II in Yakubovich and Mouton 2023. In the meanwhile, one may consult the entries for malhašša- and \*niya- in DCL.

tradition.<sup>31</sup> The only borrowing attested in Tauriša Luwian is parnink(i)- (a disease), supposedly of Hattian origin. A partial explanation for this state of affairs is the parochial character of Tauriša conjurations, which are not associated with a state cult or reputable performers. Yet, even under such conditions, if the local Luwian community formed an enclave within a multilingual region for an extended period, one would expect to find more adstrate interference in the preserved texts. The next section offers a full account of this seeming mismatch.

#### 2.2 Structural Interference

Since Luwian texts are attested across vast tracts of Asia Minor and beyond and span the period between the Late Bronze Age and Iron Age, the Luwian language is frequently invoked in discussing contact-induced changes in the region. In some instances, such changes are common to several languages and are best discussed in the context of the Anatolian linguistic area. To this category belong, for example, the second-millennium constraint on word-initial *r*-(Kocharov and Shatskov 2021), the neutralization of the voiceless/voiced (or fortis/lenis) distinction in word-initial obstruents (Melchert 2020a:274-275), and the grammaticalization of possessive adjectives (Luraghi 1998). Such phenomena will not be discussed here in any detail as this will be done in Chapter 15. There is likewise little point in addressing here instances of structural interference in which Luwian is the donor language because such a discussion is most appropriate in the chapters devoted to the respective target languages. We will instead concentrate on two structural changes that cut across the Luwian dialectal area and are thus conducive to refining our understanding of Luwian dialectal prehistory.

The first isogloss is verbal fronting, which is observed on a number of Luwian incantations from Kizzuwatna and the Lower Land and reconstructed in Lycian A. In Luwian, this syntactic configuration is frequently accompanied by the use of cataphoric second-position clitics, which double the subjects of intransitive clauses and the objects of transitive clauses. For example, KBo 29.6(+) i 23'-24' *awidu=pa=aš=ta ma[l]haššaššiš* EN-*aš ha[ratnāti] waškulimmā[ti]* can be literally translated as "May he come, (namely,) the ritual patron, from offense and

<sup>31</sup> It is easier to account for the lack of Hittite loanwords in Hattuša Luwian in cuneiform transmission. Since the use of isolated foreign words in Hittite texts presumably occurred when its author ran short of a suitable Hittite equivalent, or thought that the Luwian word would render the intended meaning more precisely, there would be little point in using Luwianized Hittite forms in such conditions. The proper places to look for Hittite loanwords in Luwian are the longer Luwian passages recorded in other dialects.

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fault," and KBo 29.3+ iii 17′ *ma*[*m*]*malway=an* EN SÍSKUR-*iš adduwalin* EME-*in* as "May (he) crush it, the ritual patron, (namely,) the evil tongue." The pragmatic reason for verbal fronting is usually the alignment of the predicate with the topic or narrow focus.<sup>32</sup> This innovation is synchronically restricted to the Luwian incantations of the Puriyanni and Kuwattalla/Šilalluhi traditions but can also be reconstructed in Tunnawiya and Maštigga rituals, where it occurs in the texts of Hittite incantations that presumably were translated from Luwian (Rieken 2011:500–502).

At the same time, the construction with verbal fronting must be reconstructed as a core feature of the ancestor language of Lycian A.<sup>33</sup> Such an approach appears unavoidable to account for the phenomenon of Lycian nasalized preterits, the forms that regularly appear in transitive clauses after the particle m(e)=, in contrast to the preterits without nasalization deployed in other contexts (Adiego 2015:8). An important correlate of the same distribution is the tendency to place the verb before the subject in sentences with the nasalized preterit ('Imbert-Garrett's Rule'). Thus, TL 103.1 *ebẽňnẽ : xupã : m=ene : prňnawatẽ : tebursseli* "This tomb, the one to build it (was) Tebursseli" contrasts with TL 40a.1 [*p*]*ajawa : manax*[*in*]*e : prňn*[*a*]*wate : prňn*[*aw*]*ã : ebẽňnẽ* "Pajawa (titled) Manaknine built this building." The construction illustrated by TL 103.1 is very frequent in the Lycian A corpus, and the use of the nasalized preterit is a grammatical rule in such constructions.

Adiego (2015:26) persuasively argued that "at a certain point in the prehistory of Lycian ... verb-"fronting" implied a clitic doubling." At that point, the virtual archetype of TL 103.1 would have the shape  $*prñnawat(e)=\tilde{e}$  tebursseli ebēñnẽ xupã '(He) built it, Tebursseli, (namely) this tomb'. What eventually emerged as the marker of the nasalized preterit, must then have been an object clitic in its expected second position. This construction is, of course, parallel to the Luwian one 'May (he) crush it, the ritual patron, (namely) the evil tongue' (see above in this section), and nothing contradicts the assumption that it was already present in the dialect of the Lukka tribes, the ancestors of the Lycians,

<sup>32</sup> The Luwian construction with verbal fronting is the topic of Appendix II in Yakubovich and Mouton 2023. In the interim, one can consult the preliminary presentation of the same argument in Russian (Mouton and Yakubovich 2020b). The same construction has also been interpreted as the result of multiple right dislocations of noun phrases (Sideltsev 2012), but this does not address the Lycian parallel. Cf. the independent recognition of Luwian verbal fronting in Giusfredi 2020c:155.

<sup>33</sup> The structure in Lycian B is deliberately left out of consideration here, since the poetic character of the Lycian B texts complicates their syntactic analysis. However, the intrusion of Lycian B in Lycia remains at least a viable option (cf. Yakubovich 2010;136).

in the second millennium BCE. The use of the particle m(e)= and the left dislocation of the topic in front of this must be regarded as subsequent inner-Lycian innovations. This secondary process was likewise accompanied by clitic doubling involving =*ene* 'it', or its allomorphs

The Luwian dialectal change, particularly its Lycian counterpart, signal a radical departure from the consistent verb-final word order reconstructed for Proto-Anatolian and typical of Hittite, Palaic, Tauriša Luwian, and Late Luwian. The fact that verbal fronting was accompanied by clitic doubling in both Luwian and Lycian suggests that we are dealing with a common innovation, not merely two typologically similar changes.<sup>34</sup> Yet its dialectal distribution represents a challenge. Even in the Kizzuwatna/Lower Land dialectal continuum, verb fronting remained an optional device, governed by pragmatic factors, as did clitic doubling in sentences with verb fronting. This speaks against treating the similar change in Proto-Lycian as an outcome of language shift; moreover, the acquisition of Proto-Lycian by Luwian dialectal speakers lacks historical support. The opposite scenario, namely the language shift in Kizzuwatna and the Lower Land imposed by the Lukka tribes, is even less likely because such a migration of the Lukka tribes would have been reflected in the historical sources of the second millennium BCE. It seems most probable that the construction with verb fronting and clitic doubling originated somewhere in southern Anatolia and then spread across a large area as a pragmatic device in a situation of language maintenance. This hypothesis implies that the dialectal continuum of the Luwic languages remained transparent for such innovations; that is, the ancestor of Lycian A and the neighboring Luwian dialects must have remained mutually understandable.

Another areal isogloss of interest for Luwian dialect geography is the possessive construction with a plural possessor, which was first described in Melchert 2000. The Luwian possessive adjective in /-ass(a/i)-/ dialectally inserts a special morpheme /-nts-/ between the possessive suffix and the ending to mark the plurality of the possessor. The suffix /-nts-/, however, has a limited functional distribution: it is compatible only with the endings of nom.-acc.pl.n., dat.sg., dat.pl., and instr. For example, the Luwian term for the 'lord of the offerings' is *malhašš-ašši-š* EN-*aš*, as discussed in the previous section, but its dative plural form is *malhašš-ašša-nz-anza* EN-*anza*: literally, 'to the lords of the offerings.' Both the placement of the morpheme /-ants-/ after the possessive marker (the

<sup>34</sup> Contrast the verbal fronting in the Late Luwian version of the KARATEPE inscription, which was presumably implemented under the influence of its Phoenician original (Yakubovich 2015b). Among the fourteen tokens illustrating this syntactic change (§§ 4, 5, 7, 25, 26, 37, 49, 51, 52, 63, 66, 72, 73, 74), not a single one features clitic doubling.

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etymological genitive case ending) and its restricted paradigmatic distribution are typologically unusual and call for a historical explanation.<sup>35</sup>

In Yakubovich 2010:51–53, it was argued that the Luwian instrumental forms in /-assa-nts-adi/, the most frequent ending signaling the plurality of the possessor, represented the starting point for the formation of the new construction. More specifically, /-ants-adi/ was added on top of the pre-existing possessive construction as a calque of the Hurrian  $=a\check{z}=\bar{a}e$ , the dedicated possessive instrumental form marking the plurality of the possessor. The morpheme  $=a\check{z}$  = normally functions as the plural marker in Hurrian, although in this case it absorbed the genitive marker =ve= through a historical sound change (\*= $a\check{z}$ =ve= $\bar{a}e$  > = $a\check{z}$ = $\bar{a}e$ ). Accordingly, it was calculated by the Luwian plural marker /-nts-/, while the instrumental ending /-adi/ represents the expected calque of its Luwian counterpart  $=\bar{a}e$ . The calque outlined above represents an instance of structural imposition, likely to be implemented during a language shift from Hurrian to Luwian. Later the morpheme /-nts-/ was extended by analogy to other Luwian forms marking plural possession, but only in those cases where its combination with the subsequent inflectional endings would not generate inadmissible consonant clusters.

The hypothesis outlined above was premised on the assumption that the morphological expression of the plurality of the possessor was limited to the Kizzuwatna dialect of Luwian.<sup>36</sup> This claim, however, was no longer tenable after the identification of the Tauriša tradition in Mouton and Yakubovich 2021. In that tradition we find an incontestable example of the relevant construction, namely, KUB 35.103(+) iii 10 *wa!-ya-am-ma-na ú-li-ip-na-aš-ša-an-za "wayamana* of the wolves" (cf. ibid. iv 9 [*ú-li*]*-ip-na-aš-ša-an-[za*]), also the probable restoration KBo 29.52 r. col. 4' *a-pa-aš-ša-a*[*n-za-a*]*n pár-n*[*i*] *"in/to* 

<sup>35</sup> For the genitival origin of the possessive marker in the Luwic languages, see Melchert 2012 and the earlier literature cited in this paper. All else being equal, the plural marker of the possessor should be closer to the stem in the chain of affixes than the marker of possessive relationship, whether expressed by the genitive case or its historical reflex. This is the corollary of Greenberg's Universal 39: "Where morphemes of both number and case are present and both follow or both precede the noun base, the expression of number almost always comes between the noun base and the expression of case." Although the relevance of Greenberg's universal to the present case is rejected in Simon 2016;329–330, this conclusion appears to be based on a misunderstanding: in the instance of a double case construction, the order of the plural marker of the possessor in the affix chain should be construed with respect to the possessive marker, not the secondary agreement case.

<sup>36</sup> Cf. Yakubovich 2010:50: "forms in *assanz*(-) never existed in central Anatolia." In addition to the data discussed in this paragraph, this hypothesis is vitiated by the growing evidence that the incantations originating in Kizzuwatna and the Lower Land reflect essentially the same dialect (cf. § 1.2).

their house" and the possessive adjective KUB 35.90 r. col. 7' <sup>d</sup>UTU-*ša-an-za-a*[*n*] "of the Sun gods" (dat.pl.) in a broken context. Furthermore, the sequence *malhašš=ašša=nz=anza* EN-*anza* 'to the lords of the offerings' and other relevant case forms of the same phrase, although nominally occurring in Kiz-zuwatna/Lower Land incantations, can be reinterpreted as scribal insertions because the ritual patron was presumably called by name in the actual performance. There are reasons to believe that at least the ritual texts attributed to Kuwattalla were first recorded in Hattuša (Yakubovich 2010:277–278).

In Mouton and Yakubovich 2021:49, this new evidence was taken as an argument for the pandialectal character of marking the plurality of the possessor in Bronze Age Luwian. While formally possible, such a hypothesis does not illuminate the distribution pattern of the relevant construction, which has no counterpart in Late Luwian or Lycian.<sup>37</sup> An alternative way of coping with the new facts is admitting the diffusion of the construction from Kizzuwatna to the Lower Land, Hattuša, and Tauriša. However, the horizontal transfer must have had a strong sociolinguistic motivation: the possessive construction with a plural possessor is too unusual and asymmetrical to have been borrowed solely for convenience reasons.

An assumption necessary to maintain the calque from Hurrian is the status of the language of the incantations as the Kizzuwatna Luwian koiné. The historical trigger of its formation would be the interaction among the itinerant Old Women and other ritual practitioners. A handy typological parallel is the formation of the Greek epic language as a result of interactions among the rhapsodes. In sociolinguistic terms, the language of the incantations was akin to a professional jargon (*Fachsprache*), although it must have been passively familiar to the potential patrons to ensure the success of the rituals.<sup>38</sup> Naturally, its spread need not have respected political boundaries: if the ritual

<sup>37</sup> Contrast Simon 2016:332: "[D]ie traditionelle Erklärung (dass das Morphem *-nz-* im Kizzuwatna-Luwischen durch die morphologische Reanalyse der Phonemfolge  $^{\circ}nz^{\circ}$  zustande gekommen ist, die in allen Pluralendungen des Genus commune [bis auf den numerusneutralen Abl.-Instr.] vorkommt) die Herkunft der Konstruktion adäquat erklärt". Such an explanation, however, remains gratuitous, as long as one fails to outline the mechanism of the proposed reanalysis, which would yield both the attested syntactic position of the new marker in the middle of the affix chain and its distinct meaning, namely, plurality of the possessor.

<sup>38</sup> See Melchert 2006 for the discussion of some devices that characterized Luwian verbal art. While the title of his paper emphasizes the inherited character of such devices, of no less importance is the question of the sociolinguistic factors that supported the cultivation of Luwian verbal art in the historical period. This chapter's assumption of a professional jargon linked to the performance of Luwian ritualists provides here a partial answer.

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specialists of the Lower Land belonged to the same professional community as the Kizzuwatna ritualists, they would have been likely to avail themselves of the same ritual language. This would mean learning not only formulae and stylistic devices but also certain grammatical structures, such as the possessive construction marking the plurality of the possessor.

At the same time, just as one investigates the dialectal background of the Greek epic language, it is appropriate to inquire into the dialectal origin of the Kizzuwatna Luwian ritual language. To maintain the hypothesis of the Hurrian calque, one is forced to assume that the Luwian dialect of former Hurrian speakers played a key role in the formation of the new koiné. Although Simon (2016:326) makes a valid point that the precise area where the Hurrian speakers shifted to Luwian remains elusive, there is a linguistic argument for the presence of Hurrians in Kizzuwatna well before Mittani began to exercise influence in this region. As stressed in Trameri 2020:333-336, the dialect of the Hurrian texts emanating from Kizzuwatna and preserved in the archives of Hattuša is distinct from that of the Mittani letter found in El Amarna. Moreover, some of the Hurrian texts have idiosyncratic dialectal features. Therefore, the language shift from Hurrian to Luwian in Kizzuwatna (perhaps in its eastern part) remains the default hypothesis. It can be claimed with more certainty that the Hurrian and Luwian ritual traditions interacted with each other in the same region in the mid-second millennium BCE.<sup>39</sup>

The marking of the plural possessor in the expression 'lord of the offerings' can be explained through the hypothesis that the Hittite-Luwian rituals were first recorded by Kizzuwatna scribes. The presence of such a scribal group in the chancery of Hattuša is not a new idea; the activity of 'southern' scribes was linked with the Luwian foreign words in Hittite texts in Güterbock 1956b:138. This hypothesis did not stand the test of time because the dialect of those Luwian foreign words turned out to be distinct from the Kizzuwatna dialect (cf. § 1.2). There is, however, a different argument that points in the same direction, namely, the presence of Hurrian loanwords in Luwian in Hittite texts that have no apparent connections with the Kizzuwatna or Hurrian milieus (cf. § 2.1). The easiest explanation for the extension of the Kizzuwatna scribes to Hattuša chancery would be the transfer of some Kizzuwatna scribes to Hattuša

<sup>39</sup> Note also the historical evidence for the presence of Hurrians in Haššu in the early second millennium BCE (cf. § 1.4). In contrast, Luwian remains the only language whose presence in southeastern Anatolia, to the west of the Euphrates, can be confirmed through written sources by the end of the second millennium BCE. The language shift from Hurrian to Luwian in the area of Haššu likewise remains the default hypothesis, although its timing is unclear.

in the wake of Kizzuwatna's annexation. Yet if one faced the task of recording Hittite-Luwian rituals emanating from Kizzuwatna or the adjacent regions, it would be only natural to involve scribes of Kizzuwatna extraction familiar with the local variety of Luwian. As long as the Kizzuwatna scribes were able to imitate the language of the oral performers, they would insert the forms in /-assa-nts-/ where appropriate, including into the expression 'lord of the offerings.'<sup>40</sup>

Finally, the use of the same forms in the Tauriša tradition could reflect the dialect of a Luwian population group that migrated or was transported from Kizzuwatna. Such a solution may seem ad hoc at first glance but gains in attractivity when weighed against the possible alternatives. If the population of Tauriša had spoken Luwian since the prehistoric period, it would be reasonable to expect a considerable degree of interference between the local dialect and Hittite/Hattian. However, this is not the case: the only likely loanword in this corpus is *parnink(i)*-, a word for a disease, which was supposedly borrowed from Hattian (cf. § 2.1). The hypothesis that the Luwian presence in Tauriša derived from populations transported from Arzawa or a late language shift has even less to recommend it: some fragments belonging to the Tauriša tradition are written in Middle Script (Mouton and Yakubovich 2021:41). This leaves us with the late 15th to early 14th century BCE as the most likely period for the Luwian resettlement in the region of Tauriša; what we know of Anatolian political history in this period would favor Kizzuwatna as its starting point. Granted, we have no written accounts of mass migrations or transportations from Kizzuwatna to Hattuša in the wake of the former's annexation, but this could be due to the extreme scarcity of historical sources addressing the circumstances of this political event. We do know, however, of the integration of Kizzuwatna texts into the archives of Hattuša (Yakubovich 2010:275, summarizing Miller 2004a); we have reason to believe that Kizzuwatna scribes were relocated to Hattuša as well (see above in this section); and we know that the Kizzuwatnean Goddess of the Night was split and reinstalled in Šamuha (Miller 2004a:259–439).<sup>41</sup> Against such a background, there is nothing counterintuitive

<sup>40</sup> Alternatively, one could argue that the Hittite-Luwian rituals had already been recorded in Kizzuwatna and then their texts were transferred to Hattuša. The possibility of such a scenario is implied by the discussion in Miller 2004a:256. See Yakubovich 2010:275–278 for its critical assessment and Melchert 2013:169–170 for further discussion. For all its problems, it would explain equally well the secondary forms in /-assa-nts-/ in Kizzuwatna Luwian incantations.

<sup>41</sup> Note also that the resettlement of a group of people from Kizzuwatna to Tapikka is addressed as a distinct possibility in the Maşat letter HKM 74 (Alp 1991:263).

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in the hypothesis that the rulers of Hatti would draw upon the population of their new province to compensate for the people they had lost to the Kaška ravages in the north.<sup>42</sup>

As mentioned in §1.2, the anonymous Tauriša conjurations contrast the Kizzuwatna Luwian rituals attributed to reputable professionals, so it would not be unexpected if they also differed in the linguistic register used. The deviations of Tauriša Luwian from the ritual language of Kizzuwatna may have a twofold explanation. First, if the population to be resettled in Tauriša was recruited in a particular town or region of Kizzuwatna, then certain features of Tauriša Luwian could reflect the colloquial speech of that town/region rather than the standardized ritual language. Second, some of the innovations that characterize Tauriša Luwian may have come into being in the northern Anatolian milieu. This explanation is particularly likely in the instance of the clitic particle /=wa/, which spread beyond its original quotative function in Tauriša Luwian and was grammaticalized as clause-demarcational particle in Hattuša/Empire Luwian (Mouton and Yakubovich 2021:42-43). All else being equal, these two phenomena should be considered together as evidence for a new dialectal continuum but do not constitute an argument for a common substrate and thus are compatible with the scenario of secondary convergence.

### 3 The Status of Luwian in Time and Space

The present section focuses on the chronological presentation of sociolinguistic issues related to Luwian dialects attested in cuneiform transmission, representing an update to their treatment in Yakubovich 2010 in the light of more recent discoveries. At the same time, it summarizes the new hypotheses advanced in the preceding sections. For presentation clarity, their limitations will not be addressed here; alternatives are mentioned in the preceding sections.

We know little about the status of Luwian at the time of the Old Assyrian colonies in Asia Minor but can make educated guesses. The Luwian lexical borrowings, attested in both Old Hittite and Old Assyrian (Melchert 2020a:242–

<sup>42</sup> It is unnecessary to project the forced character of the transportations from Arzawa to Hatti that followed the conquests of Muršili II. The circumstances surrounding the annexation of Kizzuwatna were most likely peaceful, so local population groups may have been offered incentives to embark on a northward journey. It does seem, however, that the Luwian community was placed under protection of the traditional gods of Tauriša and entrusted with their worship (cf. Mouton and Yakubovich 2021:44–46).

243), suggest that Luwian was the principal language in one of the urban centers associated with Assyrian trade. The most common identification of the center is Purušhanda, which was situated in the western part of the central Anatolian plateau. Linguistically, Luwian was one of several closely related Luwic dialects spoken contemporaneously in large areas of western Asia Minor; others included Ištanuwa Luwic, Arzawa Luwic, and Proto-Lycian. Whether the Luwian language functioned as superstrate or adstrate for Kanešite Hittite is an open question, but the Luwian personal names attested in Old Assyrian sources suggest that it could be heard on the streets of Kaneš and was associated there with an integrated minority group (Giusfredi 2020b:250–251).<sup>43</sup>

At some point in the early second millennium BCE, the Luwian homeland was incorporated into a larger state, conventionally known as the Hittite kingdom or Hatti. A known historical event that could have produced such a result was the peaceful submission of a king of Purušhanda to Anitta, ruler of Kaneš (cf. Yakubovich 2010:245), but the Hittite Laws (cf. §1.3) provide the definitive evidence for incorporation. The Luwians had lesser legal status than 'the men of Hatti' in the new polity, and their language probably was less prestigious than Hittite. Nevertheless, Luwian and/or Luwic incantations are embedded in the descriptions of the Old Hittite festivals, sometimes next to those in the Palaic language.<sup>44</sup> There were also individuals with Luwian names among the early Hatti kings, although some were interlopers (Yakubovich 2010:251–252).

The migrations of Luwian speakers to Cilicia and the surrounding regions must likewise be dated to the early second millennium BCE, although how and the extent to which the migrations correlated with the military campaigns of Hatti in southeastern Anatolia and Syria is unknown (cf. Trameri 2020:113–117). There is independent evidence for the early presence of Hurrian speakers in this region, and some must have shifted to Luwian, as suggested by the restructuring of the Luwian possessive construction (cf. § 2.2). The Luwians probably constituted the majority of the population of the kingdom of Kiz-zuwatna, founded in the late 16th century BCE and centered in Cilicia (Trameri 2020:332–333). A peculiarity of Kizzuwatna culture was the prominence of privately sponsored rituals, which were associated with reputable practitioners. This practice can be contrasted with the state-sponsored religious festivals that were typical of Hattuša and the surrounded region. The Kizzuwatna Luwian rit-

<sup>43</sup> Cf. also Yakubovich 2020b:280-283 contra Kloekhorst 2019:58-65.

<sup>44</sup> The cautious formulation 'Luwian and/or Luwic' is prompted by the fact that the term *luwili* is never used in connection with the relevant incantations, and some of them assuredly reflect Ištanuwa Luwic, as discussed in §1.3.

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ual language, which presumably developed in the circles of itinerant ritualists and spread to the eastern part of the Lower Land, incorporated innovations such as the construction with verbal fronting (cf. § 2.2.).

In the 15th century BCE, Kizzuwatna became a vassal state of the Hurrian kingdom of Mittani, which may have contributed to the increasing use of Hurrian among the local elites. The historical correlate of this process was the archiving of Hurrian and Hittite-Hurrian compositions, while its linguistic correlate was the considerable number of technical loanwords from Hurrian that entered Luwian (cf. § 2.1). An argument for their technical character is the restricted use of Hurrian loanwords in Luwian incantations, as opposed to the Hittite/Luwian scribal jargon.

The Luwian language became more prevalent in Hattuša and its vicinity after the annexation of Kizzuwatna by Hatti in the late 15th or early 14th century BCE. Kizzuwatna scribes, apparently recruited by the Hattuša chancery, brought with them their version of Luwian, which was replete with technical loanwords from Hurrian. In addition, some Kizzuwatna communities were probably resettled on the northern frontier of Hatti. Since they must have consisted mostly of farmers and artisans, they would have spoken local dialects and been largely unfamiliar with the ritual language of Kizzuwatna. One of the resettlement destinations was the town of Tauriša, which later became associated with a distinct Luwian dialect attested through anonymous conjurations (cf. § 1.2 and § 2.2). After the incorporation of Kizzuwatna, the Hattuša chancery undertook an ambitious project of recording Luwian rituals from Kizzuwatna and the Lower Land. In some of the texts, the incantations were recorded in the local variety of Luwian. They were presumably collected from local ritual specialists, who acted as informants (Melchert 2020a:239–240).

In the early 14th century BCE, the sociolinguistic situation in the town of Hattuša was characterized by widespread multilingualism. One piece of evidence for such a conclusion is a Hittite instruction for the royal bodyguard, composed around 1400 BCE. A gold spearman is to receive an order in an unspecified language, presumably Hittite, and then transmit it to the ordinary spearmen in Luwian (Miller 2013:100, 121). This suggests that the use of Luwian was still associated with a lower social status. However, the syllabic values of Anatolian hieroglyphs, first attested through inscriptions shortly before 1400 BCE, speak in favor of acrophony (rebus derivation) based on both Hittite and Luwian lexemes, although the latter were arguably more numerous (Valério 2018 with ref.).<sup>45</sup> This implies that some Luwian native speakers entered the circles of

<sup>45</sup> The idea that both Luwian and Hittite influenced the acrophonic values of Anatolian

scholar-scribes. This is also the period when the term *luwili* first appears in Hittite texts, even though the place-name Luwiya is no longer used in contemporary compositions.

We do not have evidence to establish whether the shifting balance between Hittite and Luwian in and around Hattuša in this period was primarily due to the migrations from Kizzuwatna. It is, however, clear that the Luwian dialects attested in northern Anatolia differ from the ritual language of Kizzuwatna. The simplest explanation for this is that the Luwian migrations had several starting points, which resulted in the transfer of the colloquial dialects of the respective communities (some of which, but not necessarily all, had been spoken in Kizzuwatna). The interaction between these groups led to the leveling of dialectal differences and the formation of the new koiné that we call Hattuša Luwian (cf. § 1.2). it seems to have been a vernacular, some of whose speakers also learned Hittite to improve their social status. Imperfect learning of Hittite by Luwian native speakers manifested itself in the contact-induced restructuring of New Hittite (cf. Chapter 15, § 3.4).

Although Hittite continued to be a language of high prestige until the abandonment of Hattuša, the Hittite elites must have felt increasing pressure to learn Hattuša Luwian as it became the local lingua franca. A linguistic shift from Hittite to Luwian took place during the 13th century BCE.<sup>46</sup> By the end of the century, it culminated in the use of irregular Hittite forms, indicating, at this point, not a changing grammatical norm but rather a continuum of imperfect learning (Cotticelli-Kurras and Giusfredi 2018:185). This pattern signals the prevalence of native Luwian speakers among the scribes but also suggests a gradual deterioration of the system of scribal training, which no longer guaranteed the uniformity of written Hittite. The use of *Glossenkeil* words must have reflected the practice of code mixing at the court of Hattuša: in the bilingual setting, scribes, officials, and even kings would have felt free to use Luwian expressions when they could not come up with a Hittite equivalent or wanted to vary their discourse.

Luwian became the main spoken language in Hattuša in the 13th century BCE. In addition to its impact on New Hittite and use as the language of hieroglyphic literacy, the analysis of local onomastics supports its native transmission in Hattuša. Although both Hittite and Luwian names are mentioned in

hieroglyphs was initially advanced in Yakubovich 2008. For recent assessments of the hypothesis, see Valério 2018 and Simon 2020c.

<sup>46</sup> It seems logical to assume that the speakers of other Luwian and Luwic dialects who came to Hattuša would find it even easier to shift to the local dialect. In their case, the vectors of prestige and communicative simplicity pointed in the same direction.

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connection with the local elites in 13th-century sources, the latter names are more numerous (Weeden 2013). One commonly finds onomastic compounds containing theophoric elements or epithets as their first elements and the recurrent Luwian second elements *-ziti* 'man', *-muwa* 'strength', *-piya* 'give', *-wiya* 'send', etc. (Yakubovich 2013:98–108).<sup>47</sup> The widespread colloquial use of Hat-tuša Luwian is confirmed by its resilience: after the abandonment of Hattuša and the extinction of the Hittite language, its evolved form (Late Luwian) was maintained as the official written language of the so-called 'Neo-Hittite' states in southeastern Anatolia and northern Syria. The other Luwian dialects attested in the Bronze Age disappear from the radar screen with the demise of cuneiform script in Asia Minor, but they could have survived for several more centuries in local illiterate communities.

<sup>47</sup> While names of Hittite origin also occur in this corpus, they are considerably less frequent and do not form a pattern. In essence, this distribution is the reverse of what was found in Kaneš in the Assyrian colony period, where the Hittite names formed a regular core, whereas the Luwian names were few and far between.

# Palaic in the Hittite Archives

F. Giusfredi

# 1 What Is Palaic and Where Is Pala?

# 1.1 The Palaic Texts

Palaic is the least attested member of Forrer's group of the *acht Sprachen der Boghazköi-Inschriften*, after the sociolinguistically minor Mittani Aryan. Like the other 'local,' non-Mesopotamian members of this group, Palaic appears to be documented exclusively in the Hittite archives, which means that all we read is filtered by the scribal habits and praxis of the official scribes of Hat-tuša. Therefore, graphemic laws that apply to Hittite also apply to Palaic: we may assume that the rendering of consonant clusters reflects the conventions used by the Hittites; we can assume that Sturtevant's law<sup>1</sup> applies and renders consonantal phonemic oppositions much as in Hittite;<sup>2</sup> we can also interpret the notations of ambiguous vowels (*i/e* alternation) and plene writing much as we do in Hittite (as a not always consistent way to note the vowel length, which was probably linked to accent position in a complex fashion).<sup>3</sup> Yet, as

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<sup>1 &</sup>quot;[O]riginal voiceless stops are usually represented in Hitt. by doubled consonants wherever the cuneiform makes this possible, while the tendency is to write single p, t (d) and k (g) for original voiced stops and voiced aspirates" (Sturtevant 1932:2; cf. Yates 2019:241 with further references). On the problem of how this principle applied to Luwian and Palaic, cf. Yates 2019:295. Note, however, that Yates views this law in terms of phoentic sound change, while here we limit the discussion to scribal reflexes, which *seem* to hold also for the notation of non-Hittite Anatolian languages attested in the Hittite archives).

<sup>&</sup>lt;sup>2</sup> However, some peculiarities emerge in the spelling of sounds that would be etymologically expected to appear as geminates. One example is the rendering of the genitival adjectival forms in \*-*osyo*-, which should yield a geminate sibilant as in Hittite and Luwian. Yet Carruba (1970:42–43) and Melchert (1994:219–220) have observed that the attested forms show a single sibilant, as in *Zaparwaašaš* 'of the god *Z*'. The limited evidence available prevents the identification of diachronic or synchronic rules that might explain this phenomenon, which may simply indicate uncertainty in the application of a Hittite graphemic rules to a foreign language.

<sup>3</sup> The problem of plene writing in Hittite cuneiform has been debated for almost a century. For the current interpretation of its functions, see Melchert (1994:27, who also discusses its crosslinguistic significance in the languages of the Hittite archives, including Palaic and Luwian) and, more recently, the *Addenda and corrigenda* to Hoffner and Melchert (GrHL) available at https://linguistics.ucla.edu/people/Melchert/Addenda&CorrigendaGrHL2.pdf; also Rieken 2017b.

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pointed out by Kudrinski (2017), the Palaic texts are encoded somewhat differently than Hittite texts when it comes to Akkadograms and Sumerograms. The former are virtually absent and the latter very infrequent. This pattern is sociolinguistically unproblematic, as it mostly matches that attested for Luwian (in which Akkadograms are very rare and Sumerograms rare, but a bit more frequent than in Palaic), although it appears to be more extreme (but a different amount of available documents forces us to be cautious when assessing the available data), and argues that scribes who took dictation in this language had a limited competence in it and wrote the syllables they heard without replacing them with the usual heterograms.<sup>4</sup>

The Palaic texts found in the Hittite archives are very limited in number and seem to be exclusively connected to the cultic sphere. In recent years, Palaic fragments have been assigned CTH numbers from 751 to 754 and some new joins have been identified (mostly by D. Sasseville).<sup>5</sup> Although a detailed description would risk rapid obsolescence due to the importance of the philological works currently in progress, the nature of the main texts and text groups that carry evidence of the Palaic language can be summarized. CTH 751, 752, and 753 are Festrituale for what is sometimes called the 'Palaic pantheon,' with the significant difference that, in the current tentative partition, CTH 751 seems to collect ritual offers, while CTH 752 and some fragments cataloged under CTH 753 appear to involve the Anatolian topos of the 'disappearing god.'6 At this point is appropriate to introduce a well-known problem that will be mentioned again in this chapter: the difficulty of disambiguating Palaic and Hattian cultural and religious constructs. The divinities mentioned in the texts that we wish to ascribe to the Palaic pantheon include figures such as Ziparfa/Zaparfa, Katahzifuri, and Hašamili, who not only occur in the Hattian tradition but in some cases have Hattian names (see below § 2.3). Other divine names appear

<sup>4</sup> The scribal habit of giving the spelling of foreign words more attention than those in their own language has been remarked in the literature (recently in Rieken 2017b). Among the reasons for this must have been the uncertainty of the scribes, who had not learned how to heterographically represent Palaic or Luwian (or Hattian or Hurrian) words using the logograms of the Mesopotamian tradition. This explanation is confirmed by the fact, also duly noted by Kudrinski, that the scribes *did* succesfully use Sumerograms in Palaic and Luwian texts when the encoded words were homophonic in Hittite (i.e., if they recongnized the word, they knew the logogram).

<sup>5</sup> See the *Bericht* of the project *Das Corpus der hethitischen Festrituale* (https://www.adwmainz .de/projekte/corpus-der-hethitischen-festrituale/berichte/bericht-eingangsevaluierung-201 8.html).

<sup>6</sup> The topos of the missing god is generally considered central Anatolian (Haas 2006:96–122, with references to previous literature) and emerges in texts that seem to be connected with the Hittite, Hattian, and Palaic traditions.

to be Anatolian (Šaušhalla, Hašauwanza, Aššanuwanta, Hilanzipa) and might originate from a Hittite or Luwian linguistic environment. A few of the names do exhibit a Palaic morphological marker (such as the suffix *-ika-* in the Ilaliyantikeš and GUL-/Gulzannikeš divine groups and the possible Luwian suffix *-anni-* in the latter), but it is hard to trace these theonyms to a specific non-Hittite and non-Luwian Palaic lexicon (in other words, they could easily represent Palaicized versions of foreign god names). CTH 754, containing further Palaic fragments, concludes the inventory of texts in Palaic. Other texts, such as CTH 750 (a ritual related to the god Ziparfa/Zaparfa), CTH 643 (fragments mentioning the god Ziparfa/Zaparfa), and some portions of larger festivals (*nuntarriyašha* and AN.TAH.ŠUM), are in Hittite but related to the Palaic cultic milieu.<sup>7</sup>

In the documents that carry direct Palaic linguistic material, the Palaic text (while occasionally framed by Hittite passages) is generally monolingual. This situation, consistent with the use of Palaic as a religious language employed in ritual and cultic contexts, makes the role of linguistic analysis crucial for the Entschlüsselung of the language. Accordingly, the scholarship on Palaic began in the context of Indo-European studies. After Forrer's announcement that Palaic existed (based on the occurrence of the adverb *palaumnili* 'in Palaic' in CTH 750, a composition that, however, does not contain Palaic passages), more than two decades passed before the first Palaic text, KUB 35.165 (CTH 751), was properly published by Otten (1944). Otten recognized that Palaic was an Indo-European language, but it was not until the late 1950s that a grammatical study appeared (Kammenhuber 1959a and 1959b, a thesaurus and grammar, respectively). Subsequently Carruba (1970) published a short corpus and grammar, which is the most complete study of Palaic grammar available, although the philological ordering of the fragments is outdated. General Indo-Europeanists, made aware of the importance of this new language, by now recognized as belonging to the Anatolian branch of the Indo-European family, made significant contributions to its study (Watkins 1975 and Szemerényi 1979 on historical morphology; Wallace 1983 on sound changes affecting the vowel system). The historical phonological evidence was systematized in the dedicated chapters in Melchert (1994:190-228), which remains the standard reference almost 30 years later. Studies on specific texts or topics have supplemented Melchert's diachronic analysis of the Palaic phonology (e.g., Watkins 1987a and 1987b on lexical aspects, Yakubovich 2005 on a formulaic topos, and Furlan 2007 and Soysal 2016 on the meaning and etymology of specific words). Grammatical overviews have also been published in the last two decades (Melchert 2008b;

<sup>7</sup> Gorke 2018.

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Kassian and Shatskov 2013), and a comprehensive etymological study is being carried out within the framework of the eDiANA project, which will result in a new digital corpus (https://www.ediana.gwi.uni-muenchen.de).

Most of the studies of Palaic have been very specific and focused on lexical interpretations because of the limited number of documents and lack of bilinguals that could shed light on obscure forms or lexemes. Other issues that have received less attention are no easier to solve. These are essentially sociolinguistic and include a better understanding of the role played by the Palaic culture in the Hittite world; its areal relationship with languages such as Hittite, Hattian, and Luwian; and its status in Hattuša. Was Palaic a spoken language, as suggested by Yakubovich (2010:257, who posits the presence of bilingual Hittite-Palaic scribes in the Hittite capital city) or only a foreign written language? Or was it dead by the time the texts found in the archives of Hatti were written down or copied? While one may argue that the existence of a land of Pala in the earlier manuscripts of the laws (or later copies thereof)<sup>8</sup> would point to Palaic being spoken there, this kind of circumstantial evidence is only indirect and not particularly trustworthy. Pala might not have been a Palaic-speaking country in the Late Bronze Age, just as Hatti was not, as far as we can tell, a Hattian-speaking kingdom.9

The next section provides general information on the classification of Palaic from a linguistic perspective and presents the role and features of the Palaic textual production in Hattuša. This background will be needed to explore the issues raised above.

### 1.2 The Palaic Language

Genealogically, Palaic is an Indo-European language of the Anatolian branch. Along with (the different varieties of) Luwian and Hittite, it is one of the languages of this branch that are textually attested for the second millennium BCE.<sup>10</sup> Just like Hittite, no traces of Palaic survived the fall of Hatti, but all of the texts that contain Palaic material seem to stem from a relatively early phase.<sup>11</sup>

- 10 Of course, other languages of the branch such as Lycian and Lydian probably existed during the Bronze Age, but there are no texts available, and the only possible evidence might be the occurrence of personal names. For the problems associated with the analysis of personal names in western Anatolia, see Yakubovich (2010:86–96).
- 11 This is true for the older manuscripts of CTH 751 and for all available tablets belonging to CTH 752, while the apparently later ductus in the fragments (CTH 753–754) may be

<sup>8</sup> Hoffner 1997:19.

<sup>9</sup> While not in these exact terms, a similar view is presented by Melchert (1994:10), according to whom Palaic was certainly extinct in the 14th and 13th centuries BCE, and might have been dead already during the 16th.

The Palaic grammar appears to be reasonably close to that of Hittite and Luwian. Given the limited number of texts, however, it is difficult to establish whether Palaic was closer, morphologically, to the Hittite or Luwic branch. With respect to the leveling of the paradigm of the clitic personal pronouns, Yakubovich (2010:173-178) has shown that Palaic seems to pattern with Hittite and Lydian but not Luwian, with which it does not share the final stages of the innovation. However, the limited number of documents available in Palaic means that negative observations must be made cautiously (e.g., that Palaic seems to be absent in the documents from the *kārum* in Kaneš, cf. below § 2.1) because Palaic forms may be unrecognizable with our current level of understanding of its lexicon and grammar.

Phonologically, Palaic seems to exhibit the presence of a fricative(?) /f/, which is a very odd feature that does not seem to be matched by any similar phoneme in the other Anatolian languages of the Bronze Age. Although this feature is surprising, the grapheme associated with the alleged phoneme, a sign PI (/wa/, /we/, /wi/, /wu/) with a subscribed vocalic sign, is employed to render Hattian words. Melchert (1994:195) indicates that /f/ is used to write Hattian loanwords, but this characterization is not necessarily entirely correct.<sup>12</sup> All we know is that the Hittite scribes used the same signs to encode what they interpreted as Hattian phonetics in the texts they wrote, regardless of the foreign language of the context. Therefore, writings like *la-wa<sub>a</sub>-a-at-ta-an-na* (KUB 32.18+ iv 2f.), waa-a-na (ibid. iv 18), waa-a-ar-ra (ibid. iii 12), waa-ar-ki-ya (ibid. iv 12; KUB 32.16 iv 6) and *wu<sub>u</sub>/pu-la-(a)-ši-na* (KUB 35.165 obv. 20 *et passim*, IBoT 2.36 obv. 5), or again the divine names *Katahzifuri*—certainly analyzable as Hattian—and the formally elusive Ziparfa/Zaparfa were Hattian forms recognized and rendered as such by the scribes of Hatti or Palaic forms that were mistaken for Hattian ones by the Hittites because of the similar areal origin of the Hattian and Palaic cultures.<sup>13</sup> Apart from the issue of the aspirate phoneme, which will be discussed again later in this chapter, there exist sound laws that distinguish Palaic from the other Anatolian languages, but, as observed above, we only have a small sample of lexical items to build on.

explained by the fact that they are later copies. A later copy of CTH  $_{751}$  also survives in the tablet KBo  $_{48.178+}$  (following the joins identified by Sasseville 2019).

<sup>12</sup> According to Simon's recent reassessment of the Hattian phonology (Simon 2012:34–40), the language probably had two different fricative phonemes that were rendered differently in the cuneiform texts. This hypothesis, which is tempting although suspiciously reliant on the phonographic finesse of the scribes in Hattuša, is not incompatible with the views expressed in these pages.

<sup>13</sup> For the possibility of true Palaic words in which the sign PI with *mater lectionis* was employed, see Sasseville 2020:368–369.

# 1.3 The Position of Pala in the Anatolian Historical Geography

The name of the land of Pala is attested in the Hittite Laws, which represent a collection of legal statements<sup>14</sup> from the Old Hittite age (although some copies are composed in a later ductus, and one version of the corpus, the so-called Parallel Text, KBo 6.4, was composed at a later time).<sup>15</sup> The laws do not tell us much about Pala, its location, or its status as a polity:

If anyone kills a merchant, he shall pay 100 minas of silver, and he shall look to his house for it. If it happens in the lands of Luwiya or Pala, he shall pay the 100 minas of silver and also replace his goods. If it happens in the land of Hatti, he shall (also) bring the aforementioned merchant (for burial). (Laws, § 5; Hoffner 1997:19)

While this single passage in the laws has been used to support speculations on the relationship between Hatti and the Palaic-speaking regions in terms of political and administrative subordination and the status of the Palaic peoples during the Old Hittite age, it seems clear to me that all we read is that a different treatment was applied when a felony over which Hatti had jurisdiction was perpetrated outside of the boundaries of the kingdom. As the difference only pertains to the physical possibility or impossibility of retrieving the body of a dead merchant (we do not even know if the reference is to any merchant or a Hittite one!), the passage is not illuminating. It only tells us that Pala was the name of a location in which (Hittite?) traders went to conduct business.

Also, the reference to Pala (like the one to Luwiya, at least in this instance) seems to have been removed from the later parallel text, which characterizes the relevance of Pala for the text as an Old Hittite feature. Contrary to the toponym Luwiya (and Arzawa, which replaces it in one passage of the later copy of the code),<sup>16</sup> Pala does not occur in other passages of the laws. All we learn is that it must have been a location that was geographically or politically

<sup>14</sup> For an edition, see Hoffner (1997). For a recent discussion of the significance and value of the laws, cf. Archi 2008, with references to previous scholarship.

<sup>15</sup> Archi 1968; Hoffner 1997:5–11.

<sup>16</sup> KBo 6.3 shows Arzawa instead of Luwiya at § 19a (Hoffner 1997:30). Cf. also Yakubovich 2013:112–113, who emphasized the fact that the replacement occurs in only one locus of the manuscript of the laws. In any case, it is not necessary to consider Luwiya or Pala territories controlled by the Hittite. This does not mean supporting Hawkins's (2013b) view that the articles in the law reflected ideal and not necessarily enforceable norms: we do not know anything about the way jurisdiction was conceived. The laws could have regulated the sanctions for crimes that involved Hittite people even if these occurred in foreign territories that were not at war with Hatti. This could have been the case for the land of

distinguished from a Luwian-speaking region and also from Hatti. Whether the mention of Luwiya and Pala in the Hittite Laws indicates that the laws were enforced, as proposed by several scholars (although this has not been supported by external evidence), or whether we are dealing with Hittite cultural propaganda, or again if the reference is to a crime committed in Luwiya/Pala but by Hittites who are then to be punished in Hatti, we do not know, nor will we try to resolve the issue here. That said, the diffusion of Hittite juridical texts outside of Hatti would hint at an intensive circulation of peoples and a Hittite influence outside of Hatti during the Old Hittite era, which would set the scene for early linguistic and cultural phenomena of interference. However, we have already presented evidence for multiculturalism and multilingualism during the Middle Bronze Age, so it will suffice here to state that the hypothesis of intensive interactions between Hatti and an Old Hittite-Palaic polity or geographical area is not inconsistent with the scenario we have defended in the previous chapters. We will not try to use such a complex and elusive source as the laws to try to further support this historical framework.

The earliest documents that contain Palaic linguistic material are roughly contemporary to the age in which we assume that the laws were put into writing: while CTH 751 probably survives in Middle Hittite copies only (as per HPM, *contra* Carruba 1970:6, 12), CTH 752 survives in an Old Hittite copy or original, as do some unordered fragments with Palaic forms listed under CTH 754.

Neither these texts nor the laws, however, are informative as regards the localization of the land of Pala. The identification of the geographical position of Pala cannot be attempted based on the Old Hittite sources, but only through later documents composed or at least written down during the imperial age.

Diachronically, it makes sense to start with the one that, despite being available only in later versions, was probably copied from an older original. CTH 727, the myth of the Moon fallen from the sky, is preserved in a Hattian and a Hittite version. In the Hattian text, at the very beginning, the spot where the fallen god crashes is the city of Lihzina (Bo 8341:10a, <sup>[URU]</sup>*la-ah-za-an zi-ši-im a-ah-ku-unwa*), while, in the Hittite version, the name of the city is omitted and replaced by the common noun KI.LAM (KUB 27.5+ obv. 11, *na-aš-kán še-er* KI-LAM-*ni ma-uš-ta*). Lihzina is probably the Anatolian rendering of a Hattian toponym, Lahzan. It could have been a Palaic adaptation as it occurs in the Palaic text KUB 32.18+ (i 14, CTH 752).<sup>17</sup> This dual toponym may point to the existence of

Pala, just as it was for Luwiya, assuming that this designation was political and not merely geographical. See, however, the extensive discussion in Chapter 5 above.

<sup>17</sup> One may speculate whether the Palaic/Hattian toponym in the Hittite version was omit-

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a bilingual Hattian/Palaic region or at least of an interface area in which Hattians and Palaeans coexisted. As argued below, this is not inconsistent with the geographical scenario that can be reconstructed.

The other relevant documents were certainly composed and not just copied during the imperial age. These are the Deeds of Šuppiluliuma I and the Annals of Muršili II; both consistently associate the land of Pala with the land of Tummana.<sup>18</sup> Further details may be gained by accepting some identifications of ancient toponyms with modern landscape features. Cammarosano and Marizza (2015) identify the Mount Kaššu mentioned in the Deeds of Šuppiluliuma I (Güterbock 1956a:110; Cammarosano and Marizza 2015:160) with the Ilgaz Dağları, thereby placing Tummana to the north, in the region of classical Blaene (a name assumed to be derived from Pala, just as the name Tummana has been linked to the Hellenistic Domanitis), with Pala being located in the area of modern Ankara. A similar reconstruction using the classical and Hellenistic designations is proposed by Corti 2017a. Corti disagrees with Cammarosano and Marizza mostly on the localization of a third region mentioned in the Late Hittite sources, Durmitta, whose position is, admittedly, problematic, but luckily of little relevance for our present purpose. While Pala can only be roughly located, there are no serious reasons to doubt that it was northwest of the core area of the Hittite kingdom. It is important to notice that toponyms may far outlive political formations and cultural identity groups, so the geographical boundaries of the areas may fluctuate over the centuries. This fact, duly recognized by Cammarosano and Marizza (2015:179), means that it would be unwise to assume that the position of a Pala that was an administrative district of the Hittite Empire from the late 14th century BCE was identical to the location of an elusive polity or geographical region known as Pala, in which the Hittites assumed some crimes could occur that would require rectification and punishment under the alleged jurisdiction of a collection of legal articles conventionally known to us as the Hittite Laws.

# 1.4 The Areal Context

Uncertainties remain about the exact localization of Pala, and we cannot know for sure for how many centuries into the Late Bronze Age the Palaic language was alive and spoken in the region, but placing Pala roughly to the northwest of Hatti is enough to allow us to attempt some speculations about the areal

ted because of its lack of significance to a Hittite audience or, if the text derived from an earlier oral Hattian tradition, because it was irrelevant to a later audience.

<sup>18</sup> For an overview of the sources, see Cammarosano and Marizza (2015).

context of Palaic. The first and most obvious is the contiguity of the Palaic and Hattian speaking regions, which, even though the historical and linguistic geography of Middle and early Late Bronze Age Anatolia is no exact science, seem to have been very close to one another. It would not be surprising if in some regions—for instance, to the south of the Devrez Çayı—both languages coexisted at the end of the third and beginning of the second millennium BCE. This could explain why cities like Lahzan/Lihzina were designated differently in Hattian and Palaic. This observation, while trivial, is particularly important when it comes to discussing the status of the Palaic language in Old Hittite Hattuša. Yakubovich (2010:21, 254–257) finds some similarities in Palaic and Luwian, in that they enjoyed lesser status than the Hattian language and culture, but the cultural compenetration of the Hattian and Palaic elements was probably more relevant to the status of Palaic than its membership in the same language family (Indo-European) and group (Anatolian) as Luwian.

Apart from the obvious areal contiguity with the Hattian world and Hatti, we do not know much about other neighboring cultures and linguistic communities, although some northern regions and populations are mentioned in the later Hittite sources. The two geographical regions that are associated with Pala in the early imperial documentation from the final decades of the 14th century are Tummana and Durmitta.<sup>19</sup> We do not know much about the former, except that it was a buffer kingdom created by the Hittites for military and political reasons. At the time of its creation, it seems to have partly overlapped with the area that we have associated with the southeastern border of Pala. The political and regional makeup of the region must have changed during the previous centuries. Durmitta also appears to have been near what was once Pala, even though much debate exists concerning its location (see also Chapter 4, § 4). If it was, indeed, a northern region, which seems to be the most convincing conclusion,<sup>20</sup> it is curious that the ritual of Zuwi, a conjurer who came from this region, contains Luwian sparse Luwian phrases.<sup>21</sup> The best explanation lies

<sup>19</sup> The two most recent contributions are Cammarosano and Marizza 2015 and Kryszen 2016. See also below, § 2.1, for further discussion and a few more references.

<sup>20</sup> For an overview of the geography of northern Anatolia, see Corti 2017a. See also below, §2.1, for a discussion of the location of Tummana and Durmitta.

<sup>21</sup> The phrases occur in KUB 35.148+ iv 11–13. As for the provenance of Zuwi, KBo 12.106+ i 1 reports [U]*M*-*M*[*A*] <sup>f</sup>*Zu*-ú-i <sup>URU</sup>*Dur*-*mi*-it-[*ta*], but the fragments of the third tablet of the ritual assign the enchantress to a different city (cf. Hutter 2006 and Klinger et al. 2016). See also Sasseville and Yakubovich (2018), for a possible parallel passage in CTH 751 and the ritual tradition of Zuwi of Durmitta.

within the relationship that existed between the region of Purušhanda and the northern regions during the Old Assyrian age. Nonetheless, the presence of a large number Luwian speakers in the north in the early years of the Late Bronze Age would be surprising, so that extreme caution is required in evaluating the relevance of this piece of evidence when discussing the areal relationships of the Palaic language (cf. also below § 2.2).

Apart from the political toponyms from the early imperial traditions, the sources also inform us of the presence, in northern Anatolia, of the Kaškeans. This name refers to allegedly nomadic tribes that are assumed to have threatened the stability of the northern regions during the 15th century BCE.<sup>22</sup> While speculations have been made about their cultural and linguistic profile,<sup>23</sup> we know nothing of these groups except that they proved hostile to Hatti and resisted entertaining diplomatic relationships with the Hittite kings. Furthermore, the information about them that we can gather from the Hittite sources is relatively late.

### 2 Areal Relationships of Palaic

Based on the scenario that was sketched in the previous sections, the nature and context of the Palaic material we possess can be described as follows. First, Palatic is an Anatolian Indo-European language, whose exact position in the internal filiation of the Proto-Anatolian branch is still unclear, even though it appears to have some relatively archaic features. It seems to be associated with the region of Pala, somewhere to the northwest of Hatti, not far from the areas in which we assume that Hattian was spoken. Whether other languages were used in the same region or nearby is unclear, and the hypothesis that Luwian penetrated Durmitta during the Old Hittite age is problematic. We have no idea whether Palaic was still a spoken language by the time it was recorded in Hattuša, but it was associated with the cultic and ritual sphere in the Hittite capital. The Palaic material that we know from the Hittite archives appears to share some cultural features with the Hattian religious environment but was used with Luwian for incantations in at least one instance.

With this sketch in mind, it is time to shift from a historical-geographical to a diachronic philological and linguistic perspective in the next subsections

<sup>22</sup> Cf. Singer 2007b and de Martino 2020:63-64.

<sup>23</sup> Most notably, by Giorgadze (2000). A sound assessment of the limits of our knowledge of the language and culture of the Kaška can be found in Singer (2007b, especially p. 178 as regards the hypotheses on the linguistic affiliation of the idiom).

and examine the (admittedly few) data on the areal relationships of the Palaic language.

### 2.1 Old Assyrian Age

While Palaic, as previously discussed, textually emerges during the Late Bronze Age in the cuneiform archives of Hattuša, the problem of its areal relationships is rooted in the MBA stages of the Anatolian society during the Old Assyrian phase. The absence of Palaic material from the archives of Kaneš, confirmed for onomastics by the lack of Palaic forms and morphemes in the lexical analysis carried out by Kloekhorst (2019),<sup>24</sup> is not surprising, in light of the geographical, historical, and cultural considerations presented in Chapter 4. Given Pala's presumed localization (see above), it was certainly far too decentered to be involved in the easternmost portions of the Old Assyrian commercial network and, in all likelihood, was not part of it at all. It may have been involved in western interregional networks of which we possess no written records.<sup>25</sup> Durhumit, the Assyrian form of the toponym Durmitta, does appear in the Old Assyrian sources but refers to a city relatively far from Kaneš, belonging to a western itinerary. However, since the exact position of Durmitta is far from certain, this does not add much to the reconstruction.<sup>26</sup>

Linguistically speaking, no recognizable Palaic form has emerged from the documents from Kaneš that have been published, and the typical Palaic diagnostic features are subtle when it comes to identifying a name as Palaic rather than Hittite or Luwian. The task of identification is further complicated by the suboptimal graphemic capability of the Old Assyrian script to render Anatolian forms and clusters. A sound conclusion is that Pala was at the extreme boundary of the area covered by the Old Assyrian trading networks and, if Palaeans were present at all in the  $k\bar{a}rum$  society of Kaneš, they probably formed an even smaller minority than the Luwians and left no recognizable trace of their existence in the available documents.

For the alleged interpretation of the nouns ending in *-ga-* as Palaic anthroponyms, which was proposed by Goetze 1954, see the early criticism by Laroche (1966:306–309).

<sup>25</sup> Cf. above, Chapter 4, for further discussion.

<sup>26</sup> The proposed positions of Durmitta range from the mid Kızılırmak (Forlanini 2008) to the area of Merzifon (Barjamovic 2011). While it is true that the southern hypotheses seem unconvincing because of the association of the area with the Kaška fronteers throughout the history of the Hittite kingdom, Barjamovic's hypothesis appears too extreme, as, with Weeden (2012), it would extend the Old Assyrian network too far to the north-east. Leaving aside the details of the micro-geographical data, it seems reasonable that Durmitta was located somewhere in the İnandık area (Kryszen 2016).

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### 2.2 The Hatti Age

Palaic material is found in the Hittite archives beginning in what is commonly referred to as the Old Hittite phase. This label is nowadays problematic, as the very date of the Old Hittite paleographic ductus has been called into question.<sup>27</sup> In this work we maintain with de Martino 2021 that the non-Akkadian texts dating to the reigns of the earlier kings of Hatti probably existed, but it is not possible to establish what the Old Script of the ritual CTH 752 meant in terms of chronology. The text may have been composed at any point between the late Middle Bronze Age and the end of the 16th century BCE.

These chronological uncertainties, however, affect the absolute chronology more than the relative one, so they are not a major issue for our purpose. The data suffice to attribute the production of the earliest documents containing Palaic material to the same phase in which the oldest Hittite documents were composed, such as the first manuscripts of the Laws, the Palace Chronicle, and the Tale of Zalpa.

In this context, which we may label early Late Bronze Age Hatti, Palaic emerges as a foreign language in the Hittite archives. It is associated with Luwian in CTH 752, a text that contains incantations in both languages, which means that the two idioms shared the status of cultic vernaculars, although it does not prove that they had the same role and prevalence. The fact that Pala and the Luwian land are both mentioned in the passage of the Laws discussed above indicates that the two areas (and populations) had a similar political status from the perspective of the Hittites. However, the Luwian region is mentioned in other loci of the code, whereas Pala occurs only once and disappears in the later version of the text.<sup>28</sup>

From a linguistic perspective, there are no obvious traces of significant linguistic interference or interaction between Luwian and Palaic. The shared lexical elements, such as the title *tabarna/labarna*, that also occur in Hattian and Hittite depend on a mixed cultural and linguistic environment that does not prove direct interference between Palaic and Luwian at any known stage of the history of Anatolia.

<sup>27</sup> Cf. van den Hout 2009b and the critical assessments by Archi 2010, Beckman 2019a:67, de Martino 2021 and Klinger 2022. For more details on this issue, which is closely related to the problem of the adoption of cuneiform in Anatolia, see above, Chapter 5.

<sup>28</sup> The Luwian land is mentioned also at §§19a, §19b, §21 and §23 (Hoffner 1997:30–32). All except §23 mention 'the Luwian man,' indicating that a Luwian was distinguished from a Hittite. Significantly, Pala and its inhabitants are not mentioned in any of these passages, so the same cannot be automatically assumed for Palaeans.

Beyond the lexical level, Palaic does not share the same sociolinguistic leveling of the clitic pronominal system that was identified for Luwian by Yakubovich (2010:161–195), nor did it develop the *i*-mutation, which, while conditioned by prosodic factors at least in Lydian (cf. Sasseville 2017), was spread areally through the influence of Luwian (or Luwic), at least in the case of Hittite.<sup>29</sup>

Despite being attested only in the Hattuša archives, Palaic does not show any trace of active linguistic interference with Hittite either. Unlike Luwian, that will become one of the main vernaculars in the Hittite regions of Anatolia and in the capital city by the pre-imperial age, the language of Pala seems to have existed only as a cultic language and to have played no recognizable role in the development of the Late Hittite language. Whereas Luwian had lexical, morphological, and even morphosyntactic influences on Late Hittite, no changes in Hittite were induced by contacts with Palaic. And, as just observed regarding Luwian-Palaic shared lexical items, the only words that occur in both Palaic and Hittite contexts (*tabarna/labarna* being the obvious example), are common areal words.<sup>30</sup>

Therefore, Goedegebuure's observation (2008, 170) that the only *attested* interference is between Palaic and Hattian seems trustworthy. The evidence for interference can, as usual, be divided into two main types: lexical phenomena and grammatical phenomena. In the next section, the available evidence will be critically discussed.

# 2.3 Alleged Phenomena of Linguistic Interference between Hattian and Palaic

Hattian-Palaic lexical interference seems proven by the existence of a limited group of Hattian words in the Palaic incantations, ritual passages, and texts from Hattuša. The candidate forms, which are based on the Carruba's glossary (1970), are mostly those that were already listed at §1.2: *lafattanna* (*la-wa<sub>a</sub>-a-*

<sup>29</sup> Cf. Rieken 2006 and Yakubovich 2010:334–337 on the extension of the *i*-mutation to Hittite by contact.

<sup>30</sup> A very peculiar and unique case exists of a shared word that occurs in Palaic and Hurrian. It concerns the Hurrian *hašeri* and Palaic *hašira* 'dagger' (Carruba 1970:55). However, since the corresponding Hittite word is unknown, one may not exclude that this is another case of a circulating word. Cf. also Richter (2012:139), who, however, does not propose an etymology. A possible Indo-European etymology was proposed by Brent Vine (cited in Melchert 2007:257). But the likeliest explanation is a Wanderwort deriving from—or connected to—the Akkadian *hasārum, hesērum* 'to blunt, chip, trim' (CAD H, 176). See below, Chapter 14, § 3.2, for further discussion.

*at-ta-an-na*),<sup>31</sup> the mysterious compound(?) *manzakilba-* (*ma-an-za-ki-*<sup>r</sup>*i*]<sup>1</sup>-*ba-*),<sup>32</sup> *tuwafanteli* (*tu-wa-wa<sub>a</sub>-an-te-li*),<sup>33</sup> *fana* (*wa<sub>a</sub>-a-na*),<sup>34</sup> *farra* (*wa<sub>a</sub>-a-ar-ra*),<sup>35</sup> *farkiya* (*wa<sub>a</sub>-ar-ki-ya*),<sup>36</sup> *fašhullatia* (*wa<sub>a</sub>-(a)-aš-hu-(ul)-la-ti-ya-aš*), *fatia* (*wa<sub>a</sub>-ti-ya-*),<sup>37</sup> *fatila* (*wa<sub>a</sub>-ti-la-*),<sup>38</sup> and *fuzzanni* (*wu<sub>ú</sub>-(uz)-za-(an)-ni-*),<sup>39</sup> all of which are semantically unclear but occur in the usual cultic and ritual contexts; possibly the title *taberna/labarna* (if originally Hattian);<sup>40</sup> and the bread *fulašina* (*wu<sub>ú</sub>/pu-la-(a)-ši-na*,<sup>41</sup> also attested in the derivative *wu<sub>ú</sub>-la-ši-ni-ki-eš*). Two observations are in order. First of all, recent advancements in our understanding of Palaic suggest that some of the words containing the putative fricative sound may have been inherited rather than borrowed (cf. Sasseville 2020:368–369), a circumstance for which one mayaccount either by reconstructing a dedicated Palaic phoneme or, perhaps more reasonably, by assuming an interpretation of the words as belonging to a common Palaic-Hattian lexicon famil-

<sup>31</sup> E.g., KUB 32.18+ iv 2f.; eDiana s.v. *lawattānna*- indicates Indo-European etymology as "very likely" (https://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=528).

<sup>32</sup> KUB 32.18+ iv 3; eDiana s.v. *manzakilba*- doubts Hattian origin but only provides partial and very tentative comparanda from the Anatolian languages (https://www.ediana.gwi .uni-muenchen.de/dictionary.php?lemma=1052).

<sup>33</sup> E.g., KUB 32.18+ iv 4; eDiana s.v. *tuwawantili*- proposes a possible Luwian etymology, with, however, a very complex morphological structure and an extremely tentative meaning (https://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=2404).

<sup>34</sup> E.g., KUB 32.18+ iv 18.

<sup>35</sup> E.g., KUB 32.18+ iii 12.

<sup>36</sup> E.g., KUB 32.16 iv 6.

<sup>37</sup> E.g., KUB 32.18+ iv 14; See however eDiana s.v. *watiya*- for possible Indo-European etymologies (https://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=2827).

<sup>38</sup> E.g., KBo 19.152 i 17; eDiAna s.v. watīla- 'a body part' (http://www.ediana.gwi.uni-muenchen .de/dictionary.php?lemma=652).

<sup>39</sup> E.g., KUB 35.156:6; eDiana s.v. p/wūzzanni does not exclude an Indo-European etymology (https://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=651).

The etymology of the word *tabarna/labarna*, ultimately a title of the Hittite king, has been much debated in the literature. The main hypotheses are that of an Anatolian (generally Luwian) origin (to cite only the most recent contributions, see Starke 1983; Melchert 2003:19; and Yakubovich 2010:229–232), and that of a Hattian origin (Soysal 2005). It is impossible to solve this problem, but, in the context of a contact-oriented analysis, it is worth to emphasizing that the diffusion of the term in documents with Hittite, Luwian, Hattian, and Palaic contexts probably links it to a shared Anatolian kingship lexicon that may have belonged to the mixed society of the Middle Bronze age (see in general Chapter 4). For the purposes of the present chapter, *tabarna/labarna* can be regarded to as a sort of Wanderwort, and its presence in a Palaic context provides us with no new information about the interference between Palaic and any specific language of the area.

<sup>41</sup> E.g., KUB 35.165 obv. 20.

iar to the Hittite scribes, who rendered them using the same graphemic device. Second, regardless of the true origin of each word, based on the contexts (and on the meaning in the case of the *fulašina* bread), the lexical items belonged to the technical lexicon of the ritual sphere, which may indicate that they were composed by scribes who specialized in writing ritual texts and possibly employed a standard graphic inventory. This observation is conducive to a further methodological remark: since we know only the written Palaic (and Hattian) grapholect of Hattuša, it is impossible to detail the exact nature and duration of Hattian-Palaic interference. Even the idea that Palaic had a fricative phoneme (either inherited or used to adapt borrowings) is, despite the apparent evidence, mere speculation about a language of which we have no direct examples. The texts that we possess were filtered by at least one and possibly two intermediate cultures.

Possible traces of structural interference, however, have been proposed to exist. The contrastive particle *-pi* of Palaic seems to functionally resemble the *-pa* of Luwian and the *-(m)a* of Hittite, and is formally remindful of the contrastive/adversative particle *-pi* of Hattian.<sup>42</sup> The hypothesis that the Palaic particle was borrowed by Hattian was cursorily advanced by Goedegebuure (2008:170–171). While this is theoretically possible, the borrowing of a clitic grammatical morpheme and its integration in the morphosyntax of the target language (in this case, the Hattian *pi* would be integrated as a Wackernagel particle in the syntagmatic structure of Palaic) is a phenomenon that occurs in contexts of very intensive contact. Assuming it before excluding a simple Indo-European inheritance is acceptable only if a very convincing match exists not only formally but also semantically. Given our limited *lexical* understanding of the Palaic and Hattian languages, claiming that the function of either of the particles was certain would be unfounded. Therefore, we are once again faced with circumstantial and non-conclusive evidence.

Another possible example of interference would be the morphophonemic rule of assimilation of the alveolar nasal /n/ to /m/ before a bilabial stop.<sup>43</sup> This seems to regularly occur in Hattian, judging from the texts we possess,

<sup>42</sup> While Palaic also has a clitic particle *-pa*, this seems to be distributed differently than *-pi*. The former is always non-final in a clitic chain, whereas the latter is always final. Pending a better understanding of the meaning, this might even point to allomorphism. The author of the present chapter wishes to thank Ilya Yakubovich (personal communication) for pointing out this fact. Melchert (personal communication) prefers to rather assume two particles with different functions but compares a possible particle *-pi* of Luwian, which would also falsify the borrowing.

<sup>43</sup> Cf. Goedegebure (2008:170–171).

as well as in Palaic, but far more rarely in the Hittite or Luwian texts produced in Hattuša. It is very difficult to evaluate this possible case of morphophonemic interference because the texts that we can read in both Hattian and Palaic were composed in Hattuša and reflect the way that these languages were perceived and rendered (possibly through dictation) by the Hittite scribes. However, given that this common pattern does contrast Hattian and Palaic with Luwian and Hittite, the hypothesis that the feature was a northern areal one cannot be dismissed entirely.

Summing up, one can only admit that the evidence for areal contacts involving Palaic is meager in the limited number of texts available to us. Nevertheless, even if none of the features that Hattian and Palaic share can be called conclusive, each could point to language superposition or attrition due to the cohabitation of Hattian and Palaic speakers in a geographically contiguous and partially overlapping territory. This scenario appears to be consistent with the strongest, although not properly linguistic, piece of evidence supporting a strong connection between the two cultures, which is the composition of a putative 'Palaic' pantheon as we can reconstruct it based on the sources that carry Palaic texts. There are two types of divine names: Hattian names (e.g., <sup>d</sup>Hašamili and possibly also <sup>d</sup>Ziparfa/Zaparfa), and Anatolian names, occasionally with a Palaic suffix (e.g., dIlaliyantikes and dUliliyantikes). Even though proper names, including names of divinities, are linguistically very conservative and therefore may return a palimpsest of which the strata are impenetrable, the evidence is certainly compatible with a scenario of strong cultural and linguistic contacts involving the Hattian, Hittite, and Palaic worlds.

### 3 The Status of Palaic in the Hittite World

After outlining the evidence for the areal position of Palaic, a sociolinguistic issue remains to be discussed: the status of the language in Anatolia. Given the lack of data for the pre-Hittite phase, this problem can only be tackled for the age of the Hittite archives. Some facts are obvious: Palaic was a foreign language in Hattuša, and, judging from the materials in the archives, was used very early in religious and ritual contexts. This is a feature that Palaic shares with two other languages recorded in the earlier Hittite tablets, Hattian and Luwian. Luwian and Palaic even co-occur as languages of incantation in the ritual CTH 752, available to us in Old Script.

The parallel use of Luwian and Palaic in CTH 752, as well as the parallel reference to Pala and Luwiya in one passage of the Hittite Laws (see above §1.3), prompted Yakubovich (2010:21) to observe that "The ritual practices of

the Hittite Old Kingdom apparently drew upon the traditions of Luviya and Pala, which are mentioned in the Hittite Laws as separate geographic entities under Hittite sovereignty." In describing the inclusion of Palaic texts in the Old Hittite ritual and religious corpus, the scholar observes that "[s]o far as we can judge, Palaic indigenous society was never literate, and so one has to assume that the officials of the Hittite Kingdom undertook conscientious efforts to adapt the worship of Palaic gods to the needs of the state cult. The scribes who were responsible for accomplishing this task must have been bilingual in Hittite and Palaic."

While the general scenario appears convincing, it is worth wondering whether we need to assume that the scribes were bilingual. Mesopotamian heterography (Sumerograms and Akkadograms) far less frequently in the rendering of Palaic than Luwian, hinting that Palaic was *not* a part of a scribal formation: the texts were, on the contrary, written by reproducing phonetic patterns using almost exclusively syllabograms. Although Palaic speakers could have been involved in the process, it is equally possible that the scribes did not know the language of the Palaic oral traditions that they were recording and were not bilingual—unless we want to define as bilingual an individual who has learned a language that is never used in oral communication such as classical Latin or ancient Greek today.

Since the process of leveling the pronominal system is limited in Palaic to the first two stages of the general pattern outlined by Yakubovich (2010:161– 195), and no text found in Hattuša is a proven Middle or Late Hittite original, it is important to examine whether any evidence points to Palaic being a living language used in Hatti at the time that it is recorded in the available cuneiform documents. The circumstantial data are not conclusive. Palaic may or may not have been known by the scribes who wrote down the Palaic rituals and incantations. Even if they knew it, it could have been merely an old religious idiom. The Palaic religious material acquired by the Hittites, in any case, had already been strongly influenced by the Hattian culture.

With the sole exception of the sentence in the Laws, historical information on the Palaic regions and their relationship to the Hittite kingdom is unavailable for the phases during which the Palaic texts were composed or written down.

As no evidence indicates that a diachronic evolution of the language occurred during the age in which it is attested,<sup>44</sup> the internal linguistic data are

<sup>44</sup> David Sasseville (personal communication, June 7, 2021) made us aware that the aberrant form of the imperative *ašendu* (instead of the expected *ašandu*) in the late copy of CTH 751

also ungenerous. Palaic could have been a very conservative Anatolian language or died before innovations occurred. None of the areal modifications that are of interest for Luwian and Hittite in the Late Bronze Age are apparent in the available Palaic documents. We have no diffusion of the *i*-mutation, no trace of interference-driven leveling of paradigms, and no trace of lexical borrowings except for the Hattian words mentioned above (if they must be interpreted as true borrowings). The only feature shared between Palaic and the other Anatolian languages seems to be the devoicing of initial stops, assuming that one accepts Melchert's very convincing proposal (2020) that this phenomenon was areal. Even so, the change must have occurred at a very early date—at the time that Palaic separated from Proto-Anatolian—so it is irrelevant to the problem of Palaic's status in historical times.<sup>45</sup>

All in all, there seems to be no evidence supporting the use of Palaic as a spoken language in Hatti, even during the Old Hittite age, or that the scribes had mastered it as a foreign language when they were writing down the texts that constitute the current thesaurus of Palaic. That Palaic and Luwian were both used in the text CTH 752 and both employed in the ritual and magic sphere is not per se sufficient to indicate that they had similar status in Hatti and Anatolia.

### 4 Concluding Remarks

Based on its historical and geographical context, Palaic appears to have been a very marginal language in the generalized Anatolian area. During the Middle Bronze Age, it was spoken on the periphery of the eastern Old Assyrian trading network. During the Old Hittite age, it entered the Hittite archives in a form that was already culturally influenced by Hattian, although, on a linguistic level, this interference seems to have been limited to a handful of *termini technici* used in rituals and magic and two forms that may or may not represent structural interference. Although the Palaic materials were subsequently

<sup>(</sup>KBo 19.153+ iii 13) is matched by a similar form with an unexpected /e/ vowel in a similar phonetic context (DBH 46.101+ ii 10/14 *wehen*[ $ta^2$ ]; cf. Soysal 2017). While the similarity of the phonetic contexts might indicate a conditioned sound change in a very late phase, the examples are few, and cases seem to exist in which /a/ is preserved in the same prosodic and phonetic environment in the same texts.

<sup>45</sup> Note, however, that Yakubovich (2020a:232) proposes that Hittite underwent initial stop devoicing relatively late, so the shift would have occurred in historical times instead of protohistorically.

copied and recopied in the archives, there is no evidence that Palaic became part of the sociolinguistic scenario of Late Bronze Age Hattuša, which may be indicative of a loss of significance and makes it impossible to establish whether Palaic was still spoken as a living language in any areas of the Hittite kingdom.

# Indo-Aryans in the Ancient Near East

P. Cotticelli-Kurras and V. Pisaniello

# 1 Indo-Iranian People in the Ancient Near East: An Overview of the Studies

The subject of Indo-Iranians in the cuneiform sources from the ancient Near East, specifically related to the Hurrian kingdom of Mittani, is striking in its bibliographical overabundance, given the limited amount of material attested. Since a detailed discussion of the bibliography is impossible here, in what follows we will summarize the milestones of the debate and the main solutions suggested without making any claims for completeness. For this purpose, we decided to conventionally divide the studies that have been conducted since the first identification of this linguistic material into two stages. During the first stage, five different solutions were suggested for how the material related to Indo-Iranians could be classified linguistically: as 1) Iranian, 2) Indo-Aryan, 3) Indo-Iranian before the split into the two branches, 4) both Iranian and Indo-Aryan, or 5) a third branch of the Indo-Iranian group. The beginning of the second stage can be dated roughly to the middle of the 20th century and is represented in the person of Manfred Mayrhofer. Through his many contributions to the field, it became clear that the Indo-Aryan hypothesis best accounted for the data.

# 1.1 From the Discovery to the Mid-20th Century

The acknowledgment of the presence of Indo-Iranian people in the ancient Near East in the second millennium BCE predates the discovery and interpretation of Hittite texts. The letters sent by Tušratta of Mittani to Amenhotep III and Amenhotep IV, found at Tell el Amarna beginning in 1887, contain names of the kings and nobles that had already been recognized as Indo-Iranian<sup>1</sup> when Winckler (1907) pointed out the presence of Vedic god names in the cuneiform tablets found at Boğazköy that preserved the treaty between Šup-

<sup>1</sup> See Bezold and Wallis Budge 1892:144 (under W(?)idya) and 146 (under Wyašdata); Rost 1897:113, 216; and especially Hommel 1898, Hommel 1899:425, Scheftelowitz 1902:270–273, and Bloomfield 1904:8.

piluliuma I and Šattiwaza of Mittani (which led him to the misidentification of the ethnonym and toponym *Hurri*, read as *Harri*, with the Indic  $\bar{a}rya$ -, the self-designation of the Indo-Iranians).<sup>2</sup>

Despite some sporadic criticism on whether the onomastic material was Indo-Iranian,<sup>3</sup> Winckler's discovery seemed to provide definitive confirmation of the presence of a group of Indo-Iranians in the kingdom of Mittani who belonged strictly to the ruling class, namely, an Indo-Iranian dynasty settled in an area in which a non-Aryan (Mittanian) community lived.<sup>4</sup> Further evidence emerged from the Hittite hippological treatise by Kikkuli (CTH 284), in which some Indo-Aryan technical terms could be recognized,<sup>5</sup> and a Hittite ritual text (CTH 395) in which the name of the Indic god Agni was found.<sup>6</sup> These discoveries provided further support for the previous identification of the Kassite Sun god name *Šuriya* with the Vedic *súr<sub>i</sub>ya*-. Moreover, an Indo-Iranian etymology seemed to be available for relevant words and place-names in texts concerning Mittani from different areas (Alalah, Egypt, etc.)—for example, *mariyanni*<sup>7</sup> and *Waššukanni*<sup>8</sup>—and some terms referring to horse colors with a likely Indo-Aryan etymology were later identified in texts from Nuzi.<sup>9</sup>

Thus, the collected evidence of personal names, divine names, place-names, and technical terms confirmed the presence of Indo-Iranian people throughout the ancient Near East. However, several difficulties emerge in trying to define the linguistic identity of such Indo-Iranians more thoroughly. Most of the personal names of the Mittanian rulers were initially regarded as specifically Iranian rather than Indo-Iranian or Indo-Aryan, although they showed some features seemingly pointing to a stage before the diversification of the Iranian dialects (in particular, the initial \**s* was not changed to *h* before a vowel).<sup>10</sup>

<sup>2</sup> Winckler 1910:291, a correspondence definitively dismissed by Hrozný 1929b:91–92.

<sup>3</sup> See Sayce 1909 and especially Clark 1917, who tried to show that any alleged Indo-Iranian element identified in such names could relate to linguistic elements found in Semitic, Hittite, and 'Mittanian' (i.e., Hurrian) names.

<sup>4</sup> See Bloomfield 1904:8: "on the one hand an Aryan dynasty with Aryan names rules in Mitani; on the other hand there is no indication of Aryan nomenclature outside of this dynasty." After Winckler's discovery, see, for example, Meyer 1908a:17–24, Meyer 1908b, Jacobi 1909, Kennedy 1909, Konow 1921, Forrer 1922:247–249 (who argued that these Indo-Iranians corresponded to the Manda people [i.e., the Medes] mentioned in Hittite and Akkadian texts), Friedrich 1928:146, and Schmökel 1938.

<sup>5</sup> See Hrozný 1919:xi–xii; Jensen 1919.

<sup>6</sup> See Hrozný 1929a.

<sup>7</sup> Winckler 1910:291.

<sup>8</sup> Friedrich 1925:121, Kretschmer 1927:93–94, Sturtevant 1928:213–214.

<sup>9</sup> First by von Soden 1957:336–337.

<sup>10</sup> See Bloomfield 1904:10–11, who, as an alternative, also suggested the possibility that these

In contrast, the divine names found in the treaty between Šuppiluliuma I and Šattiwaza, who belonged to the Mittanian dynasty, seemed to be unequivocally Indo-Aryan,<sup>11</sup> as did the glosses in Kikkuli's hippological text.

Different solutions were suggested to account for such a puzzling situation. Meyer (1908b) regarded this Indo-Iranian stock as belonging to a stage predating the branching of the Indo-Iranian group into the two distinct Indo-Aryan and Iranian subgroups. This theory was quickly challenged by Jacobi (1909:726), who, while accepting the Iranian status of the personal names of the Mittanian rulers, remarked on the unequivocally Indic character of the deities in the Šattiwaza treaties and suggested that the Mittani Aryans were an Iranian tribe coming from the east of Iran and highly influenced by the Vedic culture. However, his scenario was disputed by several scholars, who accepted Meyer's position.<sup>12</sup> Konow (1921:60), much like Jacobi, explained the presence of Vedic gods and glosses in Hittite texts as the result of "the pre-historic expansion of Indian civilization" in the form of "a peaceful propaganda," while Mironov (1933) opted for an unlikely scenario involving a mixed Indo-Aryan and Iranian community. A different position was staked out by Lesný (1932), who regarded the Mittani Aryan as neither an Indo-Aryan nor Iranian language but rather as the only known member of a third branch of the Indo-Iranian group.<sup>13</sup> Feiler (1939) regarded all of the Mittani Aryan linguistic material, including the personal names of the Mittanian rulers, as closer to the Indo-Aryan group.<sup>14</sup>

We choose to regard Belardi's comprehensive contribution, published in 1951, as the final chapter of this first stage of research. After carefully reevaluating all of the available data and the various hypotheses, he concluded that the linguistic identity of these Indo-Iranian relics could not be determined, although they could not be considered Iranian.

### 1.2 From the Mid-20th Century to the Present

From the middle of the 20th century until recently, the debate on the Indo-Iranians in the ancient Near East and their language was dominated by Manfred

names belonged either to a non-Iranian dialect close to Iranian or an Iranian dialect that preserved the initial \*s (possibly Median).

<sup>11</sup> See Jacobi 1909, Konow 1921, and Hrozný 1929b:104. A further problem—the fact that these deities did not occur in any of the letters sent to Egypt by the Mittanian kings, in which a different pantheon was found—is ably explained by Konow (1921), with further remarks and corrections by Thieme (1960), by invoking their specific role as the tutelary deities of contracts, peace, etc.

<sup>12</sup> Cf., e.g., Oldenberg 1909, Keith 1909, Kennedy 1909, and, later, Porzig 1927.

<sup>13</sup> This is in line with one of the suggestions by Bloomfield 1904:10–11.

<sup>14</sup> Followed by Dumont 1947 and Hauschild 1962:34.

Mayrhofer, who published, beginning in 1959, thorough and fully documented studies of the linguistic evidence from linguistic, philological, geographical, and historical perspectives.<sup>15</sup> Mayrhofer tackled the entire lexical evidence, including personal names, divine names, place-names, and technical terms occurring as loanwords from different Near Eastern areas. Moreover, he considered language contact between the Indo-Aryan superstrate and the Hurrian substrate and dealt with the Hurrian adaptation strategies used for Indo-Aryan words (see § 3 below).

Mayrhofer's studies are crucial for the recognition of the essentially Indo-Aryan character of all of the lexical material attested in the cuneiform sources, although that solution was previously proposed by other scholars, as mentioned above, and by Mayrhofer's contemporary Thieme (1960), who examined the material from a cultural perspective. Thieme revived Konow's (1921) arguments on the specifically Indo-Aryan nature of the gods in the Šattiwaza treaties (although cautioning that Indo-Aryan and Proto-Aryan cannot be distinguished from a strictly linguistic point of view).

Mayrhofer's Indo-Aryan solution was criticized by Kammenhuber (1968) and Diakonoff (1972), who challenged several Indo-Aryan etymologies suggested for personal names and loanwords and pointed out that no evidence for a living Indo-Iranian language can be found in Near Eastern documents of the 15th and 14th century BCE, claiming, in particular, that 1) the glosses in the Kikkuli text were just Hurrianized fossils mechanically reproduced by the scribes; 2) the Indo-Aryan deities in the Šattiwaza treaties, also in a Hurrianized form, do not occur elsewhere in Mittanian documents; 3) the Indo-Iranian personal names of the Mittanian kings were throne names (Šattiwaza originally bore the Hurrian name Kili-Teššub); and 4) no traces of Indo-Iranian influence can be found in Hittite. Despite Thieme's (1960) analysis, even the gods in the Šattiwaza treaties offer no compelling evidence for whether the Near Eastern Aryans were still Indo-Iranians or already Indo-Aryans. Furthermore, they contended that any Indo-Iranian people who existed in the ancient Near East would not have been those who later reached India because no Hurrian elements can be found in Old Indic texts. They concluded that Indo-Iranians probably never penetrated the Near East in the second millennium BCE, instead only interacting with a group of Hurrians (the Mittanians sensu stricto) in a border area, which Diakonoff believed was Armenia (1972:116-120). These con-

<sup>15</sup> See Mayrhofer 1959a, 1959b, 1960, 1965a, 1965b, 1966, 1969, 1974a, 1974b, 1982, 1983, 1996, and 2007. On Mayrhofer's contribution to the clarification of the issue of the Indo-Aryans in the ancient Near East, see especially Raulwing 2013.

tacts, however, were highly significant as they gave rise to dynastic names, the adoption of some deities, and the introduction of technical terms related to horse training.

Mayrhofer defended his positions in his first monograph (Mayrhofer 1974a) and later publications. His results have been generally accepted by later scholars,<sup>16</sup> who significantly added to them with fine-grained analyses of the linguistic material, on which the discussion in the following sections is based.<sup>17</sup>

### 2 Sources

As mentioned, there are no full texts in the Indo-Aryan from the ancient Near East but rather only a set of lexical items relating to texts with various findspots, associated with the kingdom of Mittani. The nature of the lexical material attested—personal names, divine names, place-names, glosses (technical terms), and sporadic loanwords—seems to suggest that they are relics rather than proofs of the existence of a living community of Indo-Aryan speakers in the kingdom of Mittani.

The Amarna letters from Mittani provide us with a number of personal names, mostly borne by the rulers of the kingdom and some officials. Other personal names and sporadic loanwords can be found in texts from Alalah (level IV) and Kassite Babylonia. The documentation from the archives of Boğazköy is the main source for divine names—particularly the (Hurrianized) names used to refer to the deities who witnessed the treaty between Šuppiluliuma I and Šattiwaza of Mittani, to which should be added Agni, who is mentioned in a Hittite ritual—and technical terms referring to the training of horses, which appear as glosses in the hippological treatise by Kikkuli. Texts from Nuzi also provide other Aryan personal names and technical terms belonging to the sphere of horse training, while other loanwords are found in texts from different areas.

#### 3 Linguistic Analysis

In the following sections, we will provide an overview of the Indo-Aryan lexical material found in cuneiform sources. It is organized into two main groups: ono-

<sup>16</sup> But see also the reply by Kammenhuber (1977).

<sup>17</sup> Among others, see Burrow 1973, Hodge 1981, Derakhshani 1998, Raulwing 2000, Witzel 2001, Sadovski 2009, Fournet 2010, Fournet 2012, García Ramón 2015, Sani 2017, Kroonen, Barjamovic, Peyrot 2018:2, and Gentile 2019.

mastics (with three subgroups) and loanwords. Since discussing each lexeme for which an Indo-Aryan etymology has been suggested would unnecessarily burden the text, we opted for a selection of the most relevant material, especially focusing on their Indo-Aryan etymology and the strategies of adaptation they show in the target languages in which they appear.

### 3.1 Onomastics

As mentioned, proper names represent the great majority of the Indo-Aryan lexical material from ancient Near Eastern sources. Most are personal names, although there are also some divine names (to which one may add those occurring in theophoric personal names) and perhaps a couple of place-names. Their etymology is often unproblematic and can be easily traced back to Indo-Aryan roots, although some unclear or ambiguous cases exist.<sup>18</sup>

Most of the personal names found in Indo-Iranian sources are built through nominal compounding.<sup>19</sup> They are generally found uninflected, in their original stem form (Hittite case endings may be added sporadically in names occurring in Hittite texts). Conversely, most of the divine names and place-names feature more complex strategies of adaptation that involve Hurrian suffixes, although some elements still lack compelling explanations.

### 3.1.1 Personal Names

The etymology and structure of the Indo-Aryan personal names known from cuneiform sources have been more or less extensively discussed by almost all of the scholars who dealt with the issue of the Indo-Iranians in the ancient Near East. In the most recent comprehensive analysis of the material, Gentile (2019) has shown that these personal names are morphologically and semantically consistent with those attested in Vedic and Avestan. Most are built through composition, except for some single-stem names (e.g., *Wāzzi*, to be compared to the Vedic *vājín-* 'racer'). The majority are possessive compounds (*bahúvrīhi*), for example, *Tušratta* 'whose chariot is vehement' (var. *Tuišeratta*, *Tušeratta*), < \**tvaiśa-ratha-*, or the names having *-atti* 'guest' (< \**-atthi*)<sup>20</sup> as their second member, such as *Intarratti* 'having Indra as his guest', *Mittaratti* 'having Mitra as his guest', and *Tewatti* 'having a god as his guest' (< \**daiwa-*). The exocentric *éntheos* type is also found, although less frequently (e.g., *Abiratta*, 'facing

<sup>18</sup> See, e.g., the discussion on the name *Biriyaššuwa* ~ *Biridašwa* (probably meaning 'to whom (his) horse is dear') in Gentile 2019:142–143.

<sup>19</sup> See especially Schmitt 2000 and Sadovski 2013.

<sup>20</sup> See Mayrhofer 1966:22. Cf. also Pinault 1998.

chariots', < \**ab*<sup>*h*</sup>*i*-*ratHa*-), and the endocentric determinative compounds (*tat-puruşa*) are well attested, such as *Indaruta* 'helped by Indra' (with -*ūtá* as the second member; cf. the Vedic *av*<sup>*i*</sup>/*ū*- 'help')<sup>21</sup> and *Yašdata* 'given by the sacrifice' (< \**yaja*-*dāta*). Finally, several names are built as verbal governing (or synthetic) compounds, in which the 'verbal' element can be either the first or the second member (cf. especially Š*attawaza* ~ Š*attiwaza* < \**sāti-vāja*- ~\**sāti-vāja*- *sāta*-, both meaning 'having reached the prize').

The meanings of Indo-Aryan names in ancient Near Eastern sources generally cover the most relevant semantic field of Indo-Iranian names. Some names that refer to war and military valor are compound names that include nouns like *aš(šu)wa* 'horse' (= the Vedic *áśva- < \*Haćwa-*) and *ratta* 'chariot' (< \*ratHa- lit. 'the one who has wheels'), such as Aššuzzana 'delighting in horses' (< \*Haćwa-cana), Biriyaššuwa 'whose horse is dear' (< \*priHa-Haćwa-), Abiratta 'facing chariots', and *Tušratta* 'whose chariot is vehement'.<sup>22</sup> Other names, with -atti 'guest' (see above), relate to hospitality. Rightness, truth, and order are the basis of compound names with *arta* 'truth' (= the Vedic *rtá*-)—for example, Artamanya 'thinking of *Rtá-*' (< \**Hrta-manya-*), *Artatama* 'whose abode is the *Rtá-'* (<\**Hrta-dhāman*), and *Artaya* 'acting according to the *Rtá-'* (<\**Hrtayant-*). These names are relevant to the dialectal position of the language among the Indo-Aryan branch (cf. names like Biryamašda, built with \*mazdha- 'wisdom', or Zantarmiyašta and Zirdamiyašda, with \*miyazdha- 'sacrifice', which preserve the original /azd(h)/, regularly changed to /e:d(h)/ in Vedic).<sup>23</sup> From the perspective of language contact, however, their informative value is limited.

The fact that the Indo-Aryan names of the Mittanian kings were throne names<sup>24</sup> is extremely relevant from a sociolinguistic point of view, but there is insufficient data to allow the reconstruction of a definitive scenario. From a strictly linguistic perspective, their spelling shows consistent strategies of graphic adaptations compared to their Indo-Aryan corresponding forms, with only sporadic examples of variation (e.g., *Tušratta, Tušeratta, Tušeratta*), and no other peculiar features can be observed. In this respect, divine names, place-names, and loanwords—dealt with in the following sections—provide more interesting data, since their adaptation often involved Hurrian morphemes.

<sup>21</sup> On this name, see García Ramón 2015.

<sup>22</sup> On these names, see also Sadovski 2009.

<sup>23</sup> See also the loanword *mištannu* in § 3.2 below.

<sup>24</sup> This is clear from the fact that the original Hurrian name of Šattiwaza, Kili-Teššub, appears in the colophon of the tablet containing his oath to Šuppiluliuma I (KBo 1.3+ rev. 45').

### 3.1.2 Divine Names

As mentioned, Indo-Aryan divine names were among the first Indo-Aryan materials identified with relative certainty. Most are found in the list of divine witnesses in the treaty between Šuppiluliuma I and Šattiwaza of Mittani. They are the most problematic divine names to analyze linguistically because their bases almost perfectly match the corresponding Vedic divine names, but the Hurrian suffixal elements they display are difficult to elucidate. The four names were written as follows:

KBo 1.1+ rev. 55'–56' (with variants from KBo 1.3+ rev. 24') <sup>d.MEŠ</sup>Mitraššil <sup>d.MEŠ</sup>Uruwanaššil (var. <sup>d.MEŠ</sup>Arunaššil) <sup>d</sup>Intar (var. <sup>d</sup>Indara) <sup>d.MEŠ</sup>Našattiyanna

Their identification with Mitra, Varuna, Indra, and the Nāsatyā (the elliptic dual standing for the names of the twin gods Aśvin and Nāsatya)<sup>25</sup> is straightforward, and their order perfectly matches the list found in RV 10.125.1cd.<sup>26</sup> The first two names probably reflect the dvandva compound Mitrā-Varuņā (both terms of which are in the dual form),<sup>27</sup> which could explain the plural determinative applied to both names. However, the puzzling suffix -ššil remains obscure. A tentative solution, already suggested by Friedrich (1943), would see in the suffix the reflex of the Hurrian numeral šini 'two' + the Hurrian plural suffix -lla, which would be consistent with an original Indo-Aryan dual. Fournet (2010:7), while maintaining an origin from the Hurrian *šini*, explains the final -*l* slightly differently, identifying it as the Hurrian pronoun *-lla* 'they, them'.<sup>28</sup> In either case, such a suffixal chain is unique, and none of the analyses suggested can be confirmed. The name of Indra does not pose particular problems (for occurrences in personal names, see § 3.1.1 above). In d.MEŠNašattiyanna, reflecting the dual form Nāsatyā, the final suffix *-nna* is generally explained as the Hurrian plural marker.

Some other possible Indo-Aryan divine names have been identified in cuneiform sources: Agni, S $ir_iya$ , and the Maruts. The former occurs uninflected

<sup>25</sup> On the elliptic dual in Indo-European languages, see Wackernagel 1924, 1:82–83.

<sup>26</sup> See Dumézil 1952:9. For the function of these deities in the Šattiwaza treaties, see especially Konow 1921 and Thieme 1960.

Various explanations have been suggested to reconcile the cuneiform spellings *a-ru-na*and *ú-ru-wa-na*- with the Vedic Varuṇa, but no conclusive solution can be given (see Thieme 1960:303-304).

<sup>28</sup> Goetze's explanation (quoted by Thieme 1960:305 with fn. 13) as "some (indefinite) belonging to Mitra-gods," from *Mitra=š* (plural indefinite) + -*we* (genitive) + -*l*(*an*) (accusative), appears even less formally and semantically convincing.

 $({}^{d}Agni$ —dupl.  ${}^{d}Agni$ —functionally corresponding to a genitive) in the Hittite ritual of Hantitaššu (CTH 395), whose belonging to the Hurrian milieu is debated,<sup>29</sup> and with Hittite endings in the omen text KUB 8.28 (nom.  ${}^{d}Agniš$ ), in the fragmentary ritual KBo 13.147 (nom.  ${}^{d}Agniš$ , dat. *ANA*  ${}^{d}Agni$ ), in the tablet catalog KUB 30.51+, recording the existence of a *mugawar* of Agni (gen.  ${}^{d}Agniyaš$ ), and in the fragmentary historical text KBo 3.46+ (nom. *Agniš*), which deals with Muršili I's campaign against Hurrians and contains some possible Indo-Aryan personal names.<sup>30</sup> The god surely corresponded, both formally and functionally, to the Vedic fire-god Agni,<sup>31</sup> but whether it should be regarded as a cognate or a true Indo-Aryan loanword is debated.<sup>32</sup>

As for Súr<sub>i</sub>ya, the name occurs as *Šuriyaš* in Kassite onomastics in cuneiform sources, in the personal name *Šuriātti* 'having Súr<sub>i</sub>ya as his guest' at Alalah (see § 3.1.1 above), and in a Kassite-Akkadian vocabulary (BM 93005), in which the Akkadian column equates it with Šamaš. Therefore, the identification of the Kassite divine name with the Vedic Sun deity seems unavoidable.<sup>33</sup>

Finally, the divine name *Marattaš* is found in the same vocabulary, matching the war god Ninurta. The same theonym occurs in Kassite onomastics as *Maruttaš* ~ *Murutaš*. The name has been compared to the Vedic Maruts, although this correspondence is not unanimously accepted.<sup>34</sup>

#### 3.1.3 Place-Names

The only toponym that has been almost unanimously accepted as deriving from the Indo-Aryan dialect attested in the ancient Near East is Waššukanni, the capital city of the kingdom of Mittani. Friedrich (1925:121) explained this city name as the Old Indic \**vasu-gaṇī*- 'containing the multitude of the *Vasu'* (name of a class of deities), while Kretschmer (1927:93–94) recognized the Old Indic *vasu-* 'good' in the first part of the name and suggested the Old Indic *jána-* 'humans, family, folk' for the second part; Waššukanni, that is, \**vasu-jani-*, would thus mean something like 'provided with noble population.' Mayrhofer (1959b:2 fn. 4), however, rejects such etymology because the Hurrian reflex of the Old Indic *j* usually appears as *z*. Therefore, the preform should be reconstructed as \**vasu-ka-* (adapted with the Hurrian suffix -*nni*), with a *ka-* suffix that can be found in other Indo-Aryan words.<sup>35</sup>

<sup>29</sup> See the discussion in Miller 2004a:447-452.

<sup>30</sup> See Kitazumi 2020.

<sup>31</sup> See especially Álvarez-Pedrosa 2016.

<sup>32</sup> Cf., e.g., Kammenhuber 1968:150–155 vs. Mayrhofer 1974:14. See also Carruba 2000.

<sup>33</sup> See Ancillotti 1981:124–125 and Mayrhofer 1982:77, with references.

<sup>34</sup> For a discussion on this divine name, see Ancillotti 1981:97–98. Cf. also EWAia, 11:322.

<sup>35</sup> See also Mayrhofer 1960:141 fn. 40 and Hauschild 1962:25 fn. 1.

Quite unconvincing is the Sanskrit etymology suggested by Fournet (2010:11; 2012:241–242) for the obscure toponym Mittani (also Maiteni at Nuzi), which is traced back to the Old Indic verb *mith-* 'unite':  $m[a]ith\bar{a}m$  (accusative) + Hurrian *-nni* would thus mean 'union' or 'united kingdom,' "en cohérence avec la présence simultanée de Hourrites et d'Indo-iraniens" (Fournet 2012:242).

# 3.2 Loanwords and Technical Terms

After scholars became aware of the existence of Indo-Aryan personal names and divine names in the ancient Near East, Indo-Aryan etymologies were suggested for several words of unclear origin attested in Akkadian, Hurrian, and Hittite texts. Some of these words are attested throughout the Near East; others are technical terms recorded in specific areas whose circulation outside the texts in which they occur cannot be evaluated. Most evince a clear Hurrian intermediation, signaling the major role of the kingdom of Mittani in the transmission of such material toward Anatolia and Syria.

The term mari(y)an(n)u, used to refer a high-ranking social class and typically translated as 'charioteer, warrior, nobleman' (vel sim.), is widely attested throughout the Near East, with occurrences at Amarna, Alalah, Boğazköy, Nuzi, and Ugarit (mryn), as well as in Egypt (mrjn, cf. Takács 2008:417-418). This noun is often traced back to the Old Indic *márya*- 'young man, member of the Männerbund',<sup>36</sup> adapted into Hurrian through the suffix -nni,<sup>37</sup> although some scholars defend a genuine Hurrian etymology based on the existence of Urartian mariahini 'mare-men'.<sup>38</sup> If it was an Indo-Aryan loanword in Hurrian, it was very productive (type IV, according to the classification employed in this volume: loanwords showing morphological integration and base productivity) because several derivatives are attested: the collective nouns mariyannardi (Mittani) and mariyanzari (Boğazköy) 'group of mariannu' and the morphologically unclear mariyannade (Alalah) and mariyannui (Boğazköy). A possible synonym of the far more common mari(y)an(n)u was martiyanni, only attested at Nuzi and also an Indo-Aryan loanword < márt<sub>i</sub>ya- 'man' + the Hurrian suffix -nni (unless it is a scribal mistake for mari(y)an(n)u).<sup>39</sup>

Another widespread noun with a possible Indo-Aryan etymology is *maninnu*, *mannin*(*n*)*i*- 'necklace', attested in Akkadian texts from Amarna, Qatna, and Alalah, as well as in Hittite texts from Boğazköy. Its base may match the

<sup>36</sup> On the *márya*- in Indo-European context, see Falk 2002.

<sup>37</sup> Cf. Giorgieri 2000a:211.

<sup>38</sup> For a comprehensive overview of the relevant bibliography, see Richter 2012:244–245.

<sup>39</sup> For all of these forms, see Richter 2012:245.

Vedic *maņí*- 'id.', which was adapted into Hurrian as usual through the productive suffix *-nni*. Furthermore, the Hurrian noun *wadurānni* 'bridewealth', attested in the Mittani letter and at Alalah, is regarded by Mayrhofer (1996:161–162) as reflecting the Indo-Aryan *\*wadhū-rā-* 'bride-gift' (cf. the Vedic *vadhū́*-'bride, young woman'. For the element  $^{\circ}r\bar{a}$ - 'gift', Mayrhofer compares the Vedic *śatá-rā-* 'with a hundred gifts'), which was adapted into Hurrian through the suffix *-nni*. Mayrhofer (1965b) also proposed that the Akkadian *mištannu* 'pay, reward', attested in the treaty between Idrimi and Pillia from Alalah (AT 3), reflects a Hurrian word adapted with the suffix *-nni* from Indo-Aryan *\*miždhá-*'pay, price', with preservation of the original cluster *-žd-* (vs. the Vedic *mīdhá-*) as in the personal names Biryamašda, Zantarmiyašta, and Zirdamiyašda (see above).<sup>40</sup>

According to Yakubovich (cited in Giorgieri 2010a:938 fn. 38), the Hurrian  $ni\dot{g}(a)ri$  'dowry' could match the Old Indic ni-har- 'to gift', although the absence of the suffix -nni, often employed in adapting foreign words into Hurrian, could argue against this possibility. Another Hurrian word with a possible Indo-Aryan etymology is maganni 'gift' (magannu in Akkadian texts), which can be compared to the Vedic  $magh\acute{a}$ - 'id.'<sup>41</sup> Less certain is the supposed Indo-Aryan origin of k/gat(t)inni, meaning unknown (attested at Alalah, Amarna, and Nuzi), which was perhaps related to the Vedic  $khad\acute{a}-$  'bracelet, ring'.<sup>42</sup>

Some technical terms attested at Boğazköy, Nuzi, and Alalah concern hippology. Some Indo-Aryan glosses have been identified in the treatise on horse training by Kikkuli that was found in the Hittite capital city. All show the same structure—a numeral + *wartanna*- 'lap, turn' (= the Hittite *wahnuwar*) and refer to the number of laps or turns made by the horses.<sup>43</sup> They include *aikawartanna* 'for one lap' < \**aika-wartana-*; *tierawartanna* (also *tierurtanna*) 'for three laps' < \**tri-wartana-* (although the outcome *tiera-* remains largely unexplained);<sup>44</sup> *panzawartanna* 'for five laps' < \**panća-wartana-*; *šattawartanna* 'for seven laps' < \**sapta-wartana-*; and *nawartanna* 'for nine laps' (haplologic from \**nawawartanna* < \**nawa-wartana-*).<sup>45</sup> In the debate on the exact Indo-Iranian dialect attested in the kingdom of Mittani, these glosses provide crucial data by showing the Indic character of the language, although with

<sup>40</sup> See also Mayrhofer 1982:73-74.

<sup>41</sup> See Mayrhofer 1960:143, with references.

<sup>42</sup> See Mayrhofer 1960:145–146.

<sup>43</sup> On the hippological interpretation, see Starke 1995 and Raulwing 2005.

<sup>44</sup> Cf. EDHIL:878.

<sup>45</sup> See Hrozný 1919:xi–xii and Jensen 1919. A full treatment can be found in Kammenhuber 1961:293–302.

some archaisms: see especially aika- 'one', which preserves the diphthong later monophthongized in the Old Indic éka-, where the suffix -ka points to Indo-Aryan (vs. the Iranian aiwa-), and šatta- 'seven', matching the Indo-Aryan saptá (with a trivial assimilation) rather than the Iranian *hafta*.

The etymology of <sup>LÚ</sup>aššuššanni- 'horse trainer', the professional title held by Kikkuli in the incipit of his treatise, has been much debated.<sup>46</sup> The *aššu*element of this noun is generally regarded as a reflex of PIE  $*h_1e\hat{k}w$ -o- 'horse', but there is no consensus on whether it represents the Vedic áśva- (which, however, appears as *ašwa* or *aššuwa* in personal names, as well as in the noun ašuwaninni from Alalah) or an Anatolian outcome of this root<sup>47</sup>—compare the Luwian  $\dot{a}$ -s $\dot{u}$ - or  $\dot{a}$ -z $\dot{u}$ - (the latter being the most likely reading), Lycian esb(e)-, and perhaps the first element of the Pisidian toponym Ecouaxwyn.<sup>48</sup> The second element is problematic: those who defend an Indo-Aryan etymology mention the Vedic aśva-sáni- 'horse winner' or reconstruct \*aśva-śama-'horse tender' (based on the Greek compound  $i\pi\pi x x y y x y$ ) or \*aśva-śam-ni, with the Hurrian suffix -nni, whereas Anatolian advocates recall either the Luwian verb šannai- 'overturn',49 which is semantically unattractive, or the adjectival suffixes -assa/i- and -anna/i-.50 One might also consider the Hieroglyphic Luwian verb /azzussattalla-/, a factitive in -*a*- built on an agent noun /azzussattalla-/, which in turn is a derivative in -attalla- from a base /azzussa-/, which can be perhaps explained as a relational adjective in -assa/i-, 'of the horse' (even though /azzuwassa-/ would be expected), although other solutions have been suggested.<sup>51</sup> Were this the case, <sup>LÚ</sup>aššuššanni- could be explained as a Hurrian adaptation with the suffix -nni of this alleged Luwian adjective, but if the Luwian name of the horse was /azzu-/ rather than /assu-/, the spelling  $(a)a\check{s}\check{s}u^{\circ}$  could be problematic unless explained by the adaptation of the Luwian word into Hurrian. Besides the Indo-Aryan and the Anatolian hypotheses, a third solution involves a Semitic origin, from the Akkadian šušānu 'horse trainer', which is attested in Middle Assyrian, although the Vedic aśva-sáni- is sometimes regarded as the model for the Akkadian word.52

<sup>46</sup> For a compilation of the hypotheses, with bibliographical references, see HED A:222–223.

See especially Starke 1990:502 fn. 1852. 47

See Starke 1995:119. 48

See Wittmann 1964:147-148. For the meaning of this verb, see Sasseville 2020:226-227, with 49 references.

See Starke 1995:117-118 and Carruba 2000:56-59. 50

See Sasseville 2020:85 for a thorough discussion. 51

See CAD Š/3:379-380. 52

Recently, Burgin (2017) suggested that the Hurrian adjective *time/ari* 'dark', attested in the bilingual 'Song of Release' from Boğazköy, in which it refers to the earth in the phrase *timerre eženi* = the Hittite *tankuwai taknī*, and which should correspond to the Kassite *timiraš* (a color of horses), is an Indo-Aryan loanword from \**tam-r*- (cf. the Vedic *tamrá-* 'dark', *támas-* 'darkness').

Some Akkadian adjectives referring to horse colors that are attested in tablets from Nuzi are terms deriving from Indo-Aryan words that were adapted into Hurrian with the suffix *-nni: babrunnu* (cf. the Old Indic *babhru-* 'brown'), *barittannu* (cf. the Old Indic *palitá-* 'gray'), and *pinkarannu*, *pinkarami* (cf. the Old Indic *pingalá-*, *piñjara-* 'golden yellow').<sup>53</sup> Other Akkadian technical terms in the Nuzi texts that were borrowed from Hurrian and have a possible Indo-Aryan etymology are *akkan(n)u* 'wild donkey' (perhaps deadjectival with a semantic shift; cf. the Old Indic *agha-* 'bad' and the Vedic *aghāśva-*'with a bad horse'), *amkamannu* '?' (whose base could reflect the Old Indic *aṅka-* 'crook' or *aṅga-* 'member'), *wirrarikkunni* '?' (perhaps related to the Old Indic *vīra-* 'man'), *zilukannu* '?' (with *zilu-* perhaps a variant of the Vedic *jīra-*'fast'), *zirra(ma)nnu*, perhaps meaning '(very) fast' (cf. the Vedic *jīrá-* 'fast'), etc.<sup>54</sup>

The noun *ašuwaninni* is attested at Alalah on a tablet dealing with the delivery of wood to build chariots (AT 422), so an etymology from Indo-Aryan \**aśvanīc*-'horse-leading' (+ Hurrian *-nni*) has been suggested, possibly denoting a part of the chariot; compare the Vedic *aśvanāya*- 'horse leader, horse shepherd' and the Vedic phrase *áśvam nī*- 'drive the horse (off the wagon)'.<sup>55</sup> The Hurrian term *aratiyanni*, also from Alalah (AT 425, a list of chariots),<sup>56</sup> may be the adaptation of an Indo-Aryan word matching the Vedic *rathyà*- or *ráth<sub>i</sub>ya*- 'belonging to the chariot, part of the chariot, etc.', with the suffix *-nni* and a prosthesis of *a*-because Hurrian does not allow initial *r*-.<sup>57</sup> Similarly, the Akkadian word *uruk-mannu* (a decoration of a shield), attested at Nuzi and Amarna, may depend on a Hurrian word related to the Vedic *rukmá*- 'gold ornament', with a prothesis and the suffix *-nni*.<sup>58</sup>

<sup>53</sup> Cf. EWAia, 11:126–127.

<sup>54</sup> For these terms and others, see Kronasser 1957.

<sup>55</sup> See Mayrhofer 1960:140.

<sup>56</sup> Perhaps the same as the obscure *eratti*(*a*)*nni* from Amarna (EA 22).

<sup>57</sup> See Mayrhofer 1960:144–145.

<sup>58</sup> See Mayrhofer 1960:145. For other possible Indo-Aryan loanwords in Hurrian attested in Akkadian texts, see Fournet 2012.

#### 4 Concluding Remarks

Despite some etymologies that remain uncertain, it is clear after more than a hundred years of study that the language of the Indo-Iranian onomastic material and loanwords found in second-millennium documents throughout the ancient Near East has Indo-Aryan characteristics, although it is not identical to the language of the Vedic texts because it preserves more archaic features (e.g., the retention of the diphthongs /ai/<sup>59</sup> and /au/, the cluster /zd(<sup>h</sup>)/), besides sporadic innovations such as *šatta-* 'seven' with assimilation vs. the Vedic *saptá-*. This is consistent with the references to Indo-Aryan gods that match Vedic gods formally and functionally in the Šattiwaza treaties.

The historical implications of the presence of Indo-Aryan people in the ancient Near East are not yet fully understood. The fact of their presence demands new scenarios for the migration of the ancient Indo-European populations. Scholars have suggested the following hypotheses, which are summarized by Mayrhofer (1966):

- 1) The Indo-Aryans of the Middle East, having left the territory of Mittani, moved east to colonize northwestern India. Mayrhofer rules out this scenario as unlikely.
- 2) The Indo-Aryans of the Middle East came from India. The solution is unconvincing but not entirely rejected.
- 3) Migrating Indo-Aryans, probably in Iran, separated into two groups. This is regarded as the most likely scenario by Mayrhofer.<sup>60</sup>

Regarding the role of Indo-Aryans in the kingdom of Mittani, it is difficult to say anything conclusive. Cultural and linguistic contacts with Hurrians surely existed, and probably the Indo-Aryan element was perceived as highly prestigious, given that Mittanian rulers adopted Indo-Aryan throne names. Nevertheless, there can be little doubt that the dynasty was not of Indo-Aryan blood: the onomastics point to Hurrian and, except for proper names, the lexical material is almost entirely restricted to the sphere of technical terms. As Kammenhuber concluded, there is no evidence for a living Indo-Aryan speaking community in the Near East in the 15th to 14th centuries BCE, and the Aryan endoethnonym is never attested in cuneiform sources.<sup>61</sup> For the time being, little more than this can be stated with relative confidence. Only the discovery of new documentary sources could shed further light on the situation.

<sup>59</sup> But cf. the personal name *Tewatti* < \**daiwa-att*<sup>*h*</sup>*i*-.

<sup>60</sup> See also Diakonoff 1972 and Burrow 1973:125.

<sup>61</sup> See also von Dassow 2014:12–13.

## PART 3

# Contact Phenomena in Late Bronze Age Anatolia

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## Lexical Contact in and around Hittite Anatolia

V. Pisaniello and F. Giusfredi

## 1 Theoretical Framework

## 1.1 What Is a Loanword?

A lexical loanword or borrowing can be defined as any lexical item that is produced inside a target language based on a form from a model language. The distinction between a loanword and borrowing could be treated as a point of view: the modeled word is a loanword from the perspective of the model language and a borrowing from the perspective of the target language. Therefore, we can safely employ the two terms as synonyms.

To distinguish a loanword from other phenomena of lexical exchanges between languages—namely, calques—it is important to look at the material that is involved in the transfer process. In the case of a loanword, an *entire* linguistic sign of the target language is reproduced in the model language, that is, both its expression (*signifiant*) and content (*signifié*). The two elements of the sign may undergo more or less drastic changes in the transfer: the *signifiant* may be phonetically, phonologically, and morphologically adapted to a greater or lesser degree, and the *signifié* may also be altered—typically, a word is not borrowed with all of the meanings that it has in the model language.

Loanwords represent the most superficial expression of linguistic and cultural contact. They may occur in situations of loose or indirect contact, even between distant languages. Indeed, the model language of a given loanword may not coincide with its source language. Instead, intermediaries may be involved in the transmission between the ultimate source and a given target language; in evaluating the phenomena of adaptation, the direct model is often more relevant than the ultimate source of a given loanword.

## 1.1.1 Loanwords vs. Heterography

As is well known, Hittite texts do not only include Hittite words. Just as Babylonians and Assyrians used to include Sumerian words in their texts in Akkadian, so the Hittites filled their texts with Sumerian and Akkadian words the so-called Sumerograms and Akkadograms, which are generally referred to as 'logograms' (word signs). We prefer to label them 'heterograms,' following Kudrinski and Yakubovich (2016), because: 1) Sumerograms are often root

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This is an open access chapter distributed under the terms of the CCLBY-NC-NPACOLicense Downloaded from Brill.com07/06/2023 07:59:14AM via free access signs rather than word signs, with the word (and even the stem, in the case of derivatives) frequently resulting from the addition of phonetic complements; 2) several Sumerograms consist of more than one sign, sometimes with a non-compositional meaning; and 3) Akkadograms are mostly written with syllabic signs, so they cannot be regarded as logographic.

There is a crucial difference between such heterograms and loanwords, which should be stressed to avoid confusing the two phenomena. Loanwords are foreign words that have entered the lexicon of the target language, thus becoming part of its *langue*. Heterograms belong only to the written language (and possibly to a very restricted oral dimension that remains functional in writing). They are foreign graphic words meant to represent—and thus be read as—their corresponding words in a different language, that is, the language of the text. For example, the Sumerogram EN and the Akkadogram  $B\bar{E}LU(M)$  represent the Hittite noun *išha-* 'lord' when they occur in Hittite texts. Although evidence for direct dictation of heterograms seems to exist,<sup>1</sup> it was probably simply a scribal practice and cannot prove the existence of these words as loanwords in the *langue*. In the case of Akkadograms, the distinction between a heterogram and a true loanword is sometimes not straightforward, but the two phenomena are easily discernible in most cases.

## 1.1.2 Loanwords and Related Phenomena

Before discussing in detail the criteria for analyzing and classifying loanwords, it is worth briefly elucidating some concepts referring to phenomena that are related to or can be confused with loanwords—namely, Wanderwörter, *Kulturwörter*, glosses, code-switching, and code-mixing—to have a clear metalinguistic framework. The terms Wanderwort and *Kulturwort* are often used interchangeably. However, a distinction is sometimes made, although it is quite blurred and probably redundant because it has more to do with our limits than an actual state of affairs. 'Wanderwörter' can be defined as words, generally denoting objects, techniques, or commercial products, that are used in a significant number of languages that are not necessarily close to each other in space or time. *Kulturwörter* are also words used in many languages but lack a clear etymology, so they cannot be unequivocally traced back to a given language.<sup>2</sup> Whether one decides to distinguish the two concepts or consider the two terms synonymous, we are still dealing with loanwords—very successful loanwords—even if we are not able to determine their ultimate origin and

<sup>1</sup> Cf. Weeden 2011:10-11.

<sup>2</sup> Cf., e.g., Rubio 2005:330-331 fn. 80.

fully evaluate their paths of diffusion. We can analyze them with the methodology that we apply to loanwords because not being able to trace the ultimate source of a word and perfectly reconstruct all the steps of its diffusion does not necessarily prevent us from determining the direct model responsible for its transmission to a target language—that is, the last step, which is often the most relevant for investigating the linguistic strategies used in adapting words and the cultural implications of the borrowing process.

Glosses, code-switching, and code-mixing are different phenomena. While loanwords, including Wanderwörter and *Kulturwörter*, belong to the *langue* that is, they are part of the linguistic system of a given language and thus are expected to be familiar to almost all speakers of that language—codeswitching and code-mixing phenomena pertain only to the *parole*; they are strictly individual and usually confined within a single act of communication. The term 'code-switching' generally refers to the use of different languages by the same speaker in a single communicative act. This can take place in different ways. When the alternation between the different languages occurs within a single sentence, we speak of code-mixing (or intrasentential code-switching).

As for glosses, they are simply isolated foreign words that are not part of the lexicon of the language in which the text is written. They are usually mentioned so that they can be explained—for example, *nu hattīli tahaya halzai tahayan=ma=za hattili* <sup>LÚ</sup>ŠU.I *halziššanzi* "He calls out *tahaya* in Hattian—in Hattian, the barber is called *tahaya*" (lit. "they call the barber *tahaya*") (IBoT 1.36 i 65–66). This concept of a gloss should not be confused with the 'glosses' in Hittite studies, the so-called *Glossenkeilwörter*, which are foreign words—mostly but not exclusively Luwian—that are embedded in Hittite texts and marked by the *Glossenkeil*. As will be discussed, such words represent code-switching phenomena or even true loanwords.

It is not always straightforward to distinguish between these different types of phenomena, particularly between loanwords and code-switching, in ancient languages that are known only from written texts. Frequency of occurrence is a criterion: true loanwords, being part of the lexicon of a language, are expected to occur multiple times in a corpus at different periods and possibly even in texts of different genres unless they are technical terms specific to certain textual typologies. Conversely, code-switching and code-mixing phenomena are likely to be nonce words employed to solve an immediate communicative contingency. However, a full assessment of individual cases may be hampered by the fragmentary and incomplete nature of the documentation and the possibility that the two phenomena coexist—for example, that a nonce word used on a specific occasion eventually becomes a loanword, integrated into the lexicon of the language, or that a true loanword is used in a code-switching or code-mixing context. For instance, a non-native speaker may not be aware that a word in his language, which he is using because he does not know its equivalent in the language in which he is communicating, was borrowed from his native language. Similarly, nothing prevents a gloss included in a text from corresponding to a true loanword or showing some superficial and mechanical phenomena of phonological and/or morphological adaptation like a loanword (compare, for example, the Hattian gloss *tahayan* in the Hittite accusative case in the passage quoted above).

## 1.1.3 Typology of Loanwords

Loanwords can be classified using different criteria. The most relevant from a linguistic point of view is adaptation. According to this criterion, loanwords can be divided into two categories, adapted and non-adapted loanwords. A loanword is regarded as adapted when the *signifiant* of the model word accommodates the phonological rules of the target language and is also assigned its inflectional morphology. Consequently, an adapted loanword is not immediately recognizable as a word of foreign origin to an ordinary speaker of the target language. Phonological adaptation should not be confused with phonetic adaptation, which is mechanical and almost always occurs in the target language. Morphological adaptation can only concern overt morphology because the acquisition of some mandatory morphological features required by the target language is unavoidable.<sup>3</sup>

As will be shown, derivational morphology may also have a role in the process of adaptation, and sometimes even more complex phenomena occur. For example, folk etymology may result in the alteration of the original *signifiant* to match a word in the target language based on some phonetic similarity and a real or supposed semantic correspondence.<sup>4</sup> In a non-adapted loanword (also referred to as 'foreign word'), the original *signifiant* remains unchanged, thus preserving a structure consistent with the phonological rules of the model language; the only changes that can occur in the target language concern mechanical processes of phonetic adaptation. Overt morphology of the target language

<sup>3</sup> For example, in a target language with a pervasive gender system, all borrowings are necessarily assigned to a grammatical gender, regardless of the addition of a dedicated morpheme.

<sup>4</sup> Cf., e.g., the adaption of the German *Steinbock* to the Italian *stambecco* 'Alpine ibex' instead of the expected \**stambocco* because *becco* is an Italian word meaning 'buck' or 'ram.' Similar alteration phenomena may also involve grammatical suffixes. For example, the Old Persian \**ganzabara-* 'treasurer' became the Lycian *gasabala-*, with the sequence *-ara-* of the Persian model—which is not a morpheme, but part of the lexical element *bara-*—altered to *-ala-*, probably in order to match the Lycian 'professional' suffix (for a full discussion and references, see Volume 2.

is also expected to be absent in a non-adapted loanword. For a native speaker of the target language, a non-adapted loanword is usually clearly identifiable as a foreign word.

Loanwords can be classified not only by adaptation but also by integration. Integration is the degree to which a given loanword is acclimatized to the lexicon of the target language. This is measured by the possibility of forming derivatives through productive word-formation rules of the target language.<sup>5</sup> Such base productivity is independent of adaptation because nonadapted loanwords may produce derivatives, whereas nothing prevents a fully adapted loanword from remaining isolated in the lexicon of the target language and not being used to form other words. Base productivity strictly concerns word-formation rules of the target language and should not be confused with the possible occurrence, in the target language, of derivatives of a given loanword that are independently borrowed from the same model language through a direct or indirect path. Furthermore, integration as defined here has nothing to do with the possible use of derivational morphology in the process of adaptation of loanwords. A derivational morpheme of the target language may be selected to adapt a loanword. For example, a professional noun borrowed from a model language may be adapted by adding a derivative suffix that usually forms professional nouns in the target language. This is not a matter of base productivity; it merely represents an adaptation strategy.6

We employ in our analysis the following categorization of loanwords, which combines the criteria of adaptation and integration:

	Adaptation	Integration	
Туре 1	_	_	= non-productive foreign word
Туре п	_	+	= productive foreign word
Туре III	+	_	= non-productive adapted loanword
Туре і	+	+	= productive adapted loanword

<sup>5</sup> On the distinction between adaptation and integration, see, e.g., Gusmani 1986 (who labels them *integrazione* and *acclimatamento*, respectively), followed by Cotticelli-Kurras 2012:75–76.

<sup>6</sup> Cf., e.g., the Akkadian  $p\bar{u}hu(m)$  'replacement, substitute' > the Hurrian  $p\bar{u}hugari$ - 'id.'. The Akkadian word is adapted in Hurrian through a derivational suffix whose exact meaning is unclear.

Such a typology should not be understood as hierarchical, and the four types do not represent mandatory steps on a path toward adaptation and integration. A loanword entering the target language may be adapted immediately and become productive. Furthermore, a loanword in a given target language does not necessarily fall into only one of the four types outlined above. Sometimes, a loanword may belong to more than one category in the target language, depending on factors such as the chronology of attestation or sociolinguistic variation.

#### 1.1.4 Borrowability Scales

From a strictly linguistic perspective, no compelling reasons make a borrowing necessary or, on the contrary, prevent it. However, some general tendencies can be identified. Some linguistic signs are more likely to be borrowed than others. Differences in 'borrowability' relate to the types of morphemes involved and the parts of speech to which words belong. Based on these tendencies, borrowability scales can be established, that is, hierarchies of borrowings meant to measure and predict the greater or lesser ease of borrowing linguistic items, which is also related to the degree of contact between two languages.<sup>7</sup>

First of all, it is universally accepted that lexical items are more easily borrowed than grammatical morphemes.<sup>8</sup> This can be represented as follows:

#### lexical > non-lexical

The first borrowability scale was formulated by Whitney (1881:19–20). Linguists have devised several others over the decades.<sup>9</sup> The scales differ from each other because they are based on case studies or differing amounts of comparative data, but all identify nouns as the parts of speech most likely to be borrowed.

A borrowability scale functions at different levels and can be read in different ways. Let us take as an example the scale established by Haugen (1950:224) on data relating to American Norwegian and American Swedish: nouns > verbs > adjectives > adverbs-prepositions, interjections. Such a scale, as described by Haspelmath (2008), can be assigned the following values, although they are sometimes difficult to distinguish clearly:

<sup>7</sup> See Thomason and Kaufman 1988:74 for a comprehensive discussion of borrowed linguistic items relative to the degree of language contact.

<sup>8</sup> Cf., e.g., Tesnière 1939:85; Deroy 1956:66, and Thomason 2001:69.

<sup>9</sup> See, e.g., Haugen 1950:224, Moravcsik 1978, Muysken 1981, Field 2002:36–40, and Matras 2007:71.

- temporal: elements on the left side of the scale are usually borrowed before those on the right;
- 2. implicational: a language that contains borrowed elements on the right is also expected to have those on the left;
- 3. quantitative: borrowed elements on the left are expected to be more numerous than those on the right;
- 4. probabilistic: elements on the left are more likely to be borrowed than those on the right.

Because different borrowability scales exist, they cannot be regarded as universal. The circumstances of borrowing may vary, resulting in considerable divergences among language contact situations.<sup>10</sup> Therefore, borrowability scales identify general tendencies rather than absolute rules.

## 1.2 Calques and Their Typology

While a loanword is the replication of a linguistic sign from a model to a target language, a lexical calque—also called loan translation—involves the transfer of only one of the components of the sign, the *signifié*. It becomes associated with a *signifiant* belonging to the target language that already exists or is created for the purpose through the productive word-formation rules of the target language. Although complex typologies of calques have been established,<sup>11</sup> sufficient for our purposes are the two macro-categories into which all other subtypes fall: structural and semantic calques.

Structural calques involve the creation of a new *signifiant* in the target language—a word, phrase, or more complex structure—to receive the *signifié* transmitted by the model language. The process usually involves translating the constitutive elements of the model word into corresponding elements in the target language to obtain an expression that optimally matches the deep structure of the word in the model language, regardless of a more or less perfect match of the surface structure.

Semantic calques, also called loan shifts, involve the transfer of a *signifié* from the model language. The *signifié* becomes associated with the *signifiant* of an existing sign in the target language that is formally or semantically similar to the sign in the model. A semantic calque extends the meaning of an existing word through language contact; no word-formation process is involved.

<sup>10</sup> Cf. Campbell 1993.

<sup>11</sup> Cf., e.g., the typology provided by Cotticelli-Kurras 2007:95–96.

#### 2 The Languages Involved

Excluding the phenomena that occurred during the Old Assyrian age (on which see the brief discussion in Chapter 4), the languages that must be considered when discussing lexical interference with Hittite and, more generally, interference involving Anatolian during the Late Bronze Age, can be categorized into two main groups: 1) the languages and cultures that were in synchronic direct or almost direct contact with Hittite, Luwian, or Palaic and 2) the languages and cultures of the wider ancient Near East and Mediterranean region. The languages of the former group are those from which loanwords were borrowed synchronically, in an almost direct fashion. The languages of the latter are those that shared some non-inherited lexical material with Hittite—material that circulated in a wider areal context. This categorization entails a conventional distinction between *loanwords*, generally borrowed from language X into language Y, and Wanderwörter. The origins of the latter were not always discernible; they were borrowed by more than one language in an area and sometimes showed up in languages spoken by cultures that virtually never interacted with one another

## 2.1 Languages in Direct or Almost Direct Borrowing Scenarios

The first group of languages includes those of the cultures that had historical connections with the Hittite world. Some, especially those that were already exchanging lexical material with Hittite during the earlier phases of the pre-Hittite and Hittite ages, were geographically Anatolian or, if foreign to the Anatolian peninsula, contextually present in it. As outlined in Chapter 4, evidence exists of lexical contacts involving Old Assyrian, Hattian, and Luwian in the mature and late Middle Bronze Age in the context of the Old Assyrian trading network. It is highly unlikely that Hurrian was involved so early and with direct interference: the words with Hurrian etymology that emerge from the Old Assyrian archives are generally present in northern Mesopotamia as well. One must assume, therefore, that they entered Anatolia via the mediation of Assyrian because they were already integrated into the Assyrian lexicon.<sup>12</sup> As for Palaic, no evidence exists that it exchanged lexical material with other languages of the area, although later Palaic texts show traces of interference with Hattian that may have occurred during the Middle Bronze Age and possibly earlier.

During the historical phase of the Hittite kingdom proper, loanwords emerging from the texts composed and stored in Hattuša include, again, Luwian and

<sup>12</sup> Cf. Chapters 4 and 10.

(very little) Hattian material. However, Hurrian appears more frequently, often mediated by Luwian, possibly as a result of the growing influence of the culture of Kizzuwatna from the 15th century onwards. A more precise description of the status and role of the languages during this phase follows:

- Hittite was the main language of the central Anatolian kingdom of Hatti. Its diachronic change demonstrates that it was a living language from the Middle Bronze Age (and arguably even earlier) until the disappearance of the Hittite archives at the beginning of the 12th century BCE. Over the centuries, it underwent passive lexical interference from local and less local languages, most notably Luwian, Hurrian, and Akkadian. Hittite loanwords in other languages are far less evident (no more than a dozen Hittite/Luwian words emerge, e.g., in Ugaritic),<sup>13</sup> so Hittite appears to be an attractor for loans rather than a model language.
- Luwian (cf. Chapter 11) was probably originally spoken to the west of the core area of Hatti. It is the main member of the Luwic group of Anatolian and the only one textually attested during the second millennium BCE. Luwian words were generally borrowed into Hittite directly, with no mediation from other languages of the area. By the 13th century BCE, Luwian may have been the most widespread vernacular in Anatolia. It acted as a significant superstrate in northern Syria and a sort of second official language in the kingdom of Hatti. Hatti's capital city, Hattuša, was almost certainly inhabited by both Hittites and Luwians by that time and therefore had a bilingual environment.
- **Palaic** (cf. Chapter 12), the least-attested member of the Anatolian group, was probably originally spoken in a region to the northwest of the core of the Hittite kingdom. While texts in this language carry traces of possible lexical interference with Hattian, these must date to ages that precede the writing of the documents by the Hittite scribes. No evidence testifies to lexical interference between Palaic and Hittite or any other language synchronically used in Late Bronze Age Hattuša, thereby qualifying Palaic as a non-spoken literary language relegated to a closed and quite small corpus of documents.
- Hattian (cf. Chapter 9) was the only epichoric language of Anatolia that was not Indo-European and is *textually* attested. Traces of borrowings from Hattian exist in Palaic, and a limited number of Hattian words were also borrowed into Hittite.

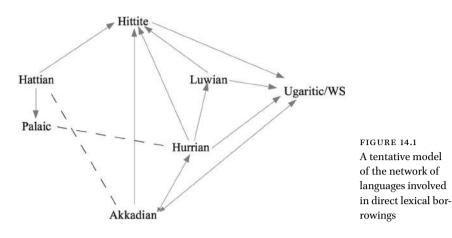
<sup>13</sup> For the identification, among loanwords of various origins, of Anatolian words in Ugaritic, see Watson's contributions (in particular Watson 1995, 2015, and 2018).

- Hurrian (cf. Chapter 10) was one of the extra-Anatolian languages that came into direct contact with both Luwian and Hittite. It was probably an active language in Hattuša only in the late 15th and early 14th centuries, but Hurrian interactions with Kizzuwatna must have begun in the age of Telipinu.
- Akkadian (cf. Chapter 8). The Assyrian colonies had only limited influence on the scribal history of the Hittite kingdom. However, Akkadian came into contact with Hittite as a learned and prestigious language and a technical administrative one. Mesopotamians were present in Hattuša (Beckman 1983b), and Hatti had frequent interactions with northern Mesopotamia beginning in the Late Hittite historical phases.
- **Ugaritic.** This Bronze Age West Semitic language was not one used to compose texts in Hittite Anatolia. However, traces of lexical interference *from* Anatolian to Ugaritic have been identified.<sup>14</sup> Furthermore, the area in which Ugaritic was spoken was the vehicle through which certain words that also occur in Hittite (and more generally Anatolian) were transmitted to later West Semitic traditions (see below).

The network of languages involved in direct, proven lexical exchange with the languages of Late Bronze Age Anatolia can be represented as a directed graph. The solid lines indicate proven lexical exchange, whereas the dashed lines indicate the presence of common lexical items with unclear paths of diffusion and/or Wanderwörter.

This scheme in Fig. 14.1 is offered not as an exhaustive representation of lexical contacts but rather as an overview of a situation that was certainly far more complex. Historically and geographically speaking, however, this network can be easily contextualized; it strongly predicts the cultural, political, and economic relationships between the groups and polities associated with the languages represented. The Hattian-Palaic-Hittite subgraph describes the situation in the north: the Hattians and Hittites had certainly been in close cultural contact since the Middle and probably Early Bronze Age. In contrast, Pala maintained a marginal profile. It interacted with the Hattian world in ways that are hardly traceable, but its cultural production emerged as a minority phenomenon in historical Hattuša. The complementary subgraph describes the most intensive areas of cultural exchange and political interactions between Hatti and the rest of the ancient Near East during the Late Bronze Age, dur-

<sup>14</sup> The painstaking identification of non-Semitic loanwords in Ugaritic was mostly accomplished by Watson (1995, 1996, 1998, 1999, 2000, 2006, 2009, 2010, and 2015).



ing which northern Syria was the main catalyst for interactions between the local components, the Anatolian, the northern Mesopotamian, and southern Mesopotamian worlds.

#### 2.2 Languages in Indirect Borrowing Scenarios

Widening the horizon, we find cultures whose languages share with the Bronze Age Anatolian idioms only a limited number of words. These words were generally circulating in a wider area, so interactions cannot be denied, but no evidence exists to show that these were direct. Mediated, or indirect contacts usually occur over a longer trajectory (that can be defined in terms of lack or difficulty of connectivity between region, not necessarily in terms of mere metric distance), which, in some cases, can even be diachronic rather than geographical. While others may argue for further, sometimes speculative extensions, we consider the following languages the main indirect contacts of the *attested* Bronze Age Anatolian idioms:

Sumerian. The language of third-millennium southern Mesopotamian was studied by the Hittite scribes. Mastering it was part of mastering the scribal curriculum across the ancient Near East. Although Sumerian was a dead language by the time the Hittite archives became active, it may have shared a very modest number of Wanderwörter that also emerged in the Anatolian languages. One example is lahan, the name of a vessel, which is related to the Akkadian *lahannum* and Hittite *lahanni-* and was probably ultimately Indo-European (although an Anatolian etymology is unlikely).<sup>15</sup>

<sup>15</sup> See Giusfredi 2018 for a discussion of this Wanderwort. On the problem of Indo-European

- **Mittani Indo-Aryan** was an Indo-Iranian language that acted as a sort of relicsuperstrate in the Hurrian principality of Mittani. It probably entered Anatolia via Hurrian, in which a few loanwords related to the field of hippology are attested in a small number of occurrences.<sup>16</sup>
- Mycenaean. The most optimistic and maximalist views of the contact between Hatti and the Mycenaean world posit rich and frequent diplomatic interactions, but no evidence exists that the relationships were more than sporadic. They took place in a specific historical contingency during the early 13th century BCE and, as argued by Giusfredi (forthcoming-b), involved contacts between the peripheries of the two areas. Accordingly, the evidence for linguistic contact is limited. While Mycenaean is indeed a Bronze Age language, it will be treated in the second volume of this work because of the modest number of attested interference phenomena.
- **Egyptian**. That the language of the Nile was not entirely unknown in Hatti might be a reasonable assumption based on Hatti's international contacts during the Amarna Period and 13th century BCE. However, despite the efforts of scholars (especially Schneider, ed, 2004 and Breyer 2010), Simon (2010b) has shown that the two languages share very few lexical loans. Cases of Wanderwörter attested both in Anatolian and Egyptian are fairly rare too. Those that exist also appear in several other languages of Syria, Mesopotamia, and the Levant, such as the Hittite *akanni-*, Akkadian *agannum*, Ugaritic *ågn*, and Egyptian *?kuna*.<sup>17</sup>
- Late West Semitic languages. As already mentioned, loanwords of Anatolian origin are present in the West Semitic language that is *textually* attested during the Bronze Age. Some of the same words emerge in later sources—for example, in the Hebrew Bible. While Noonan (2019) refers to some alleged direct loans from Hittite to Hebrew,<sup>18</sup> most attested cases have a Ugaritic

words borrowed by Sumerian, see also the illuminating and very critical discussion by Rubio 1999.

<sup>16</sup> See above, Chapter 13, for a discussion. The limited amount of lexical material available does not reduce the historical importance of the cultural connections between the ancient Near East and the Indo-Iranian regions and peoples.

<sup>17</sup> Del Olmo Lete and Sanmartín 2015:26.

<sup>18</sup> Examples include the famous case of the Hebrew *kwb'*, Ugaritic *kph*, and Hittite *kupahi-*, which is, however, ultimately Hurrian in origin: *kufahe*. See also Hoffner 1964, Del Olmo Lete and Sanmartín 2015:447, Puhvel HED K:257–258 (with mention of other Western alleged cognates), and Oreshko 2018:105. The same path of diffusion can be assumed for cases that received less scholarly attention, such as *'bws* (from the Hurrian *abuzi*/Hittite *apuzzi* via the Ugaritic *ibsn*) and *'gn* (from the previously mentioned Hurrian/Hittite *aganni* via the Ugaritic *àgn*, possibly also with involvement of Egyptian). We do not include a full list, which can be easily found in Noonan (2019). However, we must correct

antecedent and coincide with words that occasionally also entered Egyptian. For the few for which no intermediation is available in the sources, it is reasonable to assume that such intermediation existed (either via Ugaritic or another Semitic language) rather than hypothesizing that the Hittite language played the role of a direct superstrate in southern Canaan in the Late and Final Bronze Ages.

The list could be longer if we considered all of the languages that contain single or very sparse circulating cultural words that also emerge in Bronze Age Anatolia, with no geographic or diachronic restrictions. We would need to include a number of Indo-European, Semitic, and possibly isolated idioms for instance, all those containing the words for 'crocus' or 'saffron' that formally match the Hittite *kunkuman* (see Rizza 2012). If we did so, our area of interest would expand at least to Central Asia, the focus and methodologies used in this work would soon be lost, and the very concept of contact would become so vague as to be useless. Therefore, we will restrict ourselves to the languages that were in a direct relationship of lexical transfer with those of Bronze Age Anatolia or belonged to the world of Hatti in a well-defined Near Eastern areal context.

## 3 The Early Northwestern Interface

A distinct subarea of lexical circulation seems to have existed that involved northern Anatolia and featured loanwords as well as occasional Wanderwörter that emerged in Hittite, Hattian, and Palaic (and, to qualify as Wanderwörter, in other languages of the wider area). This subarea was active at the northwestern interface of what, during the Late Bronze Age, became the core area of Hatti. It is suggestive of the existence of a strong cultural and linguistic superposition of Anatolians and Non-Indo-Europeans. The evidence for this 'northwestern' interface is undeniable but hardly rich in data. No clear examples of direct loanwords from Palaic to Hittite or Hittite to Palaic exist, which makes it impossible to speculate about immediate connections between the early Hittites and the people of Pala (for a historical and contextual discussion, see Chapters 4, 5, and 12). The phenomena that are documented in the corpus are: loanwords from Hattian to Hittite; loanwords from Hattian to Palaic

a mistake in Noonan (2019:107): *htwl* is not a direct derivation from the Hittite *huttulli* but rather is present in Ugaritic as *htl* (Del Olmo Lete and Sanmartín 2015:107).

(as recorded in the Hittite archives); a few areal designations pertaining to the royal sphere that emerged in additional languages of central Anatolia; and the single, very problematic case of a word that seems to have occurred in Palaic and in Hurrian (which will be discussed separately from the other three cases).

## 3.1 Loanwords and Areal Designations

A discussion on the loanwords from Hattian to Hittite involves the general problem of the interactions between the languages arguably already in very early phases, as the co-existence of the two components in Anatolia must have been a phenomeon of the *longue durée* in proto-historical phases. No data are available for the Middle Bronze Age documents of the *kārum* world (see Chapter 4), although the adaptation of Hattian toponyms to Hittite (or, more generally, to Anatolian) is represented by vocalic thematization. For example, *Hattuš > Hattuša* is a form of adaptation, albeit a very obvious and trivial one.<sup>19</sup> As the context of these occurrences is Assyrian, it is impossible to draw any conclusions about the steps of the phonological or morphological adaptation of Hattian toponomastics into Hittite.

Apart from toponyms, the Hattian loanwords that can be recognized in Hittite texts during the Late Bronze Age are exclusively nominals (only a couple of dozen or so); nominals are more easily borrowed than verbs and grammatical words. They are normally, but not exclusively, integrated into the target language as *i*-themes. The words that designate naturally animated entities (e.g., titles, dignities, or job designations) undergo morphological adaptation as common-gender nouns. In some instances—for example, when a loanword is only attested in an indirect case such as the dative-locative—recognition of the gender is impossible. Neutral gender seems to have been preferentially assigned to inanimate nouns, as in the case of the musical instruments *hunzinar* and *ippizinar*, treated, it appears, as *r*-stems.<sup>20</sup> The availability of a suitable inflectional class such as the neuter *r*-stem in Hittite must have facilitated the selection of the paradigm and gender. In at least one case, GIŠšahi-,<sup>21</sup> an inani-

<sup>19</sup> Most notably, in the recently published letter of Wiušti KBo 71.81 (Barjamovic and Schwemer 2018:89), the name of the city  $\check{S}a$ -la-ti-wa-ra=ma at rev. 8 is thematized as an *a*-stem in an Anatolian fashion and, perhaps significantly, the name of the city of Hattuš (e.g., obv. 3 Ha-tù-uš), shows the usual lack of a vowel theme.

<sup>20</sup> Giusfredi and Pisaniello (2020:215); for the attested forms cf. HW<sup>2</sup> III:726–728 and IV:72– 73.

<sup>21</sup> The form is attested both in Hattian and Hittite contexts (as a common-gender accusative in the latter case); see Soysal 2004:695.

mate becomes an *i*-themed, common-gender noun when borrowed into Hittite, which may indicate that the prevalence of *i*-themed, common-gender nominals in Late Hittite played a role in promoting the preference for this type of stem. Overall, it seems that a preference existed for the conservation of a natural opposition of animate and inanimate nouns in the target language, but the existence of productive and morphologically 'transparent' classes also played a role in the selection of the paradigmatic series.

A borderline case of the possible influence of Hattian on Hittite was cautiously suggested by Giusfredi and Pisaniello (2020:216). It concerns the possibility that the quasi-agglutinative natural feminines in the Hittite *-šara*-(matched by those of the Luwian in *-šri-*) may calque the Hattian formations with the *-ah* suffix of Hattian. As the Anatolian morphemes are present in Middle Bronze Age personal names, the interference must have occurred very early if this analysis is correct.<sup>22</sup>

As was observed previously, the number of loanwords that entered Hittite from Hattian was quite limited. It may be even lower than estimated by Tischler (1979:257) because the Hattian origin of some famous lexical elements belonging to the sphere of royalty has been questioned. Given the scarcity of Hattian loanwords in Hittite, it would be inaccurate to describe the relationship between the two languages as a substrate-superstrate system. If Hattian was the superstrate from the standpoint of prestige, more loans would be expected in the technical, political, or religious semantic spheres. If Hattian was the substrate, one would expect grammatical interference to emerge in texts composed in Hittite, yet such interference is virtually absent. As Goedegebuure (2008) observed, it is Anatolian that might have had some degree of grammatical influence on Hattian as it was written by the scribes in the Hittite kingdom,<sup>23</sup> which further complicates the reconstruction of a stable and convincing sociolinguistic model for the Hattian-Hittite relationships in terms of a binarily polarized system.

The issue partly depends, of course, on the nature of the corpus that is available to us. To what degree spoken Hattian was influenced by spoken Hittite or spoken Hittite by spoken Hattian and how many loans existed in the *lingua dell'uso* is impossible to say. Based on the textual materials, Hittite appears to have been on the receiving end of a narrow channel of lexical transmission, even though, as outlined in Chapters 4 and 9, the Hattian world had a signifi-

<sup>22</sup> The element is present in the Kārum-period female personal names ending in *-hšušar*, on which see Kloekhorst 2019:235–239.

<sup>23</sup> Cf., however, Chapter 4 for discussion.

cant cultural influence on the Hittite world and Anatolia, by the Middle Bronze Age, had long experienced the coexistence and cohabitation of different peoples and traditions.

Although the relationship between Hattian and Hittite appears complex and is probably underrepresented in the available corpora as outlined in Chapters 4 and 12, some level of lexical interference seems to have occurred during the early history of Anatolia between Hattian and Palaic, which was the other Indo-European Anatolian language of northern Anatolia. Leaving aside the daring and poorly investigated hypothesis of the borrowing of the contrastive morpheme *-bi* as *-pi* (that belongs to a hardly borrowable closed class and can be better explained in other ways<sup>24</sup>), the possible lexical loans from Hattian in Palaic share the following features:

- a) They have been identified based on two criteria: the presence of the notation of syllables starting with a fricative using the sign PI with *mater lectionis* ( $wa_a$ ,  $wi_i$ ,  $wu_{\dot{u}}$ ) and, in a minority of cases, the recognizability of Hattian roots or Hattian morphology;
- b) They are all nouns;
- c) They all appear to pertain to the religious or ritual sphere or, in some uncertain cases that, if real, are probably better described as Anatolian areal designations, to the political sphere;
- d) They are not matched by a corresponding group of words moving in the opposite direction: Hattian > Palaic seems to represent a unidirectional path of lexical transfer.

The first point in the list, as mentioned in Chapter 12, requires a brief discussion. The presence of a fricative sound /f/ (or similar, fortis or lenis, labial or bilabial sounds)<sup>25</sup> has not been reconstructed for the better known Anatolian languages (Hittite and Luwian) and therefore is unlikely to have been an inherited sound in Proto-Anatolian. For this reason, and because these types of sounds were notated with the same graphemic strategy by the Hittites when writing Hattian and Hurrian, it is traditionally hypothesized that all words containing a PI sign with a vocalic *mater lectionis* in Palaic must have been loans, arguably borrowed from Hattian.

This line of reasoning remains valid in principle, as does the belief that the source for non-inherited material in Palaic was mostly Hattian, because no solid case can be made for an important Hurrian presence in central Anatolia during the Middle Bronze Age. However, caution must be used in dealing

Palaic exhibits two morphemes, *-pa* and *-pi*, which might have been allomorphs; even if they weren't, they would still be explainable as inherited materials. See also Chapter 12.
 See Simon acts for a discussion of the phonetics of the frientium in Hattian

<sup>25</sup> See Simon 2012 for a discussion of the phonetics of the fricatives in Hattian.

with words that are interpreted as Hattian loans based *only* on the presence of the mater lectionis. Most of the words are sparsely attested, and it is almost impossible to exclude the possibility that a sound law of Palaic could have produced innovations in the phonemic inventory of Proto-Anatolian in given contexts. Furthermore, cases exist in which the mater lectionis was employed improperly by the Hittites for languages that were different from Palaic but used in texts connected to the Palaic world—for example, to write the divine name Hilanzipa (<sup>d</sup>*Hi-i-la-an-zi-w*[ $a_{a}$ -]) in a text (KBo 27.7:7, CTH 751) in which other Hattian-Palaic gods are mentioned and spelled with the  $wa_a$  and  $wu_{ii}$  signs. More problematic is the case of the rendering of the word *warra*, which may be connected to Luwian wahra<sup>26</sup> and therefore certainly inherited from Proto-Anatolian. It is written  $wa_a$ -ar-ra in KUB 35.164 ii<sup>?</sup> 9, and this might point to the existence of a sound law that somehow produced a true fricative in Palaic, which would cast serious doubts on the Hattian analysis of other forms that exhibit the same graphemic device and are not analyzable morphologically as Hattian. A clear solution cannot be reached based on the few data available. However, given the Hittite scribes' apparent lack of familiarity with the Palaic language (see Chapter 12), it remains very plausible that these forms were not recognized as Palaic and were interpreted as Hattian and hypercorrected.

Turning to morphological adaptation, it seems that Hattian words that entered Palaic were assigned a vocalic theme, in much the way that Hattian toponyms were adapted by the Hittites during the Kārum period. We can say little about gender due to our poor understanding of the semantics and the obscurity of some contexts of occurrence; the only apparent rule is the obvious animacy of divine names. A very good example of a rather typical process is the *fulašina* bread, from Hattian *fulašne*, which is ascribed to the vocalic class of *a*-themes and, despite not being animate, assigned to the common gender.<sup>27</sup>

*Fulašina* bread is also a good example of morphological integration as it seems to behave as a true loanword, acting as a base for a morphologically Palaic derivate relational adjective, *fulašinika-.*<sup>28</sup> The existence of morphological adaptation within Palaic demonstrates that *fulašina* was a true loanword. This is not equivalent to stating that adaptation is *always* necessary to prove that a form was borrowed, but it is a sufficient condition. It acquires special significance in the case of contacts that were not only limited to written corpora but, as in this case, are also attested only indirectly: the Palaic we read

<sup>26</sup> DCL s.v.

<sup>27</sup> For the paradigm of attested forms, see Carruba 1970:79. The availability of both a dativelocative and a nominative guarantees the recognition of common gender.

<sup>28</sup> Attested in the plural *fulašinikeš* (Carruba 1970:79).

was written by the Hittites, in Hittite scribal offices. As discussed in Chapter 12, Palaic in Hattuša, even in the pre-imperial phases, seems to have been a crystallized language that was opaque to the scribes who wrote it; they may have occasionally hypercorrected forms such as *Hilanzifa* by interpreting them as Hattian, indicating that confusion was possible between the two languages. In such a situation, any Hattian form included in a Palaic context could theoretically have been a *terminus technicus* belonging to the religious or ritual sphere and may or may not have entered the lexicon of the target language as a true loan. The existence of a morphological derivative such as *fulašinika*- is, therefore, a precious piece of evidence that supports the existence of true lexical interference between Hattian and Palaic in a stage preceding that in which the Hittites wrote down Palaic and Hattian material.

So far, we have discussed those phenomena of lexical interference of the northwestern interface that may be uncontroversially assigned to the sphere of direct borrowing from one language to another. However, a few words exist that emerge in Hittite and one or both of the other languages of the northwestern area. These are, most notably, the titles tabarna/labarna, attested in all the three languages as well as in Luwian, although with some variations in the functional features, and the female equivalent tawannanna, which is attested in Hittite and Hattian but not as yet in Palaic. Labarna, with lateral onset, appears, in its earliest occurrence, on a tablet from Kaneš level Ib (La-[ba]-ar-na-áš in Kt 88/k 713 obv. 3; Donbaz 1993:145–146),<sup>29</sup> which is particularly rich in Anatolian onomastic material (cf. Tuthaliya tù-ut-hi-li-a at rev. 16 et pas*sim*, also with the 'ending' *tù-ut-hi-li-áš* at rev. 29). It was probably the personal name of a seal owner and witness. While the text is in Akkadian, the ending áš in this and other names would contain a trace of an *a*-theme if the integration and interpretation are correct. In Palaic, the word tabarna occurs as a divine title or epithet (cf. Tiyaz tabarni in KUB 35.165 obv. 22). In Hattian (cf. Soysal 2004:152), it seems to be an epithet used to refer to the king or a title, but its function is unclear because it appears mostly in mythological texts that were already integrated into the Hittite tradition. In Hittite, Labarna was the personal name of one or more kings who predated Hattušili I, but this does not indicate that it was *originally* a personal name; we know from Kaneš that it had become an anthroponym well before the Hittite age. It remained a title used for the king throughout the existence of the kingdom of Hatti and emerged in the Luwian Bronze Age corpus with lateral onset Labarna as both

<sup>29</sup> The form *Zabarna* (e.g., Kt a/k 1263 obv. 7) is also attested and may be an alternative writing of the same name, although the phonetic reasons for this rendering remain elusive.

a divine epithet (KUB 35.133 ii 13) and the title of the king (KBo 19.155:6). It survived as a personal name, with no evidence of it being still also a title, in Iron Age hieroglyphic Luwian texts.<sup>30</sup> Linguistically, it is still debated, with Soysal (2004:152) proposing a Hattian etymology and other scholars (notably Starke 1983:405–406, Melchert 2003a:19–20, and Yakubovich 2010:229–231) defending an Anatolian origin. Presently, the Anatolian interpretation appears to be dominant. Regardless of the word's etymology, it is clear that it circulated widely, originated in the cultural koiné of the northwest, and survived long enough to enter the Luwian tradition and be used as a personal name well into the Iron Age.

The feminine equivalent, *tawannanna*, was used similarly as a title and personal name. It appears in both Hattian and Hittite documents and is considered Hattian by Soysal (2004), but alternative Anatolian analyses have been proposed (Melchert 2003a:19–20). As in the case of *tabarna/labarna*, the final word has not been said on the etymology of *tawannanna*, but it seems to be an areal designation that belonged to at least two traditions and originated in the northern cultural area.

The third 'areal' title that has been described as a Hattian loanword into Hittite is the title for the crown-prince, *tuhukanti*. In this last case, it must be stressed that the title is discussed here because it is alleged to have a Hattian etymology. Rieken (2016b) has argued that the word was Luwian; if it was, then its absence from the Hattian and Palaic corpora would remove it from the group of northern areal designations of royal dignities. However, Rieken has not proven definitively that the root is also Luwian (or Anatolian), although she has shown that the word's ultimate derivational morphology is Anatolian.<sup>31</sup>

In sum, the fact that a Hattian etymology is no longer the only or best explanation for the political titles *labarna/tabarna* and *tawannanna* does not alter the fact that these designations (and possibly also *tuhukanti*-) seem to have circulated within a cultural area at the northwestern interface of the Late Bronze Age core area of Hatti. As such, they behave as short-range, local Wanderwörter, proving once more the intensity and continuity of the interlinguistic and intercultural exchanges among Hattian, Palaic, and Hittite (and, at least in the case of *labarna/tabarna*, via Hittite to other languages of Anatolia).

<sup>30</sup> The name is attested, for instance, in the Hieroglyphic Luwian inscription KULULU 4, § 5, and in the Assyrian annals, e.g., those by Ashurnasirpal II (*Lubarna*, man of Patina, in RIMA 2 A.0.101.1 iii 81–82).

<sup>31</sup> Rieken 2016b; see Giusfredi and Matessi 2021 for a discussion.

## 3.2 The Problem of the Elusive 'Loanword' hašira- 'Dagger'

Thus far, it has been possible to defend a model in which the northwestern area of circulation of ideas and words was relatively well delimited. Although this area was not isolated, it had a limited and finite set of cultures and languages involved. This is consistent with the historical and archaeological descriptions presented in Chapters 4 and 12. However, a single piece of evidence appears to contradict this scenario. In the Palaic text KB0 19.152 i 12, the sequence ha-ši-ira-am=pi is attested.<sup>32</sup> After assimilation of the final /n/ to the bilabial stop, the form is analyzable as an accusative singular of the common-gender, *a*-themed noun *hašira*-, which is replaced in the parallel passages in KB0 19.153 iii 7 and 19, in a very similar context, by the more 'Hittite-sounding' GÍR-*an=pát*. This sumerographic writing indicates that the meaning of *hašira*- must be close to 'dagger,' prompting the comparison with a Hurrian word, *hašeri*, which occurs in Boğazköy and whose meaning would also be 'dagger' (Richter 2012:139). As is often the case with these types of unexpected shared forms, Hurritologists and Hittitologists proffered different explanations. Richter (2012:139) ascribed the word to the verbal root *haš*- 'to be strong'; Vine, cited in Melchert (2007:257), proposed an Indo-European etymology going back to a root  $h_2es$ - 'to cut (vel sim.)'. Recently, Simon (2021) proposed an ultimate Hurrian origin but a mediation by Hattian.

However, the most important problem is not to understand which of two *formally* defendable etymologies is correct but rather how a loanword could have entered Palaic from Hurrian, because, as discussed in several parts of the present book, it is very hard to defend the hypothesis of a significant Hurrian presence in central Anatolia before the mature phase of the history of Hatti in the late 16th century BCE.

There is currently no certain reading for the Hittite word or words written with the sign GÍR in the texts composed in Hattuša. If a hypothetical circulating word existed both in Hurrian and Palaic, it may have been present in Hittite as well, thereby qualifying as a Wanderwort. This would make the historical scenario more credible but would not explain where the word originated and why and how it was transferred. As it denotes a *realium*, its circulation within Anatolia would not be unconceivable, especially if it dealt with a ritual item employed in ritual contexts. But it would still be difficult to imagine where Hurrian would fit in the cultural scenario.

In light of the semantic vagueness of Richter's Hurrian etymology ('be strong' > 'dagger'), an alternative explanation might be a northern Mesopota-

<sup>32</sup> Carruba 1970:21–23, for the context in which it occurs.

mian origin of the form, possibly in the Assyrianized linguistic environment of the *kārum* society. In Akkadian, the verb *hasārum*, *hesērum* means 'to blunt, chip, trim' (CAD H:176), and a G-stem participle may have served as the base for a loanword. As the Hittite and Boğazköy-Hurrian  $\langle \check{S} \rangle$  may have rendered a non-palatalized sibilant, there would be no phonetic obstacles to this hypothesis.

While none of these explanations is conclusive nor solves all of the problems, we maintain that the simple presence of one apparent loan from Hurrian to Palaic or from Palaic to Hurrian is not enough to assume direct lexical exchange between the two languages, especially since such an exchange would be very difficult to contextualize historically and geographically. The only solid conclusion is that the formal and semantic match appears to be convincing, but the two forms—the only two clearly attested manifestations of Wanderwörter in this context—probably belonged to a wider scenario of lexical circulation.

### 4 Akkadian and the Languages of Anatolia

The long-standing prominence of the Akkadian language in the kingdom of Hatti is well known and has been widely investigated.<sup>33</sup> The adoption of the cuneiform writing by the Hittites during the reign of Hattušili I implied the acquisition of a whole cultural world. This world included the two main Mesopotamian languages, Sumerian and Akkadian, which were indissolubly bound to the cuneiform script. Not only was Akkadian a constitutive element of the Hittite cuneiform script, surfacing in the form of heterograms (or Akkadograms)-that is, Akkadian words syllabically spelled to represent Hittite words-but it was also widely present in the local textual tradition produced by the Hittites from the establishment of the Hittite kingdom. Old Hittite kings wrote their annals, edicts, and other administrative documents in Akkadian as well as Hittite; Akkadian literary works were copied and stored in the Hittite archives as part of the Hittite scribal curriculum; these literary works were used as models to draft original Hittite compositions; the same occurred with Akkadian technical texts, which were the repositories of ritual, medical, and mantic knowledge. Finally, when the kingdom of the Hittites became an international power, Akkadian was the language of diplomacy, in which treaties and letters were composed.

<sup>33</sup> Cf., e.g., Schwemer 2005–2006, Dardano 2012, and Dardano 2018.

Given this situation, it would not be surprising to find phenomena of lexical interference in both directions between Akkadian and the different languages spoken in the kingdom of Hatti. Such phenomena are indeed attested and have been extensively studied by Anatolianists. However, the issue of Akkadian loanwords in the languages of Anatolia is not as simple as it might seem. The consideration of three methodological points relating to such loanwords is in order:

- a) Is it really Akkadian? The identification of an Akkadian loanword should be assessed based on either a) its etymology, which should unambiguously guarantee that it belongs to the Akkadian language; or b) its occurrence in chronologically appropriate Akkadian texts; the latter also allows the assignment to Akkadian of words not originally Akkadian. Note that Semitic does not mean Akkadian: in some instances, a Semitic origin for a given word can be established, but the possibility exists that Akkadian is not the model language.<sup>34</sup>
- b) Which Akkadian? Akkadian varied considerably in space, over time, and according to textual genres. An analysis of the phenomena of lexical interference between Akkadian and Hittite should ideally take all of these factors into account.
- c) Through which path of transmission? The Akkadian language was used across the ancient Near East, which means that it served as a model for virtually all of the languages spoken in that area—languages that also had relationships with one another. Therefore, the path through which an Akkadian word may have reached Hittite or another language of ancient Anatolia was not necessarily direct. It could have included one or more intermediaries and thus different adaptation processes, which were specific for each of the languages involved.

A further issue to be considered concerns the distinction between true Akkadian loanwords and Akkadograms, which is mostly unproblematic but may sometimes complicate the interpretation. The issue is not whether the Akkadograms were dictated in Akkadian because how the text was produced does not relate to the language. To give an example, the unusual spelling *BE-LU-uš-ša*-

Cf., e.g., *kaparta-/kapirta-* 'rodent', usually traced back to a PIE compound but recently regarded as a Semitic loanword by Kroonen (2016), < Proto-Semitic \*<sup>*s*</sup>*akbar-t-*, fem. of \*<sup>*s*</sup>*akbar-* 'jerboa' (cf. the Akkadian *akbaru*; fem. personal name *Akbartu*) through Hattian intermediation to explain the loss of expected initial *h-* (see Giusfredi and Pisaniello 2020:223–224, with references). However, a loanword from the Akkadian *akbartu* with metathesis in the first syllable (or possibly aphaeresis and anaptyxis) may be a more economical solution.

an occurring in HKM 52:25 and HKM 80:5, whose phonetic complementation does not match the Hittite noun *išha-* 'lord' in nom.-voc.sg., which is required by the context,<sup>35</sup> probably indicates that the Akkadian word was dictated,<sup>36</sup> which does not mean that it was read in Akkadian and did not represent the Hittite išha-. The point is that it is not always clear whether an Akkadian word occurring in a Hittite text, with or without a Hittite ending, should be understood as an Akkadogram (with or without a Hittite phonetic complement) or an Akkadian loanword (adapted or not) in Hittite. For example, the Hittite hapax <sup>NA4</sup>y]*a-aš-pu-un* 'jasper' (acc.sg.) in KUB 15.5+ i 4 depends on the Akkadian (i) $ašp\hat{u}$ - 'id.' (possibly a loanword in turn), but the Akkadogram NA<sub>4</sub>YA-AŠ-*PU* is found on the same line, meaning that an Akkadographic interpretation as NA4Y]A-AŠ-PU-un, with a Hittite phonetic complement, is also possible.<sup>37</sup> Similarly, the Hittite acc.pl. NINDAtap-pí-in-nu-uš (a kind of bread) only occurs in the building ritual KUB 32.137+ ii 16.38 The stem form NINDAtap-pí-in-nu is consistently used elsewhere in the text. The noun patently relates to the Akkadian *tappinnu* (< the Sumerian dabin = ZÌ.ŠE),<sup>39</sup> and the ritual shows clear Mesopotamian influences;<sup>40</sup> however, it is difficult to decide if the noun should be regarded as an Akkadogram, NINDATAP-PÍ-IN-NU (with the Hittite phonetic complement -uš in ii 16), representing a different Hittite word, or if NINDAtap-píin-nu-uš was a Hittite nonce word, an occasional Hittitization of an Akkadian noun.41

The examples above reveal the importance of distinguishing between loanwords and nonce words in the study of Akkadian lexical interference in Hittite. Nonce words are not so different from code-switching phenomena because they can be regarded as occasional Hittitizations of Akkadian words, occurring most frequently in Hittite translations or adaptations of Akkadian texts. Thus NINDA*tappinnuš*, which occurred only in a Mesopotamian-influenced ritual as mentioned above, is probably a nonce word (unless an Akkadographic interpretation should be preferred). Similarly, the Hittite <sup>GU4</sup>*alu*-, the heavenly bull in the Hittite version of the Gilgameš epic, < the Akkadian *alû*, may represent an

<sup>35</sup> Cf. Weeden 2011:175–176.

<sup>36</sup> This is not unusual because some scribal mistakes seem to indicate that Sumerograms were sometimes dictated in Sumerian (cf. Cotticelli-Kurras and Pisaniello 2021, with references).

<sup>37</sup> Hittite phonetic complements after Akkadograms are infrequent but not unknown (cf. Weeden 2011:10–13).

<sup>38</sup> With dupl. KBo 40.20+ l.c. 3' (NINDAtap-pé-e-nu-uš).

<sup>39</sup> Cf. CAD T:182-183.

<sup>40</sup> See G. Torri (ed.), hethiter.net/: CTH 415 (INTR 2012-07-30).

<sup>41</sup> See also Giusfredi and Pisaniello 2020:223.

occasional Hittitization of the Akkadian word if it is not to be understood as a proper name, although an Akkadographic explanation cannot be excluded (i.e., nom.sg.  $^{\rm GU_4}A$ -LU-uš, acc.sg.  $^{\rm GU_4}A$ -LU-un,  $^{\rm GU_4}A$ -LU- $\dot{U}$ -un). The Hittite *kumra*- (a priest), < the Akkadian *kumru*, which only occurs in the Kizzuwatna ritual fragment KUB 59.60 ii 8', 9' (acc.sg.  $^{\rm L\acute{U}}$ SANGA *kumra*n, stem form  $^{\rm L\acute{U}}$ SANGA *kumra*), may also be a nonce word, although the preserved text does not show obvious Mesopotamian influence.

In other cases, a full assessment remains problematic. For example, it seems reasonable to regard the Hittite *huripta-* 'desert' (only dat.-loc.pl. *hu-ri-ip-ta-aš*) < the Akkadian *huribdu*, only attested in the myth of Elkunirsa und Ašertu, as a nonce word in a translation text, but the occurrence of a possible derivative verb *huriptai-* in a festival for Ištar (KUB 45.46:9') would point instead to a true, productive loanword despite the inclusion of Hurrian recitations in the text.<sup>42</sup> Even if they cannot be strictly regarded as loanwords, nonce words are still worth considering because they can show the strategies implemented in adapting foreign words into Hittite.

As mentioned, one of the major challenges in studying Akkadian loanwords and nonce words in Hittite is identifying the path of transmission: distinguishing between words that entered Hittite directly from Akkadian and those that arrived through the intermediation of other languages, specifically Hurrian and/or Luwian. Only words transmitted directly can explain how Akkadian loanwords were adapted in Hittite; loanwords mediated by Hurrian and/or Luwian are classed as Hurrian or Luwian loanwords in Hittite.

Identifying paths of transmission is not always easy, although some criteria can be established. These concern both adaptation strategies and the type of text in which the words occur. Thus an originally Akkadian word occurring in Hittite transmission with a Hurrian suffix points to Hurrian intermediation. Some examples include the Hittite  $p\bar{u}hugari$ - 'substitute' < the Akkadian  $p\bar{u}hu$ , adapted with the Hurrian suffix *-ugar*-; the Hittite *irimpi(t)-/irippi(t)-/eripi*-'cedar' < the Akkadian *erēnu* 'cedar' (< the Sumerian erin), with the Hurrian suffix *-bi*, also occurring in texts belonging to the Hurrian milieu (see below for the alternation between the common gender *i*-stem and the neuter gender stem in *-it*); the Hittite ša(n)kunni- 'priest' < the Akkadian  $šang\hat{u}$ ,  $šagg\hat{u}$  (< the Sumerian sanga), with the Hurrian suffix *-nni*-; and the Hittite <sup>MUNUS</sup>*entani*and <sup>MUNUS</sup>*entašši*- (a priestess) < the Akkadian *entu* (fem. of *enu* < the Sumerian en), with the Hurrian suffixes *-nni*- and *-šši*-, the former also attested in Hurrian context (*ēntani* in KUB 27.34 iv 17').<sup>43</sup> In the case of the noun *mitga(i)mi*-

<sup>42</sup> Cf. HW<sup>2</sup> III:752.

<sup>43</sup> Other cases are more problematic, e.g., the Hittite *našarta-* 'concubine', allegedly < the

/mittaka(i)mi-/mintaka(i)mi- 'sweet bread', a Luwian intermediation is clear because it is a Luwian participle from the unattested verb \**mitkai*-, which is allegedly related to the Akkadian *matāqu* 'be sweet', *matqu* 'sweet' (thus *mitga(i)mi*- = 'sweetened').<sup>44</sup>

Akkadian loanwords and nonce words occurring in Hittite translations or adaptations of Akkadian texts can be safely regarded as directly transmitted from Akkadian to Hittite, without any intermediation, as in the case for  $^{\rm GU_4}alu$ - and *huripta*- (mentioned above). Note, however, that Hurrian is often believed to have had a role in the transmission of Akkadian literature to the Hittites. Theoretically, then, a Hittite translation of an Akkadian literary work could derive from a Hurrian model.

The paths of transmission of most of the allegedly Akkadian loanwords in Hittite remain ambiguous except for the few Akkadian words in which Hurrian intermediation is patent due to the presence of a Hurrian derivational morpheme and an even smaller number of words for which a direct path seems to be the best solution because of the type of text in which they occur. Most do not show any unambiguous derivational morphemes but rather occur in Hittite as *i*-stems (sometimes with a secondary stem in *-it*). Examples include  ${}^{L\hat{U}}api\check{s}i$ - 'exorcist' (< the Akkadian  $a\check{s}ipu$ , with metathesis),<sup>45</sup> É *apuzzi* 'storehouse' (< the Akkadian  $ab\bar{u}su$ ),<sup>46</sup> hazzizzi(t)- 'ear; wisdom' (< the Akkadian  $has\bar{s}u$  'ear'), huruppi-, a kind of dish (< the Akkadian huruppu, a metal dish), kappi- 'bowl' (< the Akkadian kappu),  ${}^{DUG}kazzi(t)$ -, a container for liquids (< the Akkadian  $k\bar{a}su$  'cup'), kazmi(t)- 'sample' (tentatively < the Akkadian kasmu 'cut, chopped'),<sup>47</sup> lahanni-, a flask (< the Akkadian lahannu),

Invoking Hurrian intermediation in order to explain the metathesis is not really necessary since it could be explained by an association through folk etymology between the  $\bar{a}\dot{s}ipu$ and the verb  $ep\bar{e}\dot{s}u$  'do, work, perform incantation, etc.' (cf. Otten 1974–1977:178). Note, however, that <sup>LÚ</sup>*apiši-* and regular <sup>LÚ</sup> $\bar{A}$ *ŠIPU* occur in the same text, which possibly makes a direct borrowing of <sup>LÚ</sup>*apiši-* from Akkadian unlikely (cf. Schwemer 2005–2006:226). For a similar metathesis, cf. the Hittite *gurzip*(*p*)*ant-* 'wearing a hauberk', from an unattested noun \**gurzipi-*, related to the Akkadian *gurpisu*, *gursipu* (also occurring as an Akkadogram *GUR-ZI-IP*, *KUR-PÍ-ŠI* in Hittite), which is generally regarded as a foreign word, possibly from Hurrian (cf. Richter 2012:228–229).

46 Only occurring as a stem form, which also permits it to be interpreted as an Akkadogram (É *A-BU-US-SÍ*).

47 Cf. Pisaniello 2017.

Akkadian *esertu*, and the Hittite *nakappi-/nekappi-* (a kind of bowl), allegedly < the Akkadian *kappu* 'bowl', because the nasal prefix cannot be easily traced back to a Hurrian morpheme, although Hurrian intermediation is often invoked for these forms (see the discussion in Giusfredi and Pisaniello 2020:224–225, 228 fn. 73, with references).

<sup>44</sup> For a comprehensive discussion on Akkadian loanwords in Luwian, see Chapter 11.

*makalti-/magalzi-/makanti-* '(eating) bowl(ful)' (< the Akkadian *mākaltu*, a bowl, from *akālu* 'eat'), *magari-* 'wheel (of the chariot)' (< the Akkadian *maga-rru*, *mugarru*), <sup>GIŠ</sup>*paini*(*t*)-, 'tamarisk?' (cf. the Akkadian *bīnu*, but the preservation of the original /ai/ in Hittite excludes a direct borrowing from this Akkadian form),<sup>48</sup> *tuppi-* '(clay) tablet' (< the Akkadian *tuppu* < the Sumerian dub), <sup>LÚ</sup>*ummiyanni-*, an official (< the Akkadian *ummiānu* < the Sumerian um-mi-a, um-me-a 'expert'), and <sup>LÚ</sup>*zakkinni-* 'prefect' (< the Akkadian *šaknu*, *šākinu*). Since Hurrian generally adapted Akkadian words as *i*-stems,<sup>49</sup> and given that some of the words listed here also occur in Hurrian texts and/or in Hittite texts belonging to the Hurrian milieu,<sup>50</sup> a Hurrian intermediation is often invoked in the transmission of these words from Akkadian to Hittite. Nevertheless, a direct transmission from Akkadian cannot be entirely excluded in some instances because the *i*-stem may derive from the Akkadian oblique stem or reflect a common Hittite strategy of thematization, perhaps also influenced by the Luwian *i*-mutation in New Hittite.

A likely and productive Akkadian loanword for which a direct path of transmission can be suggested is the Hittite *arzana-/aršana-*, always occurring with *per-/parn-* (the Sumerian É) 'house', < the Akkadian *arsānu* (a kind of groats). It is likely that the phrase *arzanaš per-/parn-* (also É *arzanaš*) originally meant something like 'porridge-house' (that is, an inn or hostel) but examples like acc.sg. É *arzanan* and abl. É *arzanaz* (or better <sup>É</sup>*arzanan* and <sup>É</sup>*arzanaz*) seem to point to a metonymic extension of *arzana-* to denote the building. The noun also became productive in Hittite with this new meaning, as evidenced by the derivatives <sup>LÚ</sup>*arzanala-* 'attendant of the *arzana-*house' and *arzanai-* 'quarter, billet'.<sup>51</sup>

Given the difficulties involved in distinguishing between direct and indirect Akkadian loanwords, the adaptation strategies of Akkadian words in Hittite are not easy to investigate. Except for the few examples only attested as stem forms (non-adapted loanwords or Akkadograms?), thematization offers multiple possibilities that perfectly match the Akkadian case endings: *a*-stems (*arzana-, huripta-, kumra-*), *u*-stems (<sup>GU4</sup>*alu-*, <sup>NINDA</sup>*tappinnu-*, <sup>NA4</sup>*yašpu-*), and *i*-stems

<sup>48</sup> A preform \*baynum should be reconstructed, attested as baynu at Ebla (see Kogan and Krebernik 2020:104). Because a single occurrence of paini is found in the Akkadian of Nuzi, probably to be explained as the code-switching of a Hurrian native speaker (see Kogan and Krebernik 2020:137), Hurrian may be the source of the Hittite word (see also Richter 2012:286).

<sup>49</sup> A list of Akkadian loanwords in Hurrian can be found in Neu 1997.

<sup>50</sup> For all of the references and further discussion on individual examples, see Giusfredi and Pisaniello 2020:226–228.

<sup>51</sup> See Yakubovich 2006:44–45, *contra* Dardano 2018:355, with references.

(see the list above) are attested, with the latter being particularly prevalent but suspected of being Hurrian loanwords instead. In the attested forms that allow an assessment of gender, the Akkadian words are generally assigned to the common gender in Hittite, with the important exception of *tuppi*-'(clay) tablet', which is consistently neuter (neuter stems in *-it* result from Luwian intermediation, as will be shown below).

Hurrian loanwords also occur in Akkadian, such as the Akkadian *ambassu*, allegedly 'park, game preserve,' which is attested in late sources. Possibly it derives from the Hurrian *ambašše*, a derivative of the Hurrian verb *am*- 'burn' (although with an odd semantic shift in Akkadian). Similarly, the Akkadian *apu* 'hole, opening in the ground', found only in Neo-Assyrian, may derive from the Hurrian  $\bar{a}pi$  'sacrificial pit' (or possibly on Anatolian  $\bar{a}pi(t)$ -, which is a Hurrian loanword), perhaps deriving in turn from the Sumerian ab 'window' (which is borrowed and adapted in Akkadian as a feminine noun, *aptu* 'id.').<sup>52</sup> Finally, the Akkadian *maninnu* 'necklace', only attested in peripheral Akkadian, mostly in texts belonging to the Hurrian milieu, may ultimately derive from the Indo-Iranian \**mani*- through Hurrian intermediation, pointing to language diffusion from Mittani to the west (see Chapter 13).<sup>53</sup>

Examples of the opposite path of transmission, from Anatolian to Akkadian, can be found in the Siege of Uršu text (CTH 7), in which some Hittite words occur both as foreign words and in Akkadian guise.<sup>54</sup> In this case, however, we cannot speak of true loanwords. They should rather be regarded as occasional code-switching phenomena.

An example of true Anatolian loanword in Akkadian is *argamannu* 'redpurple wool; tribute' (the latter meaning only attested at Boğazköy), which occurs quite late in the Babylonian and Assyrian documentation.<sup>55</sup> It should

<sup>52</sup> Other Hurrian words in Akkadian, also occurring in Hittite as loanwords, include *huprušhu* (a vessel), *huburnu* (a small container), and *namallu/namullu* 'plank-bed' (cf. the gloss *na-ma-al-lum* = *er-šu* SU<sup>KI</sup> "bed in Subarean" in CT 18 4 ii 27). The Akkadian *utuplu* (a fabric or weaving) may also be a loanword from the alleged Hurrian source of the Hittite *adupli*(*t*)- (a kind of festive garb), borrowed via Luwian intermediation.

<sup>53</sup> On Hurrian loanwords in Akkadian, cf. Giusfredi and Pisaniello 2020:228–230.

<sup>54</sup> Hittite forms are hūškiwanteš 'lingering' (KBo 1.11 rev.' 14), lahnit 'with lahni-' (rev.' 15), šehuwen 'we soiled?' (rev.' 15), kurziwanieš 'helmet wearing' (rev.' 15), kulēššar 'hesitation' (rev.' 17). Possibly Akkadianized Hittite forms include the verbal forms taštanazzukā (obv.' 14') and lištazzukā (obv.' 20'), which have been suggested to be built on the Hittite verbal stem šeške- 'rest', kula'ūtam (rev.' 18), an abstract probably reflecting the Hittite kulēššar, and eddūtam (rev.' 31), perhaps meaning 'ration', tentatively explained as an abstract noun built on the Hittite verb ed- 'eat'. On these words, see the commentary to the Uršu text in Beckman 1995, with references, and Wilhelmi 2022:350–351.

<sup>55</sup> Cf. CAD A/2:253.

be compared with the Hittite argama(n)- and the Luwian arkamman-, which surely mean 'tribute' but probably also 'purple-dyed wool' as emerges from the Manapa-Tarhunta letter (KUB 19.5+).<sup>56</sup> Although a Semitic origin is sometimes assumed, an Indo-European etymology seems to be assured for the Hittite and Luwian nouns (both from PIE \* $h_J \acute{e}rk$ - 'cut, divide').<sup>57</sup>

Besides loanwords and related phenomena involving the transfer of a whole linguistic sign, the lexical interference between Akkadian and the other languages of Anatolia also emerges in structural and semantic calques involving the content. We will first consider structural calques (or loan translations). Hittite compounds built with a genitive and the noun *išha-* 'lord' (e.g., *hannešnaš išha-* 'lord of judgment', that is, a legal opponent) are generally believed to be based on similar Akkadian expressions with *bēl* 'lord' and a noun in the genitive case (e.g., *bēl dīni*, also 'lord of judgment') that occur quite frequently as heterograms in Hittite texts (also with the Sumerian EN in place of the Akkadian *bēl*).<sup>58</sup> It is also possible that Hittite independently built new words, based on an initial set of examples, without needing direct Akkadian models. This would explain the absence of an Akkadian equivalent for nouns such as *mukešnaš išha-* 'lord of the ritual'. In that case, Akkadian would not have caused merely lexical interference but rather introduced a new word-formation rule into the target language.

The Hittite compound *šiyannaš per* 'seal house' (written as É *šiyannaš* or, fully heterographically, as É <sup>NA4</sup>KIŠIB) is possibly a calque on the Akkadian *bīt kunukkim*, and the Hittite *anišiwat* 'today' (lit. 'this day') and *appašiwatt*- 'future' (lit. 'after-day') may be calqued on the Akkadian *ūmu annû* and (*w*)*arkiat ūmi*, respectively (also note the Sumerogram EGIR.U<sub>4</sub>KAM).<sup>59</sup> Phraseological calques seem also to be attested, such as the Hittite *išhiul išhiya*- lit. 'to bind a binding' (that is, to conclude a treaty) < the Akkadian *riksa rakāsu*, often occurring in treaties, or the Hittite *aššul hatrae*- 'write favor' < the Akkadian *šulma šapāru*, frequently attested in Hittite letters, which largely derived from Akkadian models in the formulary.<sup>60</sup>

<sup>56</sup> See Singer 2008. See also Giusfredi and Pisaniello 2019:28–34 for a discussion on this noun and further references.

<sup>57</sup> Cf. DCL s.v.

<sup>58</sup> Cf. Dardano 2018:358 for other examples.

<sup>59</sup> Cf. Dardano 2018:357–358. Other possible calques are generally believed to be coincidences, e.g., the Hittite *pattarpalhi-* (a bird), lit. 'wide-winged', formally matching the Akkadian *kappurapšu*, which however seems to designate a different kind of bird (also note that such a designation is quite trivial and actually attested elsewhere, cf., e.g., the Greek τανυσίπτερος).

<sup>60</sup> Other possible examples are listed in Dardano 2018:358.

In some cases, it is difficult to assess whether a given Hittite compound is modeled on an Akkadian word or its Sumerian counterpart occurring in Hittite texts as a heterogram. Thus the Hittite *šuppiwašhar*<sup>SAR</sup> 'onion' could have been based on the Sumerian sum-sikil<sup>sar</sup> (also attested as a heterogram in Hittite) or perhaps the Akkadian *šamaškil(l)u, šusikilu,* borrowed from Sumerian. The Sumerian model, being more transparent than the Akkadian model, is perhaps a better candidate for the Hittite compound.<sup>61</sup>

As for semantic calques (or loan shifts), some technical meanings attested for Hittite words are probably derived from an Akkadian model. For example, the Hittite *parkuešš*- 'become pure' also had the legal meaning 'be proven innocent', thus semantically matching the Akkadian  $eb\bar{e}bu(m)$  'be pure; be innocent'.<sup>62</sup> Another possible example is the Hittite *haštai*- 'bone', which also denoted a measure of length, possibly after the Akkadian *eşemtu(m)* 'bone; fraction of a cubit'; however, the latter meaning has only been attested in Neo-Assyrian,<sup>63</sup> so the hypothesis of a semantic calque in Hittite remains uncertain. Finally, the specific type of groom defined in Hittite as <sup>LÚ</sup>*antiyant*-, lit. 'the one who entered (his wife's family)', that is, a son-in-law, may attest to a calque of the Mesopotamian  $er\bar{e}bu(m)$  marriage.

Considering lexical transfer in the opposite direction reveals that Hittite represented a source of linguistic contents for Akkadian. This is shown by some phraseological calques on Hittite structures occurring in the Akkadian versions of treaties and political documents issued by the Hittite kings (see Chapter 8). These calques were probably not systemic, and most should be understood as interference phenomena at the single-document level.

#### 5 Hurrian, Luwian, and Hittite between Hatti and Kizzuwatna

As most recently shown by Mouton and Yakubovich (2021),<sup>64</sup> second-millennium BCE Luwian, also referred to as Cuneiform Luwian, was not homogeneous. Different varieties should be distinguished: 1) the Luwian of Hattuša, also called Empire Luwian, which surfaced in the *Glossenkeilwörter* and later

<sup>61</sup> *Contra* Rieken (1999:313–314), even if the Hittite word could be etymologically explained as a dvandva compound, 'das Reine und Heilige' (*wašhar* being possibly related to the Luwian *wašha*-), a calque cannot be excluded because, as Rieken herself notes, *wašhar* was probably also used as a plant name.

<sup>62</sup> See Dardano 2018:357 for other cases.

<sup>63</sup> Cf. CAD E:343.

<sup>64</sup> See also Chapter 11.

developed into Iron Age Luwian; 2) the Luwian of Kizzuwatna and the Lower Land, attested by incantations embedded in rituals from the two regions; 3) the Luwian of Tauriša, also attested in conjurations in ritual texts; and 4) the Luwian (or Luwic? See Chapter 11) of Ištanuwa, attested only in a couple of festival texts belonging to the cult of that city.<sup>65</sup> Attestations for a fifth variety, the Luwian of Arzawa, are very scanty, being limited to personal names and possibly sporadic Luwian words that were included in Arzawa rituals written completely in Hittite.<sup>66</sup> Thus, when studying lexical interference between Luwian and Hittite, we should try to distinguish between the different areas and varieties involved rather than considering Luwian as a whole. The two most important topics to be investigated separately are the interface between Kizzuwatna and Hatti, which is dealt with in this section and involved Hurrian, the Luwian employed in the different ritual traditions, and Hittite, and the relationship between Empire Luwian and Hittite at Hattuša, to which the next paragraph is devoted.

With the annexation to Hatti of the formerly independent kingdom of Kizzuwatna and the general expansion of the Hittite influence under Tuthaliya I, several rituals belonging to the Hurro-Luwian milieu reached Hattuša, where they were copied and variously adapted for different purposes. Two different groups of so-called Kizzuwatna rituals were identified (Miller 2004; Yakubovich 2010). The first group consisted of rituals with Luwian incantations that show no traces of Hurrian elements, possibly pointing to the migration of ritual practitioners to Hattuša, where the texts were written by Hittite scribes under dictation. The second group consisted of rituals with both Hurrian and Luwian elements, perhaps originally recorded at Kizzuwatna and later copied at Hattuša.<sup>67</sup> While recently a new and more complex model of the Luwian

<sup>65</sup> The distinction between the different Luwian varieties may have been a diatopic one, but one should note that the Luwian corpora also differed in their textual genres: Hattuša Luwian probably reflected the Luwian language spoken by Luwian speakers at the Hittite court, whereas Kizzuwatna/Lower Land and Tauriša Luwian, as far as we can tell, were used only for recitations in magical rituals. The linguistically conservative Ištanuwa Luwian was used for songs. Therefore, the possibility exists that a diaphasic rather than a diatopic variation is involved, to be understood as variation of the subcode.

<sup>66</sup> E.g., perhaps, the Luwian neuter noun mūranza, the name of the ritual ascribed to the augur Maddunani from Arzawa (KUB 7.54 i 4). See also Chapter 11, in which it is suggested that the label 'Luwic' may be more appropriate than 'Luwian' for the Luwian of Arzawa. The second-millennium hieroglyphic inscriptions from western Anatolia—which, as suggested by Oreshko (2013), could belong to a different scribal tradition (but see Müller-Karpe 2019)—might be related to the Luwian of Arzawa, but the linguistic material that they provide is extremely limited.

<sup>67</sup> Cf. also Melchert 2013:168–170.

traditions and dialectology has been proposed (cf. Chapter 11, with references), the distinction based on the presence or absence of Hurrian material remains significant for our current purpose.

Through the path of transmission to Hattuša, several cultic technical terms, both Luwian and Hurrian, entered Hittite. Luwianisms in Hittite rituals were collected by Melchert (2013), who distinguished between words of Luwian origin and words whose origin was ultimately Hurrian. Melchert showed that the rituals belonging to the first group include, besides Luwian incantations, a larger number of originally Luwian words than rituals written completely in Hittite with both Luwian and Hurrian elements. In the latter group, true Luwianisms are markedly less common than words of Hurrian origin. Interestingly, but maybe not surprisingly, some of the Luwianisms occurring in the Hittite sections of the rituals with Luwian incantations belong to Empire Luwian (cf. the acc.pl. NINDApartanninzi and NINDAwartanninzi in KUB 17.12 vs. the expected acc.pl. ending -nz(a) of the Luwian of the rituals), as do some Luwianisms in Hittite rituals that have Hurrian and Luwian elements but no Luwian incantations (cf. the acc.pl. nišhinzi šūntinnānzi in the ritual of Ammihatna, KBo 5.2 iii 29). If these words belonged to Empire Luwian rather than merely attesting to a sporadic interference of the Luwian of Hattuša on foreign Luwian loanwords in Hittite, the degree of lexical interference of nonlocal Luwian on Hittite might need to be reconsidered. One might wonder, e.g., whether Kizzuwatna/Lower Land and Tauriša Luwian were confined almost exclusively to the incantations in these rituals, whereas the Luwianisms in the Hittite ritual framework mostly belonged to the Luwian dialect spoken in the Hittite capital. Possible exceptions could be some specific technical terms related to the Kizzuwatna cult (mostly of Hurrian origin), which, however, were also not immune to Empire Luwian influence (cf. the aforementioned nišhinzi šūntinnānzi) because Kizzuwatnean Hurro-Luwian technical terms probably also entered Empire Luwian (e.g., the acc.pl. šehellinzi in the oracle report IBoT 2.129 obv. 23). Therefore, the adaptation strategies of Luwian nominals in Hittite will be dealt with in the following section, which is dedicated to lexical interference between Empire Luwian and Hittite.

Hurrian loanwords could have entered Hittite through a twofold path based on the different adaptation strategies found in Hittite. Some reached Hittite through Luwian intermediation, as is shown by the typically Luwian strategy of adaptation of foreign words as stems in *-it*,<sup>68</sup> reflected in Hittite as neuter

<sup>68</sup> See Melchert 2003a:198. For a full list of Hurrian loanwords in Cuneiform Luwian, see Simon 2020b.

gender dental stems (with the dental stop only appearing in oblique cases).<sup>69</sup> A secondary thematization as a common gender *a*-stem occurs sporadically, as in the case of *harzazuta*- 'breadmash'.<sup>70</sup> Other Hurrian loanwords may have had direct Hurrian models unless they also came from Luwian and were recategorized as simple vocalic *i*-stems by dropping the expected dental consonant. These words are generally assigned to the common gender. Sometimes two allotropies are attested for the same word, perhaps reflecting direct and indirect paths of transmission (e.g., the common *ahrušhi*- vs. the neuter *ahrušhi(t)*- 'censer', the common *eripi*- vs. the neuter *irippi(t)*- 'cedar', and the common *kazmi*- vs. the neuter *kazmi(t)*- 'sample'). As mentioned above, the Akkadian words that entered Hittite via Hurrian (and sometimes also Luwian) intermediation also had a twofold path of transmission.

Since we are dealing with materials transferred to Hattuša from elsewhere, it is not to be expected that lexical interference occurred in the opposite direction at a systemic level, that is, from the languages spoken in the Hittite capital city to Kizzuwatna Luwian and Hurrian. Only few Hittite words occur in Luwian passages embedded in Hittite rituals: the noun halmaššuitti- 'throne', found in a ritual fragment (KUB 35.67 ii 2'); the genitival adjective hurkilašša/i-, built on the Hittite *hurkil*-, which occurs in a Luwian phrase in the ritual of Zuwi (KUB 35.148+ iv 13'),<sup>71</sup> and the noun GISkattaluzzi(t)- 'threshold', which was adapted as a stem in -*it*- in the ritual of Puriyanni (KUB 35.54 iii 29).<sup>72</sup> Furthermore, Empire Luwian had a limited influence on Luwian passages included in Luwian-Hittite rituals written at Hattuša. This took the form of non-systemic grammatical interferences that only affected single documents, such as the occasional replacement of original plural accusatives in -nz(a) with the innovative Empire Luwian forms in *-nzi*, modeled on the plural nominative.<sup>73</sup> As mentioned, some Empire Luwian words also seem to occur in Hittite rituals with Luwian passages.

<sup>69</sup> Cf., e.g., Carruba 1967, Giorgieri 2012, and Pisaniello 2017.

<sup>70</sup> Cf. Giusfredi and Pisaniello 2020:218–219.

<sup>71</sup> However, according to Melchert (2013:161), "[t]here is no basis for regarding the ritual of Zuwi as 'Luvian'."

<sup>72</sup> Note that a Hittite word, <sup>DUG</sup>*harši-* 'pithos', also occurs in a Luwian passage that is included in the festival of Ištanuwa (KBo 4.11 obv. 29), but the textual material we know from the tradition of this Luwian center is too scarce for a full assessment of the phenomena of interference between this Luwian variety and Hittite.

<sup>73</sup> See the discussion in Yakubovich 2010:26–38.

#### 6 Luwian and Hittite at Hattuša

As is acknowledged after Yakubovich (2010), most of the Luwian words occurring in Hittite texts, with and without *Glossenkeil*, reflect the Luwian dialect spoken at Hattuša, Empire Luwian, which shows some innovations compared to the older Luwian of the rituals and later developed into the Luwian variety attested in the hieroglyphic inscriptions. Thus, in the bilingual environment of the Hittite capital city, it was this Luwian dialect that mostly influenced the Hittite language, both at the lexical and grammatical level. As previously mentioned, Empire Luwian influences can also be found in Luwian rituals, both in the incantations (plural accusatives in *-nzi* replacing expected forms in *-nz(a)*) and in Hittite ritual instructions (Luwian loanwords showing unique Empire Luwian features).

Being genealogically related, Luwian and Hittite were structurally similar. Because they had the same grammatical categories, complex adaptation strategies of Luwian loanwords would be unlikely in Hittite. In considering lexical interference between Hittite and Luwian, the major problem is rather to identify Luwian loanwords unambiguously, which can only be done on etymological grounds. The *Glossenkeil* and unique Luwian endings could only prove the existence of a given word in Luwian, not its original Luwian status. Thus the Hittite *:aggatiuš* 'hunting net' (acc.pl. in KUB 8.56 i 12") surely derives from a Luwian model because it matches the Hittite cognate  $\bar{e}kt$ - and complies with Čop's Law. Conversely, the unambiguous Luwian abl. <sup>GIŠ</sup>kalmušati, which occurs in Hittite context (KUB 44.60+ iii 9), only attests to the existence of a Luwian noun kalmuš- 'lituus' but cannot indicate whether the noun's ultimate origin was Luwian.<sup>74</sup>

True loanwords, which can be expected in different texts because they belong to the *langue*, must be distinguished from code-switching phenomena, which are confined to individual acts of *parole*, although the strategies of adaptation to the Hittite language—for words that were adapted—could have been the same in both cases. The presence of the *Glossenkeil* may be a helpful criterion, although not entirely reliable. As suggested by Yakubovich (2010:396–410), the lexical function of the *Glossenkeil* to mark single words is sometimes best explained as a mark of incompetence code-switching. From Muršili II's reign forward,<sup>75</sup> scribes with non-native knowledge of Hittite marked, more or less

<sup>74</sup> See DCL s.v.

<sup>75</sup> Some examples can perhaps be found in MS texts. For an overview of the uses of the *Glossenkeil* in Hittite, see Melchert 2005, van den Hout 2007, and Pisaniello 2020b, with further references.

consistently, Luwian words they were not able to translate into Hittite and that were perceived as stylistically inappropriate. This marking probably was intended to highlight those forms to be assessed by senior scribes and possibly replaced in edited copies of the text.<sup>76</sup> However, the use of the *Glossenkeil* was not consistent and depended on how an individual, presumably non-native, Hittite scribe assessed a given word. Therefore, a Luwian word marked by the *Glossenkeil* in a given text, even if understood as a code-switching phenomenon by a non-native scribe who considered it stylistically inappropriate, could have corresponded to a true Luwian loanword in Hittite, whose acceptability might have been assessed differently by a native Hittite senior scribe.

Contact between Luwian and Hittite at Hattuša was much more intense than contact among Hittite and the other languages that we have discussed; it also affected the structural levels of the language (see Chapter 15). Lexical interference in this situation also went beyond the mere transmission of nominals to involve other parts of speech, such as verbs and adverbs. In the following sections, we focus on Luwian lexical loanwords in Hittite, divided according to their parts of speech. Limited evidence for the opposite path of transmission-that is, from Hittite to Empire Luwian-also exists. For example, /xassusara-/ 'queen', occurring in Iron Age Luwian hieroglyphic inscriptions, probably was a Hittite loanword traceable to the Empire period,<sup>77</sup> as well as the Luwian noun /mugissar/ occurring in the KARAHÖYÜK inscription (12th c. BCE), clearly reflecting the Hittite *mukeššar* 'invocation ritual' because the form is not compatible with the phonological and morphological characteristics of the Luwian language.<sup>78</sup> There are also some possible calques. It has been recently suggested that the phrase *annān tiššā*(i)- occurring in Puduheba's letter to Ramses II (KUB 21.38) is based on the Hittite *kattan handā*(*i*)- 'to match with'. The Hittite model with kattan would explain the unexpected occurrence

<sup>76</sup> This can be seen in the comparison between the two manuscripts of Muwattalli II's prayer to the assembly of gods (CTH 381), the draft KUB 6.46 and the edited version KUB 6.45. The marked Luwian noun *:hūwayalli-* 'runner' (or perhaps 'helper'), occurring in the draft as an epithet of the Sun god (iv 53), is replaced by the Hittite *kutrui* 'witness' in the edited version (iv 56), while the marked *:ziladiya* 'in the future' in the draft (iv 23) is simply repeated in the final version without the *Glossenkeil* (iii 54), probably pointing to its status as a true loanword in Hittite (see Yakubovich 2010:378–379, with further examples in the following pages).

<sup>77</sup> Many thanks to H. Craig Melchert for pointing out this example.

<sup>78</sup> See eDiAna s.v. /mugissar/, mu-ki-SUPER+ra/i 'invocation ritual' (https://www.ediana.gwi .uni-muenchen.de/dictionary.php?lemma=237), with references. The same word was probably also borrowed into Milyan, where it occurs as muxssa- (TL 44d 39); cf. eDiAna s.v. muxssa- 'invocation ritual (?)' (https://www.ediana.gwi.uni-muenchen.de/dictionary .php?lemma=238), with references.

of the Luwian *annān* 'below' instead of \**ānna* 'with' (Hieroglyphic Luwian CUM-*na*).<sup>79</sup> Furthermore, the meaning of 'defeat' or 'conquer' for the Luwian verb *muwa*- occurring with the reflexive particle *-ti* could be calqued on the Hittite *-za tarhu-* 'id.'<sup>80</sup>

6.1 Lexical Interference between Empire Luwian and Hittite: Nominals Empire Luwian nominals—regardless of their status as true loanwords or codeswitching phenomena (see above)—occur in Hittite texts either as foreign words (i.e., with Luwian endings) or adapted forms. Given the structural similarity between the two languages, Luwian words adapted to Hittite generally maintain their original stems and grammatical genders. Luwian nouns showing the *i*-mutation can be adapted either as *i*-stems or *a*-stems or both. Some examples of common-gender nouns include the Luwian armanna/i- 'lunula' > the Hittite armanni-, the Luwian halhalzāna/i- (a body part) > the Hittite (:)halhalzana-, the Luwian harpanalla/i- 'rebellious; rebel' (adj. and n.) > the Hittite *harpanalli*-, the Luwian *hutanu*(*i*)- 'mng. unkn.' > the Hittite *hūtanui*-, the Luwian *nakkušša/i*- 'scapegoat' (< Hurrian) > the Hittite *nakkušša/i*-, and the Luwian *papašāla*- 'esophagus' > the Hittite <sup>UZU</sup>*pappaššala/i*-.<sup>81</sup> Some neutralgender nouns include the Luwian  $GI\check{s}ir(h)wit$ - 'basket' vs. the Hittite  $GI\check{s}erhui$ -, the Luwian NINDAtannaš- (a type of bread) > the Hittite NINDA dannaš-, and the Luwian *upatit*- 'landgrant' > the Hittite *upati*-. We find a mismatch between Luwian and Hittite in sporadic cases. For example, the neuter stems in *-it*dupšāhit- (a ritual) and waškuit- 'offense' are adapted as the Hittite commongender i-stems dupšāhi- and waškui- (with secondary stem wašku-).82 As mentioned previously, gender mismatches between Luwian and Hittite may result from the different paths of transmission when original Hurrian words are involved, so a Hittite common-gender i-stem may not reflect the corresponding Luwian neuter stem in -it-.

In some cases, it is not clear whether a Luwian noun in Hittite transmission was adapted to Hittite or occurred as a foreign word. There are limited instances of overlap between the Luwian and the Hittite noun declensions (nom.sg. in  $-\check{s}$ , acc.sg. in -n, and dat.sg. in -i), and nouns in the genitive case

<sup>79</sup> Original hypothesis of a calque by P. Goedegebuure (quoted in DCL s.v.  $tišš\bar{a}(i)$ -); analysis by H.C. Melchert (personal communication).

<sup>80</sup> See DCL s.v. mūwa-<sup>2</sup>.

<sup>81</sup> See DCL s.v.

<sup>82</sup> Other cases are more uncertain. For example, the common gender Luwian noun *hupalla/i*-'scalp?' was oddly adapted in Hittite as a neuter *s*-stem *hupallaš*-, although a mistake in the textual tradition cannot be excluded (see the discussion in Giusfredi and Pisaniello 2020:214, with references).

can also present problems. Several Luwian words in Hittite transmission occur in the genitive case with the ending *-aš*. They are generally regarded as forms adapted to the Hittite language, with the Hittite genitive ending. It is generally assumed that Luwian lost the genitive case, and its function was taken over by a relational adjective in *-ašša/i*-, occurring in agreement with its head noun. However, while the loss of the genitive case can be ascertained for the Luwian of the ritual traditions, for which we have proper texts, it is by no means assured for Empire Luwian, only attested in isolated words in cuneiform texts. Furthermore, if we take into account hieroglyphic texts, which used a Luwian dialect that, as mentioned, was closely related to Empire Luwian, we find considerable evidence for genitives in /-as/ alongside relational adjectives. Lycian—another Luwic language—also shows the genitive case in *-ah* and the relational adjective. Therefore, the loss of the genitive case could be regarded as an innovation that only affected the Luwian of the rituals. This makes it impossible to establish whether a Luwian word occurring in Hittite in the genitive case should be regarded as an adapted form or not.83

#### 6.2 Lexical Interference between Empire Luwian and Hittite: Verbs

Apparently Luwian was the only language from which Hittite borrowed verbs. Luwian verbs occur in Hittite both as foreign words (i.e., with Luwian endings) and adapted loanwords.<sup>84</sup> The latter were consistently assigned to the Hittite *mi*-conjugation, which was more productive than the *hi*-conjugation or perhaps the unmarked one or just more similar to the Luwian conjugation.

As in the case of nouns, the major challenge in analyzing Luwian verbs borrowed in Hittite is identifying them. While verbs that occur frequently in Hittite texts and consistently show unique Luwian endings can be regarded as Luwian non-adapted loanwords (e.g., *tapar-* 'rule, govern', which only shows Luwian endings in Hittite texts), the same is not true for hapax legomena and adapted forms for two reasons: 1) the status of a true loanword cannot be assigned to hapax legomena—or perhaps even to words that occur sporadically—because we cannot exclude code-switching phenomena, which are conceptually different from loanwords; and 2) adapted forms—that is, verbs with Hittite endings—can only be recognized as Luwian loanwords when

<sup>83</sup> See also DCL, § 2.3.2.

<sup>84</sup> The identification of an adapted form can only be based on the presence of a unique Hittite ending. This is generally unproblematic, since Luwian and Hittite verbal endings rarely overlap. However, some ambiguous cases are found. For example, the imperative form *:ma-am-ma-an-na-at-tén*, which occurs twice in KUB 24.12+, can also be read as *:ma-am-ma-an-na-at-ten*<sub>x</sub>, i.e., a fully Luwian form (cf. Sasseville 2020:514, DCL s.v.).

they have an etymologically unambiguous Luwian verbal root (further considerations are in order when derived stems are involved, as discussed below).

As mentioned, the presence of a *Glossenkeil* is insufficient to identify an original Luwian word,<sup>85</sup> and the original Hittite or Luwian status of the base simply cannot always be determined. For example, the verb *hašp*- 'overcome' occurs with both Hittite and Luwian endings from Middle Hittite texts and is generally assumed to be Luwian in origin.<sup>86</sup> However, there is no etymological ground to unambiguously assign the root *hašp*- to Luwian and thus regard the Hittite verb as a borrowing: they could have been simply cognates. The fact that later Luwian forms are marked by the *Glossenkeil* is not relevant because they could have resulted from code-switching by a scribe who was unaware of the existence of a cognate verb in Hittite.<sup>87</sup>

## 6.2.1 Root Verbs and Deverbal Derivatives

If the ultimate base is an original Luwian verb, underived stems are not problematic: an original Luwian root verb occurring in a Hittite context with Hittite endings can be identified as a Luwian verb borrowed in Hittite (unless it is a case of code-switching). The same may apply to derived verbal stems with unique Luwian suffixes (e.g., the imperfective Luwian suffix *-zza-* vs. the Hittite *-ške-*) and perhaps also to derived verbal stems built with a unique Hittite deverbal suffix, which can simply be a matter of adaptation.

The distinction between true loanwords and code-switching phenomena can be evaluated by considering multiple elements, such as the number of

<sup>85</sup> It seems that the *Glossenkeil* is sometimes the only criterion to assign a word to the Luwian language. For example, the form *.ša-am-la-ya-ya-ya-ši* (meaning unknown), only occurring in KUB 14.24 (where the Hittite infinitive [(:)*ša-am-la-ya-]ya-u-wa-an-zi* should perhaps also be restored), is regarded as Luwian only because of the *Glossenkeil* (the word is included in DCL), although its meaning and thus etymology are unclear, and the pres.2sg. ending *-ši* is shared by Hittite and Luwian. Similarly, the explanation of the Hittite *hu(wa)rai* 'sprinkle' as deriving from the Luwian verb *hur-* 'give liquid' (cf. DCL s.v., based on HED H:397–398), attested in the pret.3sg. *hu-ur-ta* (KBo 8.17:5') and the derivative *huramman* 'watered pasture' (KUB 26.43+ i 12), probably is based only on the glossed form *:hu-u-wa-ra-an-zi* occurring in KUB 6.24 obv. 6'. Also, there is no ground to suggest a Luwian origin for the Hittite *uranai-* 'bring a fire-offering', despite a couple of occurrences with the *Glossenkeil* (cf. EDHIL:926; HEG U:93–94, DCL s.v.), or for the Hittite *aršulai-* 'please, satisfy' (?), which occurs only once in KUB 16.32+ ii 26, marked by the *Glossenkeil*.

<sup>86</sup> Cf. Sasseville 2020:264.

<sup>87</sup> Note that some other Hittite verbs previously regarded as Hittitized forms of originally Luwian verbs are explained as cognates—for example, the Luwian (:)tahušiya-/Hittite tuhušiyai-'keep silent' (Sasseville 2020:31–32, with references, followed by DCL s.v.) or the Luwian (:)kiša-/Hittite kišai-, independently derived from the same unattested nominal base (cf. Sasseville 2020:26–27).

occurrences, the presence of the *Glossenkeil*, and other contextual information. Some assessments are clear-cut. For example, the unique form :*a-wi<sub>5</sub>-yaah-ha*[(-), which occurs in the fragmentary prayer KUB 36.96:12', must belong to the unambiguous Luwian root verb *awi-* 'come' (vs. the Hittite cognate *uwe-* 'id.') and should probably to be explained as a 'badly Hittitized' imperative form, :*awiyahha*[*ru*] (Melchert 2022 s.v.). It is a likely example of codeswitching due to its unicity, unexpected form, the presence of the *Glossenkeil*, and the existence of other *Glossenkeilwörter* in the same context, which point to a general Luwian influence on the text. Nothing argues for the existence of a true Hittite verb *awi-* borrowed from Luwian.

Other cases are less straightforward. For example, the Hittite *šappai-* 'peel, trim', derived from the Luwian verb *šappa-*, is only attested in KUB 8.50+ iii 23' in a Hittite context (*:šap-pa-at-ta*, together with other Luwian *Glossenkeil-wörter*). The Luwian status of the base is assured, the Hittite corresponding verb being the poorly attested *šippai-* (Melchert 2022 s.v.).<sup>88</sup> The only Hittite adapted form, *ša-ap-pa-a-iz-zi*, is found in the Hittite medical text KUB 44.63+ ii 11', without the *Glossenkeil* and in a fully Hittite context showing no traces of Luwian interference. Therefore, it should possibly be regarded as a true loanword even though it is a hapax. Also note that the only two assured occurrences of the Hittite *šippai-* are found in the MS ritual KUB 29.7+,<sup>89</sup> so we could also imagine a later replacement of the original Hittite verb with a borrowing from Luwian.

The Hittite  $hap(p)u\check{s}$ - 'make up for, replace', which occurs frequently in Hittite texts (cf. HED H:133–134), is sometimes regarded as a Luwian loanword because of the Luwian pres.1sg. ha-pu- $u\check{s}$ - $wi_5$  (KBo 31.169 obv. 8', in a Hittite context) and two occurrences of the Hittite ha-pu- $\check{s}a$ -an-zi with the *Glossenkeil* in the oracle report KUB 16.66:5', 6'. However, the etymology is unclear,<sup>90</sup> and the Hittite and Luwian verbs may be cognates.

The Luwian verb  $\dot{s}iwari(ya)$ - 'deny, withhold' (?)<sup>91</sup> occurs with unique Luwian endings in some NH letters, sometimes marked by the *Glossenkeil*. The verb is found twice with Hittite endings—the unusual pres.2sg.  $\dot{s}i$ -wa-ri-e $\dot{s}$ - $\dot{s}i$  in KUB 23.97 and the pret.3sg.  $\dot{s}i$ -wa-ri-ya-it in KUB 21.38 (probably twice)—which may represent sporadic Hittitizations rather than a loanword.

The Hittite hapax *paštarnuwanzi* found in the Hittite-Luwian ritual KUB 35.146 ii 14', probably belonging to the tradition of Tunnawiya's rituals,<sup>92</sup> surely

<sup>88</sup> Cf. CHD Š:202–203.

<sup>89</sup> Conversely, whether *parā šippanzi* in KUB 51.15 rev. 3' relates to to *šippai*- 'peel' is not entirely assured (cf. the discussion in CHD P:114–115).

<sup>90</sup> See EDHIL:299-300, including the discussion of previously proposed etymologies.

<sup>91</sup> See CHD Š:493–494 for the occurrences and meaning.

<sup>92</sup> Cf. Pisaniello 2015b.

represents the Hittite adaptation of the Luwian causative verb *paštarnuwa*-'cause to fly up',<sup>93</sup> derived from the Luwian verb *paštari*-.<sup>94</sup> A Luwian origin seems assured if, as suggested by Puhvel (HED PA:193), the base should be explained as *pa-štar-*, with the Luwian prefix *pa-* matching the Hittite *pe-*. But, again, the single occurrence of the Hittite verb is insufficient to establish whether it reflected a loanword or a code-switching phenomenon.

A clear example of a Luwian verbal loanword in Hittite is  $pu\check{s}\check{s}a(i)$ -, the imperfective stem of puwa(i)- 'pound, crush', built with the suffix - $\check{s}\check{s}a$ -. The Hittite verb is attested nine times and is only once marked by the *Glossenkeil*, which perhaps makes the hypothesis of code-switching less likely.<sup>95</sup> Although the base verb puwai- is attested in Hittite and may be a cognate of the Luwian verb puwa(i)-, there can be little doubt that the derivative  $pu\check{s}\check{s}a(i)$ - should be regarded as a loanword, both because the imperfective suffix - $\check{s}\check{s}a$ - is not productive in Hittite, where it only occurs with four verbal stems (halzai- 'call (out)', iya- 'do, make',  $\check{s}ai$ - 'press', and warrai- 'help'),<sup>96</sup> while it is very productive in Luwian, and especially because the Hittite  $pu\check{s}\check{s}a(i)$ - belongs to the mi-conjugation, whereas the Hittite  $hapalla\check{s}ai$ - 'injure'<sup>97</sup> and the Hittite  $ti\check{s}\check{s}a(i)$ - 'shape, prepare',<sup>98</sup> both belonging to the mi-conjugation, probably derived from the corresponding Luwian verbs if they were built with the suffix - $\check{s}\check{s}a$ -.

The Hittite *tiyaneške*-, which occurs only twice in Tunnawiya's ritual (KUB 7.53+ ii 10, 17), probably represents the Hittitization of the Luwian verb *tiyanišš*(*a*)- 'fill, stuff' (?), which occurs in the same context (pres.1sg. *ti-ya-né-eš-šu-i* in KUB 7.53+ ii 12). Unlike the examples quoted above, it replaces the

<sup>93</sup> The Luwian form :pa-aš-ta-ar-nu-wa-at-ta occurs in KUB 5.24 ii 47 in a Hittite context.

<sup>94</sup> Cf. Sasseville 2020:468–469.

<sup>95</sup> isg.pres. pu-uš-š[a]-a-mi (KUB 33.120+ ii 45); 3sg.pres. pu-uš-š[a]-iz-zi (KUB 29.7 + KBo 21.41 rev. 24); :pu-uš-ša-iz-zi (KUB 36.25 iv 10); 3sg.pret. pu-uš-ša-a-it (KUB 29.7 + KBo 21.41 rev. 30, 33); 3sg.imp. pu-uš-ša-id-du (KUB 29.7 + KBo 21.41 rev. 31; KUB 33.93+ iii 21'); uncertain pu-uš-ša-a-a[n-...] (KBo 21.15:4'); and pu-uš-ša-a-[...] (KBo 34.64:3').

<sup>96</sup> However, the Hittite *warrišša-*, despite the *hi-*conjugation, may possibly be regarded as an earlier Luwian loanword because synchronically it does not function as the imperfective stem of the rare verb *warrai-* (see the discussion in Pisaniello 2020a:247–252).

<sup>97</sup> Only ha-pal-la-ša-iz-zi in KBo 6.4 i 22.

<sup>98</sup> Isg.pres. *ti-iš-ša-a-mi* (KUB 56.1 iii 18; KUB 31.58(+) iii 7'), *ti-iš-ša-mi* (KUB 31.63+ iii 20');
391.pres. *te*<sub>9</sub>-*eš-ša-an-zi* (KUB 22.51 obv. 12', 13'; KUB 50.108:10'); 3sg.pret. *ti-iš-ša-a-it* (KBo 32.14 ii 43); 2sg.imp. *:ti-iš-ša-a-i* (KUB 36.12 iii 14'); ptc.nom.sg. *te-eš*<sub>15</sub>-*ša-za* (KBo 30.164 iii 6'); ptc.nom.-acc.sg.n. *ti-iš-ša-a-an* (KUB 21.38 obv. 59'), *ti-iš-ša-an* (KUB 33.02+ ii 15), *te*<sub>9</sub>-*eš-ša-an* (KUB 33.98+ ii 13); 2sg.pres.impf. *:te*<sub>9</sub>-*eš-ša-eš-ke*-[*š*]*i* (KUB 23.1+ iv 20); Isg.pret.impf. *:te*<sub>9</sub>-*eš-ša-iš*[-*ke-nu-un*] (KBo 12.38(+) iii 2'); 2sg.imp.impf. *:te*<sub>9</sub>-*eš-ša-eš-ke* (KUB 23.1+ iv 22). See DCL, s.v., for the meaning.

productive Luwian imperfective suffix *-šša-* with its Hittite productive counterpart, the suffix *-ške-* since an imperfective form is required by the context. However, even if we take it as a loanword—although the occurrence of the corresponding Luwian form in the same context instead argues for code-switching involving morphological adaptation—the ultimate origin of the base cannot be determined, nor can the exact derivational process be established.<sup>99</sup>

Finally, the issues surrounding the Luwian verb *tapar*- 'guide, rule' and the forms related to it are quite complex. The Luwian (:)tapar- is quite frequently attested in Hittite texts as a non-adapted loanword (i.e., always has Luwian endings).<sup>100</sup> Although some forms are marked by the *Glossenkeil*, the frequency with which the verb occurs and the textual typologies in which it is found point to a true loanword rather than a code-switching phenomenon. Related to this root is the Hittite verb *taparriya*(*i*)-, also Luwian in origin, but whose explanation is less clear. Different scenarios can be envisaged. According to Starke (1990:259), followed by Melchert (2003b:207), the Luwian tapar- is a secondary stem back-formed on the Luwian tapariya-, which is only attested in Hieroglyphic Luwian and which would also be the source of the Hittite *taparriva*(*i*)- in this hypothesis. Kloekhorst (EDHIL:831) suggested instead that the Luwian *tapar*- was the base of all the other derived stems, including the Luwian tapariya-, which he too regarded as the source of the Hittite verb. Sasseville (2020:31, 271-273) proposed a more complex scenario, in which 1) taparwould be a primary root verb; 2) the Hieroglyphic Luwian *tapariva*- would be a denominative verb based on the action noun *tapariya-* 'command'; and 3) the latter would derive from an unattested Luwian verbal stem \*tapari-. For the Hittite forms, Sasseville distinguished between the denominative taparrivai- and the adapted verb *tapariye/a-*, which would reflect the unattested Luwian verb \*tapari-. If one accepts Sasseville's scenario, the situation can be summarized in the following schema (Fig. 14.2), which only takes into account the relevant tapar-related words.

#### 6.2.2 Denominal and Deadjectival Stems

Verbs derived from nouns or adjectives through a unique Luwian suffix may be safely regarded as originally Luwian verbs, provided that the Luwian suffix cannot be confused with a homophonic Hittite suffix. But when verbal stems are derived from nouns or adjectives through ambiguous or uniquely Hittite suffixes, we cannot establish definitively whether the derived verb occurring

<sup>99</sup> Cf. HEG T/D:365-366 for an overview of the various hypotheses.

<sup>100</sup> See Sasseville 2020:271 for attested forms.

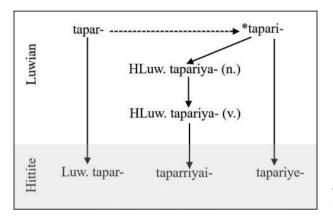


FIGURE 14.2 The process of borrowing of *tapar*- into Hittite

in Hittite is an adaptation of the Luwian verb or merely a derivative verb built in Hittite on a noun borrowed from Luwian (pointing to the productivity of the noun), even when the original Luwian status of the base noun is assured and the denominative verb is attested in Luwian. As an example, the verb *anahidai*-, which only occurs with Hittite endings in Hittite texts, is clearly based on the Luwian noun *anahit*- 'sample', which is a loanword from Hurrian adapted in Luwian as a stem in *-it*- (see above), whereas an alleged Luwian verb \**anāhidā*(*i*)- is not attested. How should we explain the Hittite verb *anahidai*-? Is it the adaptation of an unattested Luwian verb—that is, a Luwian verb borrowed in Hittite (scenario 1)—or a denominative Hittite verb based on the noun *anahit*-, borrowed from Luwian and become productive in Hittite (scenario 2)?<sup>101</sup>

Scenario 1 the Luwian *anahit*- (n.)  $\rightarrow$  the Luwian \**anāhidā*(*i*)- (v.)  $\rightarrow$  the Hittite *anahidai*-(v.)

Scenario 2 the Luwian *anahit*-  $(n.) \rightarrow$  the Hittite *anahi*(*t*)-  $(n.) \rightarrow$  the Hittite *anahidai*- (v.)

Among the almost 50 verbs that can be possibly regarded as adapted Luwian loanwords in Hittite, excluding lexicalized Luwian participles (e.g., <sup>NINDA</sup>walip-aimiuš in KBo 24.29 iii 6), several denominative verbs are found (*anahidai-*, *annara*(*i*)-, *appalai-*, *arrahhani*(*ya*)-, *aštaniya-*, *hapā*(*i*)-, *huntariyai-*, *kušalā*(*i*)-,

<sup>101</sup> Denominative verbs in *-ai-* are widely attested in Hittite (cf. GrHL:176–177).

*lila*(*i*)-, *malāi*-, *patalhai*-, *putalliya*-, *taparriyai*-, *tarkummā*(*i*)-/*tarkummiya*(*i*)-, *zammurā*(*i*)-, and *zappantala*-). However, the Luwian status of the base is not proven for all of these, nor for some deadjectival verbs (*hantalliyai*-, *hantiyai*-, *maruwāi*-).

Choosing for the moment to leave aside the problem of the distinction between true loanwords and code-switching phenomena, let us pretend that all these Hittite verbs can be regarded as possible Luwian loanwords. To evaluate the possibility that a given Hittite verb is a borrowing from a Luwian denominative verb and not an inner-Hittite formation based on a Luwian noun borrowed in Hittite, we summarize the relevant data in the following table, which provides the following information for each Hittite verb allegedly Luwian in origin: 1) the attestation—in Luwian texts and/or Hittite transmission—of the Luwian denominative verbs (with Luwian endings); 2) the attestation of the Hittite base nouns (with Hittite endings) that were allegedly borrowed from Luwian; 3) the attestation of the Luwian base nouns (with Luwian endings) that were originally Luwian or borrowed from another language.

Hittite verb (= with a Hittite ending)	Luwian denom. verb (= with a Luwian ending)	Hittite base noun (= with a Hittite ending) borrowed < Luwian	Luwian base noun (= with a Luwian ending)
anahidai-	no	yes	yes <sup>102</sup>
annara(i)-	no	no <sup>103</sup>	yes
appalai-	no	yes	no <sup>104</sup>
arrahhani(ya)-	yes	(no)	(no) <sup>105</sup>

102 Despite Sasseville's (2020:82–83) reservations, a Hurrian origin is most likely, as shown by Giorgieri (2012).

103 The unambiguous Hittite cognate innara- is found.

the Hittite *appala-* 'trap' is attested as the base noun. It is regarded as Luwian in origin by Starke (1990:319–321) and DCL, s.v., because of initial  $\bar{a}$ - (\* $h_1 \acute{e} p$ - (vs. the Hittite  $\bar{e}$ -), which, however, only occurs in [...]<sup>r</sup>*a-ap*<sup>1</sup>-*pa-li* in KUB 36.106(+) obv. 8' and in the derived verbal form *a-ap-pa-la-a-u-e-ni* in KBo 16.50 obv. 14 (MS, CTH 270). In all the other occurrences, the noun *appala*-, the derived verb *appalā*(i)-, and also the possible derived noun *appaliyalla*- do not display the scriptio plena.

<sup>105</sup> According to Sasseville (2020:150), followed by DCL s.v., the noun *arrahhaniya*- (also attested with Hittite endings) is an action noun built on the verb.

Hittite verb (= with a Hittite ending)	Luwian denom. verb (= with a Luwian ending)	Hittite base noun (= with a Hittite ending) borrowed < Luwian	Luwian base noun (= with a Luwian ending)
aštaniya-	(yes) <sup>106</sup>	(yes)	(yes) <sup>107</sup>
hapā(i)-	no <sup>108</sup>	(no) <sup>109</sup>	(yes) <sup>110</sup>
huntariyai-	(yes) <sup>111</sup>	no	(yes) <sup>112</sup>
kušalā(i)-	no	no	(no) <sup>113</sup>
lila(i)-	yes <sup>114</sup>	yes	yes
malāi-	yes <sup>115</sup>	no	yes
patalhai-	Yes	yes	no <sup>116</sup>
putalliya-	Yes	no	no <sup>117</sup>

(cont.)

106 Only the Hittite *hi*-conjugation pres3sg. *aš-ta-ni-ya-i*, for which a Luwian origin is generally assumed (cf. Melchert 2005:454–455).

- 107 The assumption that the Luwian noun *ašta-* 'spell, charm' (also occurring with the Hittite genitive ending) is the base was challenged by Sasseville (2020:412), who posited an unattested base noun \**aštan-*.
- 108 But the denominative verb xba(i)- is attested in Lycian.
- 109 the Hittite *hapa-* 'river' is a cognate and may be the base of the verb  $hap\bar{a}(i)$  'irrigate', which is regarded as a Luwian loanword purely on semantic grounds (cf. Starke 1990:514 fn. 1896).
- 110 According to Sasseville (2020:102–103, with references), the Luwian root noun hapa/i-'river' cannot be the direct base of the denominative verb. Instead, a collective formation in \*- $eh_2$ - should be posited as the base.
- 111 Only attested by the Luwian participle *huntariyammaza* (with the Hittite ablative ending), assuming that this participle is actually related to *huntariyai*.
- 112 The base is *huwantar* (< *huwant-* 'wind'). However, it is only attested in Luwian with the meaning 'sheer cloth' (with determinative GADA), which does not fit the meaning of the verb semantically.
- 113 The alleged noun base \**kušal-* 'curry-comb' would also be indirectly attested as the base of the noun  $k\bar{u}$ *šattar* and the verb  $k\bar{u}$ *šai-* (cf. DCL s.v.).
- 114 According to Sasseville (2020:27–28, 89), two different denominative verbs may have been derived from the Luwian noun *lila-, lila-(ti)* and *lila(i)-(di)*; forms with Hittite endings seem to derive from both.
- 115 Note, however, that, according to Sasseville (2020:222), the verb may be derived instead from an unattested root verb \**mal* (although a denominative origin is not excluded).
- 116 According to Melchert (2014:210), the Luwian origin for the noun *patalha* is suggested by the existence of the Luwian verb *patalhai* (with an awkward cluster /lx/ where an assimilation to /ll/ would be expected).
- 117 A nominal base in *-alla/i* should be posited. However, Sasseville's (2020:140) claim that

Hittite verb (= with a Hittite ending)	Luwian denom. verb (= with a Luwian ending)	Hittite base noun (= with a Hittite ending) borrowed < Luwian	Luwian base noun (= with a Luwian ending)
šapiyai-	yes <sup>118</sup>	yes	yes
taparriyai-	(yes) <sup>119</sup>	no	(yes) <sup>120</sup>
tarkummā(i)-/	yes	no	no <sup>121</sup>
tarkummiya(i)-			
zammurā(i)-	no <sup>122</sup>	no	(no) <sup>123</sup>
zappantala-	yes	no	no

(cont.)

If the Luwian status of a noun base is assured on etymological grounds—which is by no means always obvious—the most favorable situation for assuming that a Hittite verb is directly borrowed from a Luwian denominative verb is when the base noun is not attested with Hittite endings and the denominative verb is attested with Luwian endings. Conversely, when the allegedly Luwian base noun is also attested in Hittite in an adapted form, an inner-Hittite derivation of the denominative verb from the Hittite noun cannot be entirely excluded, even when the Luwian denominative verb exists, and all the more so if it is not attested. If the Luwian status of the base noun cannot be etymologically

- 118 Only participles.
- 119 Only in Hieroglyphic Luwian.
- 120 Only in Hieroglyphic Luwian (see above for an account of the *tapar*-related stems).
- 121 The verb must be a denominative from *\*tarkumman-* (Starke 1990:261) or *\*tarkumma/i-* (Sasseville 2020:230).
- 122 However, if coming from the PIE root \*(s)k'em- 'to be disgraced' (Nikolaev 2019:191–192; cf. Eng. shame), Luwian status is assured.
- 123 A denominative origin of the verb is suggested in EDHIL:1030 and HEG W-Z:652, but the attested Luwian noun *zammurai* is regarded by Melchert (DCL s.v.) as an action noun built on a verbal stem. Melchert adds that "despite Glossenkeil no assurance that stem is genuine Luvian and not Hittite creation."

the Hittite verb *putalliya-* 'must' be a loanword from Luwian because the geminate /ll/ reflects the Luwian suffix is unsupported. A Hittite verb can be based on a Hittite noun borrowed from Luwian, and the Luwian suffix *-alla/i-* also spread to native Hittite bases (cf. Melchert 2005:455–456 for the details). The existence of the Luwian verb is a stronger argument, but the Luwian status of the ultimate base should be proven on etymological grounds.

determined due to the lack of unambiguous Luwian phonological features, the probability of a borrowing from Luwian decreases, even if the Luwian denominative verb is attested. Despite what is sometimes claimed, the occurrence of a denominative verb with unique Luwian endings cannot be taken as proof of the Luwian status of its base noun. It can only show that the noun existed in Luwian and was productive; only the etymology can guarantee its original Luwian status. Without unique Luwian phonological features, we cannot distinguish a genuine Luwian word from a possible Hittite cognate or exclude the possibility of a Hittite loanword in Luwian. This can be summarized in the following table:

Assured Luwian base noun	Hittite noun borrowed < the Luwian	Luwian denominative verb	Probability of Hittite verb borrowed < Luwian verb
+	_	+	++/
+	_	_	+/-
+	+	+	+/-
+	+	-	—/+
-	+	+	-/+
-	-	+	—/+
-	+	-	/+
-	-	-	/+

The addition of the loanword vs. code-switching issue complicates the situation further, although the problem of the dependence of the Hittite verb on a Luwian verb vs. its derivation from a Hittite noun borrowed from Luwian can perhaps be partly bypassed because a Hittite verbal form depending on a Luwian model that results from code-switching is likely to be taken as an extemporary Hittitization of a Luwian verb or possibly an occasional form built on a Luwian noun but not a genuine Hittite form built through an inner-Hittite derivation process based on a Hittite noun.

# 6.3 Lexical Interference between Empire Luwian and Hittite: Other Parts of Speech

Sporadically, other parts of speech were involved in the borrowing process, such as the Luwian adverbs *ziladuwa* and *ziladiya* 'in the future'.<sup>124</sup> The full integration of such adverbs in the Hittite lexicon is proven by the edited version of Muwattalli II's prayer to the assembly of gods (CTH 381), KUB 6.45+, in which the marked *:ziladiya* occurring in the draft (KUB 6.46 iv 23) is accepted without the *Glossenkeil* (iii 54).<sup>125</sup>

A special case is the occurrence of the Luwian adverb *šarra* in a gloss in Hittite included in the Akkadian medical omens, KBo 9.49 obv.<sup>?</sup> 14' [...]*auliš šarra tarru artari* "the *auli*- [probably the spleen] stands up firmly." This occurrence appears to be unique because the Hittite adverbs *šarā* and *šer* are consistently used in the Hittite context. Since the glosses in medical omens probably reflected a less controlled language than that used in more official texts, plausibly closer to the spoken language of the scribe, two scenarios could account for *šarra*: 1) the scribe was a Luwian native speaker, who included a form of his language—an occasional code-switching phenomenon—in a text that had not been finalized by going through a process of standardization that might have produced a full translation into Hittite; 2) the colloquial Hittite language of the Empire period was even more Luwianized than we see in official documents, so genuine Hittite local adverbs were the standard in official Hittite texts, but some original Luwian adverbs might have belonged to the lower registers of Hittite.<sup>126</sup>

# 7 Concluding Remarks

The Indo-European Anatolian cultures of the Bronze Age were part of a network that involved other local cultures as well as cultures from the Syro-Mesopotamian interface. Over the centuries, this scenario triggered the direct and indirect borrowing of lexical material in the form of loanwords and Wanderwörter. The Hittite archives, with their wealth of textual documentation, shed light on borrowing patterns that involved several of the surrounding languages. Different 'paths of circulation' can be identified. Hattian, Palaic, and Hittite seem to have constituted a preferential 'circle' in the very early phases—

<sup>124</sup> On these adverbs, see Rieken 2019.

<sup>125</sup> Cf. Yakubovich 2010:378–379.

<sup>126</sup> For a thorough discussion, see Pisaniello and Giusfredi (2021) and Pisaniello and Giusfredi (forthcoming).

apparently the only circle that involved Palaic. In the more mature phases of the Hittite history, the rate of lexical exchange with Luwian and with Hurrian intensified. Akkadian seems to have remained mostly peripheral with respect to direct borrowing, although important cultural calques can be identified.

Besides highlighting the direction and date of these patterns of lexical interference, we followed up on our previous study (Giusfredi and Pisaniello 2020) by categorizing the material by the strategies used for morphological adaptation. Due to the different grammatical structures of the languages involved, such process proved very helpful also to offer an improved contextual description.

# Grammatical Interference and the Languages of the Hittite Archives

F. Giusfredi and V. Pisaniello

## 1 Grammatical Interference

#### 1.1 The Concept

By grammatical interference, we refer to those situations of contact in which one language influences another language beyond the level of simple lexical exchange, with a potential impact on the structural layers of the target. Structural layers include the phonemic inventory, morphology, and syntax (see below, § 2). This type of interference is not uncommon but, contrary to the simple borrowing of words or the occasional calque of finite structures, requires a condition of stable and rather intense coexistence of different cultures to produce stable change. If this condition is met, it may alter the phonemic inventories of the languages involved; it may affect the morphology, producing changes in the typology if it goes beyond the occasional borrowing of morphemes; and it may affect the syntactic inventory, with shifts in the syntactic typology and phrase and clause architecture of idioms.

These types of phenomena are rare although not unprecedented<sup>1</sup> in simple borrowing scenarios but are frequent in multilingual contexts. In situations of bi- or multilingualism—either polarized binary systems in which two codes exist and one prevails over the other or more complex mixed societies in which multiple codes and varieties of codes generate fluid developments,—some features of different languages may become increasingly similar over time. Binary systems are traditionally described by the substrate-superstrate model, in which an endemic language (the substrate) enters into contact with an 'intrusive' language (the superstrate), which becomes sociolinguistically more prestigious.<sup>2</sup> This is what happened in colonial contexts throughout human history (cf. Matras 2009:300). In such contexts, the superstrate language carries

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<sup>1</sup> On grammatical interference in large linguistic areas of the modern world, see Matras 2009:286–295, with examples and reference to additional literature. On the different types of contact and interference, see Thomason and Kaufmann 1988:35–37.

<sup>2</sup> Cf. Matras 2009:80-81, for a definition and a critical discussion.

prestigious new lexical labels that are borrowed by the local substrate, which, however, tends to maintain its grammatical features. When the coexistence lasts for long enough, the substrate and superstrate may gradually merge into a contact language such as a pidgin (a first-generation mixed language) or a creole (a stable, long-lasting mixed language).<sup>3</sup>

#### 1.2 In and around the Ancient Near East and Anatolia

In the study of ancient languages and the ancient societies and cultures that employed them, the identification of grammatical interference can aid in the understanding of the social, cultural, and political context of peoples, groups, and sometimes even polities. Yet methodological issues and limitations make identifying these phenomena extremely difficult. A macroscopic problem complicates the identification of long-distance systems of interference, which operate indirectly and subtly. For the ancient world and the ancient Mediterranean in particular—of which the ancient Near East is one of the best-documented areas—a significant number of the languages that are well understood belong to the same genealogical families or branches. Many of the languages of Asia Minor, Syria, and Mesopotamia can be grouped into the Semitic group of the Afro-Asiatic family or assigned to the Indo-European family. When similar features emerge without obvious evidence for prolonged and intensive interaction, it is often difficult to disambiguate interference from inheritance.<sup>4</sup>

This does not mean that some widely shared features may not be hypothetically identified in the ancient Near East, but the idea of long-distance interference is usually easily challenged by the hypothesis of common inheritance in one or more language families or groups, meaning that long-distance interference can rarely be proven. A good example of this is an alleged long-distance case of convergence that involves Anatolian, Indo-European, and languages of the ancient Near East. An oddity of many languages used between northern Mesopotamia and the Aegean is the absence or near absence of words beginning with a polyvibrant rhotic consonant (cf. Bianconi 2015:139, followed by Romagno 2015:432). In the Anatolian branch of Indo-European, neither Hittite nor Luwian have words beginning with /r/ (the divine name Runtiya being in

<sup>3</sup> On language contact in general (including the areas in which it occurs, and the development of mixed-languages), see, among the many contributions, the fundamental works by Weinreich 1953, Thomason and Kaufmann 1988, Thomason 2001, and Matras 2009, in particular pp. 209–253. On multilingualism in the ancient Near East, see Andrason and Vita 2016.

<sup>4</sup> The hypothesis of areal similarities between languages of Anatolia and the Aegean will be dealt with in the second volume of this work.

all likelihood the result of a former K(u)runtiya).<sup>5</sup> There is no reason to assume that Palaic behaved differently, although the available thesaurus is not rich enough to allow a final determination. Lehmann (1951) observed that Hattian and Hurrian, which were areally close to Anatolian but did not belong to the Indo-European family, shared this phonotactic constraint. Romagno (2015:432) remarked that initial /r/'s also do not occur in Greek and Armenian (the initial  $\flat$  of Greek is, in fact, /hr/). While a shared tendency of geographically close languages to eliminate the initial rhotic is not excluded, it is very difficult to prove. The reasons for the exclusion of the initial /r/ in Hattian and Hurrian (the latter also excluding initial /l/, while the related Urartian language excludes neither) is impossible to explain diachronically as there are no known proto-languages whose evolution we may reconstruct, but Lehmann (1951) argued against the reconstruction of Indo-European roots with initial /r/ by showing that most of the roots that were assumed to begin with an /r/ instead had an initial laryngeal or glide. Hence, the lack of initial /r/may have been an areally shared feature, but this is not demonstrable. Whether Anatolian, in turn, influenced Hurrian and Hattian, is difficult to determine, but the Mesopotamian (and, perhaps earlier, Iranian?) provenance of Hurrian, as well as the limited protohistorical contacts with the Hittites, do not provide much support for this theory.

A similar case, once again involving the structural level of phonology, is represented by the final *-n* of Greek and the Anatolian languages that derives from an etymological \*-*m* (Bianconi 2015:139). Here, the identity of the sound laws could conceal a phenomenon of convergence if the convergence could be dated to a plausible moment in the relative chronology of the development of the phonemic inventories of the Anatolian and Hellenic branches. According to Melchert (1988), a few forms attested in the Luwian conjuration KBo 12.260 (tu-u-ri-im=ša-an, mu-ha-at-ra-am=ša-an ha-at-ta-ra-am=ša-an pí-iz-zaar-na-am=ša-an, and the syntactically elusive pariyam=ša=tta, which contra Melchert is unlikely to represent an instance of the particle  $-\dot{s}a/za$ ) could testify to the retention of the original -m before a sibilant. Given that we are dealing with the boundary of a morpheme, this would have had to have happened synchronically, proving that the shift from -*m* to -*n* was in progress when the text was composed. However, this would contradict the Proto-Anatolian date of the change that Melchert himself (1988:214) supported. As the aberrant forms all occur in the same tablet in similar phonetic contexts, we believe that they are best explained as mishearings by a scribe taking dictation rather than retention of an archaic ending, which must have changed to -*n* centuries

<sup>5</sup> Yakubovich 2010:80, with fn. 5.

before the text was written down. Once these forms are eliminated from the equation, the change from -m to -n in the final position seems to be a regular Proto-Anatolian sound law that is identical to a sound law that must have existed in Proto-Greek or even in Greco-Phrygian (if the group is real, because Phrygian also exhibits the feature). Contact during the protohistory of the two branches could have triggered a convergence, but it would be difficult to date and localize it. Furthermore, we are dealing with two sound laws, meaning that independent inheritance and development remain possible, especially since, *pace* Bianconi (2015:139), Anatolian and Greek are not the only Indo-European languages to exhibit such a typologically common change. For example, Proto-Germanic has the final -m > -n, which emerges in the accusative ending just as it does in Greek, Phrygian, and Anatolian). These proposed areal features are perfect examples of unsolvable problems that, given our poor and speculative understanding of protohistorical geographical scenarios, may be explained in terms of convergence as well as inheritance.

While cases of wide convergence are certainly difficult to identify in the early stages of the linguistic and cultural geography of the Mediterranean world, the study of ancient contacts is challenging even when we reduce the scope. Subtle problems emerge when dealing with localized superpositions of codes. The conditions that trigger superstrate-substrate systems existed as a consequence of social shifts or geopolitical events. The Anatolian languages penetrated most deeply into Syria when Hatti's political influence replaced that of Mittani as the northern counterpart of Egypt, in the late 14th century BCE. The Hurrians acted as sociolinguistic 'newcomers' in Syria from the Middle Bronze Age, and the presence of Hurrian words in the local Semitic grapholects is well documented.<sup>6</sup> In Middle Bronze Age Anatolia, the Old Assyrian trading network acted similarly in Cappadocia, and forms of grammatical interference emerged in texts produced by Anatolian scribes, who had trouble dealing with the use of gender when writing Akkadian (see Chapter 4 for further discussion and references).

Before entering into the discussion of grammatical interference in Late Bronze Age Hittite texts, it is worth dwelling on the last two examples (Hurrian influence in Syria and Anatolian influence on the Assyrian language in the

<sup>6</sup> Relevant cases go back to the Middle and early Late Bronze Age, with the names of social classes being early Hurrian borrowings in the Akkadian texts composed in centers of northern Syria. However, as Akkadian was, in all likelihood, not the spoken language used by the population of northern Syria, these scenarios appear to be very difficult to analyze from a sociolinguistic perspective. The case of Ugaritic-Hurrian interference in Ugarit is more interesting and complex (Andrason and Vita 2016).

Kārum age) as they can demonstrate the fundamental methodological problem of dealing with binary substrate-superstrate systems in the ancient Near East. The role of Hurrian in Syria and, more specifically, in Ugarit, which is discussed by Andrason and Vita (2016:306–307), is that of a mixed code consisting of the use of a language, Ugaritic, that was spoken by the local population, combined with borrowings from a higher-ranking language, Hurrian, that was connected with the ritual sphere among other possible functions. What makes this case particularly unusual is the fact that the substrate, Ugaritic, is directly represented in the written records, which allows us to observe the phenomenon of lexical transfer from a superstrate to a substrate.

Such a direct and generous recording of the local substrate in the ancient Near East is the exception, not the rule. Old Assyrian Anatolia (Chapter 4) is a perfect example of this issue. Due to the tight link between the cuneiform writing system and Akkadian, the cultures that adopted writing in the ancient Near East generally used Akkadian as the (sometimes exclusive) associated grapholect. This resulted in the development of very interesting codes that are sometimes called peripheral Akkadian<sup>7</sup> but at the same time masked the substrata because the Akkadian that was written in areas such as the southern Levant and Canaan was itself a superstrate and a somewhat artificial code. Similarly, in Middle Bronze Age Anatolia, Hittite, Luwian, and Hattian texts were not composed, and the substrate role of the local vernacular emerges only in the errors made by some scribes because of their limited competence in Akkadian (a phenomenon that pertains to grammatical interference). Few loanwords existed (see Chapter 4), and they originated from the need to refer to items or concepts that were unknown to the Assyrians-for example, institutions such as the *tuzzinnum* social group<sup>8</sup> or local realia such as the *išhiu*lum belt.9 Whether, as would be expected, lexical transfers were made from the Assyrian superstrate to the local spoken language(s), is impossible to say, because we have no representation of the variety of Hittite spoken in Kaneš except personal names (on which see Kloekhorst 2019, Giusfredi 2020, and Yakubovich 2021, including the references to previous scholarship that they contain).

So far, we have discussed the issues that hinder the definitive identification of long-term, long-distance interference and those that complicate the analysis of local substrate-superstrate systems. The last case that requires methodological discussion is the one that is usually the most interesting for the linguists

<sup>7</sup> A definition of peripheral Akkadian was attempted by Huehnergard (1989:272-273).

<sup>8</sup> Giusfredi 2020a, with reference to previous scholarship on this disputed word.

<sup>9</sup> For the recognition of this loanword, see Simon 2015.

working with modern languages: the identification of mixed languages. To begin, it is appropriate to observe that there are no qualitative differences in the structures or functions of modern and ancient human languages that would prevent us from assuming that pidgins and creoles existed in the ancient world. The problem is twofold. Firstly, we need to ask ourselves if they were ever identified. Secondly, if they were not, we need to try and understand why.

The first part of the question is easily and negatively answered: we do not have *evidence* of something like Bislama or Tok Pisin in the ancient world,<sup>10</sup> let alone in the ancient Near East. In light of the very sensible observations made by Andrason and Vita (2016:316–324), the mixing of Canaanite and Akkadian in the way the superstrate, Akkadian, was written in the Late Bronze Age southern Levant is indicative of significant interference, facilitated by the structural similarities of the two Semitic languages. However, it cannot be compared with the birth of a new language, as can be easily observed in modern Vanuatu. Similarly, the use of the term 'creole' to describe the form of Akkadian that was written in the Late Bronze Age Nuzi, in northern Mesopotamia, under influence of the local Hurrian elite, is improper, to say the least. Although some grammatical features of the language are Hurrian or Hurrianizing,<sup>11</sup> it remained Akkadian, at least in the written records.

The languages spoken in Canaan in the Final Bronze Age and Nuzi in the early Late Bronze Age were probably, respectively, a mix of Canaanite and Akkadian and Akkadian and Hurrian. Therefore, these unattested mix-languages could have been similar to modern pidgins and creoles. The problem, and the answer to the second part of our question, is, once again, the underrepresentation of substrata and spoken languages in the records. But if, as a general rule, definitive evidence for the existence of true creole languages cannot be produced for the ancient Near East, numerous small areas were multilingual or located at the interface of two linguistic cultures. Canaan, Nuzi, and Ugarit, studied by Andrason and Vita (2016), are three examples, but several others exist even if we limit the scope of the survey to Anatolia and its immediate neighborhood.

Bislama is a creole language of Vanuatu that features a mix of English, French, and local vocabulary and an Oceanic grammar. Tok Pisin is a creole language of Papua New Guinea, which similarly is a mix of English and local elements. Like all other true creole languages, the level of compenetration of elements of the different languages produced, in both cases, languages that were fully new, with grammars and lexicons that distinguished them from either, or any, of the idioms from which they originated. Nothing comparable has been identified for the Ancient Near East.

<sup>11</sup> Wilhelm 1970, in particular Chapter IV.

The Hittite capital city, Hattuša, during the Late Bronze Age will be the focus of the next pages, given the well-documented coexistence of Hittite and Luwian there and the presence of Akkadian and Hurrian, at least as written codes. However, we will also look at cases from Iron Age Syria, where Luwian arguably replaced Hurrian as the official language by the early 13th century BCE and became an endemic idiom in the following centuries—but, for reasons of periodization, these Iron Age cases will be discussed in the second volume of this work.

#### 2 The Structural Levels of Grammar

When referring to the grammar of a language, we mean those layers that govern the combination of structural elements in an ordered fashion, based on language-specific rules. The distinction between lexical and grammatical interference can be blurry because grammatical words or morphemes are occasionally borrowed. Therefore, we will employ a conventional definition of the structural levels that pertain to grammar.

The first layer is phonological. We will consider language interference resulting from contact with more languages to be grammatical when it produces a redefinition of the phonemic inventory of a language or a redefinition of the phonotactic behavior of phonemes as this implies the introduction of allophones. If a phoneme is only present in a language to render a finite set of loanwords, the interference is merely lexical. For instance, the phone [3] in Italian is only employed in loanwords from French (e.g., *garage, beige*). As it did not offer phonemic distinctiveness within the inherited lexicon, it did not produce a redefinition of the phonemic inventory of the target language.

The second layer, morphology, relates to the rules that govern derivation, composition, and inflection (if present), as well as the morphological typology of a target language. For example, a paradigmatic leveling due to interference is an example of grammatical interference on the morphological level. However, the adaptation of loanwords to the regular morphology of the target language is not morphological-level interference because the change affects the lexical inventory but does not introduce new morphological rules or constructs.

Syntax represents the third structural layer that can be affected by interference. Syntax is the set of rules that govern how words, phrases, and clauses are combined. It is tightly connected to morphology, so a competing model may present morphosyntax as a conjoined layer roughly corresponding to what is traditionally labeled 'grammar.' Interference at the syntactic level may result in alterations of the syntactic typology (i.e., the word order within phrases and clauses) due to the influence of one or more model languages.

It is extremely important to emphasize that grammatical interference, at any structural level of a language, must be systematic. Phenomena that only occur occasionally, in single documents or groups of documents, do not necessarily indicate a shift in the structure of the target language. For example, a native Luwian-speaking scribe might compose a text in a West Semitic language with a VSO word order and introduce occasional clauses with a typically Anatolian SOV order. This is not enough to prove that a structural shift occurred in the target language as the event might have been a non-systematic error of competence.

While disambiguating these document-level phenomena from systematic structural changes may be extremely difficult, a reasonable attempt can often be made based on the systematicity of the occurrence of new structures. For instance, if Akkadian, at any stage after the separation from Proto-Semitic, maintained the VSO order that has been reconstructed for the proto-language, this pattern has completely disappeared in historical times. Therefore, the Sumerian influence that is assumed (Edzard 1977, Deutscher 2000:21) to have triggered the change from VSO to SOV qualifies as a true form of contactinduced syntactic shift. Conversely, extreme caution must be exerted when dealing with aberrant structures in translation texts. Consider the case of the scribe who, when translating the original version of a multilingual document into a different language, mimics the word order or pattern of morphological agreement or even a morphophonemic or phonotactic rule of the model language. This mimicry may have resulted from the word-by-word or phraseby-phrase translation process or from a desire to maintain the structure of the text for cultural reasons.

#### 3 In the Languages of the Hittite Archives

In examining the material directly attested in the Hittite archives during the Late Bronze Age, we will proceed in top-down order: first tackling some allegedly widespread phonological features and then examining some smaller geographical groups of languages. The phonological features that may have been shared by a few of the languages that were written down in cuneiform by the Hittite scribes must, if induced by contact, have been protohistorical in their origins and can be identified from our understanding of the relative order of sound changes *within the Anatolian branch*. In other words, they resemble the two cases discussed above (in lacking an initial rhotic and changing *-m* to *-n*  in the final position), but they can be proved not to have derived mechanically from sound laws in all of the languages that exhibit them.

Both credible cases pertain to the structural level of phonology, which is unsurprising because sound laws are the only truly mechanical changes that occur over time and a glitch in their regularity within a group of related languages requires alternative explanations. The first feature that must be the result of a mix of inheritance and convergence is the merger of \*/a/a and \*/o/.Long thought to be the result of a sound law that occurred at the Proto-Anatolian stage, this change became problematic as we learned more about the Lycian language. The change could not have occurred before the separation of Proto-Luwic because Lycian has a context-conditioned change from Proto-Indo-European \*/o/ to |e| that would have been impossible if the \*/o| > |a|merger was generalized and completed in Proto-Anatolian. This problem has not been fully solved yet. Lindeman (1997) proposed a set of laws that would explain the Lycian outcomes as deriving from the Proto-Luwic \*/a/ (from the original \*/o/) in specific contexts. If Lindeman were proven wrong, it would be necessary to assume that the merger of the two Indo-European vowels occurred in Anatolian after the separation of Proto-Luwic and then spread to Luwian but not Lycian. This would require a geographical scenario that places Luwian in closer contact with Hittite, Palaic, and Lydian than Lycian. Such a scenario cannot be proven or disproven conclusively but is not entirely inconsistent with the linguistic geography of the Bronze Age.

The second feature that seems to require explanation in terms of convergence is the generalized devoicing of initial stops. This is probably better described as the dephonologization of the fortis-lenis opposition of stops in the initial position.<sup>12</sup> While the feature can only be observed indirectly in cuneiform because the Hittites did not employ the voiced and voiceless sets of CV signs in a distinctive fashion, it is confirmed by etymological observation and evidence from the epichoric alphabetic languages of the Iron Age (where the distinction can be observed distributionally) and Hieroglyphic Luwian (where the only voiced CV sign, TÀ, which writes the syllable /da/, was usually not employed word initially, regardless of the etymology of the word). Despite the generalized diffusion of the phenomenon, it is impossible to assume a set of three sound laws (d > t, b > p, and g > k in the initial position) for Proto-Anatolian because in Luwian the initial /g/ (which had different Proto-Indo-European origins) was dropped instead of devoiced. This means that the

<sup>12</sup> The principle was first formulated by Hart 1983. See Kloekhorst 2010:197–201 for a more detailed history of the studies dedicated to this problem.

change must, again, have occurred after the separation of Proto-Luwic, with the Luwic languages converging after the change from the initial /g/ to zero had taken place (Melchert 2020b:264). Whether the devoicing of the initial stop also spread to other non-Indo-European languages of the peri-Anatolian area is difficult to say: Hurrian also had no opposition for initial stops (except for loanwords that seem to have had the distinction based on the alphabetic evidence from Ugarit), but the details of Hurrian consonantism are debated. The general view is that a voiced-voiceless opposition did not exist in any position in the language, making the Hurrian data inconclusive (voiced consonants emerged as allophones between vowels or sonorants but never word initially because they did not follow a sonorant).

Both of these hypotheses concern possible cases of areal convergences in phonology that would affect the languages of the Anatolian branch in general; the first is still problematic, but the second seems to be almost certain, at least for the genealogically Anatolian idioms. Other proposed phenomena of possible shared features are limited to subsets of the languages attested in the archives of Hattuša and are not limited to the phonological level.

#### 3.1 Hattian, Hittite, and Palaic

We will maintain the geohistorical periodization proposed in the previous chapter and consider first the circulation of grammatical features in the north-western network formed by Hattian, Palaic, and Hittite. As previously discussed, this network was an early one. Palaic must have been extinguished or almost extinguished by the time that scribal activities began in the Hittite archives; most putative interferences would have occurred earlier. As for Hattian, the proposals that have been made for contact-induced grammatical change also pertain to a pre-Hittite late Middle Bronze phase,<sup>13</sup> although Hattian was probably spoken for a longer time than was previously assumed.<sup>14</sup>

As mentioned in Chapters 4 and 9, Goedegebuure (2008) proposed that certain features present in the Hattian language derived from an Anatolian language before the age of Hatti (in her view, the model language was probably Luwian, but Hittite and Palaic appear to be good candidates for geohistorical reasons). These features are generally unexpected implicational correlates that should not emerge in a VO language in terms of typological prevalence. As mentioned in Chapters 4 and 9, some unexpected correlates may emerge because implicational universals, despite their name, are not mandatory, and

<sup>13</sup> See also above, Chapters 4 and 9, for more details on this phase.

<sup>14</sup> We share Simon's belief that Hattian was a spoken language (Simon 2012:2–11) until at least until the 15th or 14th century BCE.

some languages violate a few of them. Nevertheless, the number of irregularities identified by Goedegebuure makes it very likely that at least some resulted from the influence of neighboring languages, especially since historical contacts between Hattians and Anatolians are confirmed by the data that we possess on Middle Bronze Age Anatolia.

In contrast, no evidence exists of grammatical influence by Hattian on Hittite.<sup>15</sup> The unusual constructions that emerge in bilingual documents from the Late Bronze Age archives of Hattuša are best explained as instances of translation interference (or else result from the translation process); they do not reflect changes in the grammar of the target language. However, Hittite was not the only Anatolian language in contact with Hattian. As discussed in Chapter 12, Palaic was an obvious candidate for interference because it was spoken in an area that was near or even overlapped with that in which Hattian was spoken. Consequently, hypotheses exist that involve some peculiarities of Palaic being derived from Hattian. These (according to Goedegebuure 2008) include the presence of a morphophonemic assimilation of /n/ to /m/ before a bilabial stop, which (based on the way the Hittites wrote), could have been shared by Palaic and Hattian, and the use in Palaic of a contrastive particle, /pi/, that allegedly matched the Hattian /bi/ (a possibility, however, that is made unlikely by the possible Indo-European origin of the former).<sup>16</sup> While Palaic is only attested in the texts composed in Hattuša during the Late Bronze Age, if any of these hypothetical interferences on the grammatical level occurred, they must have taken place during the Middle Bronze Age or earlier because, as discussed in Chapter 12, there is no solid reason to assume that Palaic was a living language after the 17th century BCE when the Hittites started writing it in cuneiform.

The alleged phenomena of grammatical interference that may have involved the area to the northwest of Hatti share three important features:

- 1. All must have occurred very early, probably during the Middle Bronze Age (cf. also Chapter 4).
- 2. In consequence, they have been reconstructed or observed based on their reflections in later texts that, significantly, derived from a Hittite scribal praxis.
- 3. Given the previous points, no evidence illustrates the diachrony of the changes.

<sup>15</sup> A possible but not certain exception would be the derivation of the adverbial/adjectival morpheme *-ili* of Hittite from the Hattian *-il*. While a borrowing is, in principle, conceivable, the Hittite morpheme could have been inherited (and possibly connected to the Lydian dative ending in  $-\lambda$ ). See also Melchert 2003a:16, with fn. 10, and Oettinger 1999:264.

<sup>16</sup> See above, Chapter 12, for further discussion.

Points 2 and 3 have significant methodological implications: that each and any of the phenomena summarized above was the result of a change—let alone a contact-induced change—is only a hypothesis based on comparative and contextual observations. No phase of Hattian with pure VO correlates is attested before the putative change that resulted in a mixed typology; no phase of Palaic is attested in which the contrastive particle -pa/pi is not yet present; and as was observed in Chapter 12 for the existence of a fricative /f/, there is no way to exclude the possibility that the notation of an assimilated nasal before bilabial stops was not extended to Palaic by Hittite scribes who had learned to employ it for Hattian.

#### 3.2 Akkadian and Hittite

As discussed in Chapter 8, the label 'Boğazköy Akkadian,' frequently applied to the language employed by Hittite scribes for the composition of texts in Akkadian, should be regarded as an umbrella term because various Akkadian grapholects emerged in Anatolia in different phases and for different purposes. The waves of Akkadian grapholects used in Hattuša were functionally different and resulted in the production of different types of documents. The types of interference phenomena that emerged were also various and require a dedicated discussion.

During the Middle Bronze Age, the penetration of Assyrian produced a substrate-superstrate system. The substrata may have been multiple (Hittite, but possibly also Luwian or Palaic in less well-known areas of the trading network), but the superstrate was Assyrian in the written documents from the Kārum age. Assyrian received a limited number of borrowings from the local, lower-ranking vernacular(s), mostly names of local realia or institutions,<sup>17</sup> and documents that were composed by local scribes seem to show influence on the grammatical level. Unsurprisingly, the features that derive from interference in the Old Assyrian documents are the typical results of competence errors by non-native speakers. Morphological and morphosyntactic categories of Semitic that do not exist in the Anatolian languages or Hattian, such as the gender marking of the inflected verb or the distinction between masculine and feminine pronominal forms, are often misused.<sup>18</sup> It must be stressed that the rich prosopography of the families of archive owners from the kārum of Kaneš provides us with the final piece of evidence to confirm that grammatical interference was indeed at work: the grammatical mistakes not only match the main

<sup>17</sup> See above, Chapter 14 and Dercksen 2007.

<sup>18</sup> See above, Chapter 4 and Michel 2011:107–108.

differences between the Anatolian and Assyrian grammars but also occur in documents that belonged to local families rather than foreign traders (see also Chapter 4).19

When, not earlier than the late 17th century, scribal offices begin to produce texts at the court of the Hittite kings in Hattuša, Akkadian is reintroduced as one of the many written languages (see Chapter 8). It is first employed in the so-called Old Hittite political texts, where, as already discussed in this book, it frequently accompanies Hittite in direct bilinguals. The Akkadian grapholect of these early documents generally contains structures that calque Hittite structures. Akkadian influence on the structure of the Hittite versions is harder to detect. The most common phenomenon of Hittite interference in Akkadian is the almost ubiquitous doubly marked genitival series ša X Y-šu 'of X, his Y, which is not grammatical in Akkadian either because of the left collocation of the lexical genitive, which is typical of Hittite. Other examples, which were mentioned in Chapter 8, include calques of specific constructions, such as serial verbs or uses of the verb 'to be'  $(ba\hat{s}\hat{u})$  with participles. These phenomena can generally be detected easily. They stand out in a language that is, otherwise, a Syrianizing variety of Old Babylonian. They bear witness to the scholarization of the scribes in Hattuša in the early ages of the kingdom of Hatti and on that of the 'original language' in which bilingual documents (such as the Annals, Testament of Hattušili I, and the later Edict of Telipinu) were written.<sup>20</sup> Nevertheless, the local spoken language, presumably Hittite, does not seem to have undergone any significant influence on the structural level, even in bilingual texts; phenomena of interference were limited to the written code. This was also true later when Akkadian grapholects were used for other types of documents, including the land grants, international letters and treaties, and local versions of Mesopotamian literary and scientific texts.

In sum, in historical times-during the Middle and Late Bronze Age-Akkadian varieties were used in Anatolia as written codes by non-native speakers (local archive holders and local scribes in the kārum society who composed

In light of this, morphology and morphosyntax seem to be the only structural layers 19 involved. Interference may have occurred at the level of phonology that cannot be proven because of the suboptimal graphemic system of Old Assyrian cuneiform. For instance, geminates were not marked but were spelled in a few cases (Kouwenberg 2017b:29) because of the presence of CVC signs, and the scribes occasionally doubled the wrong phoneme. Could this have resulted from the different status of the phonemic value of geminates in Akkadian and Anatolian? It is certainly possible but cannot be established, especially because the examples are generally from the archives of Assyrians, so we have no way to prove that Anatolians were involved in the writing of the documents.

See Chapter 6 for a brief discussion. 20

Akkadian texts in the age of Hatti), but no evidence emerges that Akkadian influenced Hittite or other Anatolian vernaculars beyond the lexical dimension of borrowings and calques (on which see Chapter 14). This scenario relegates Akkadian to the sociolinguistic role of a set of grapholects that were consistently employed by the Hittites for several reasons: the prestige of Akkadian; its technical utility in administrative, ritual, and scientific contexts; and its importance as a lingua franca in diplomacy. It never became a significant spoken language. These observations have implications for any hypotheses of grammatical influence that may be formulated based on mere structural observations. For instance, the isolated feature of the Hittite use of possessive clitics (a feature absent in Luwic) could tempt scholars to compare the forms with the ones that are quite ubiquitous in the Semitic group and of course present in Akkadian as well. Kloekhorst (EDHIL) reconstructed the clitic series in Proto-Anatolian; its presence would imply inheritance or very early contacts. But the forms show Indo-European morphs, proving that they were not borrowed, so the decisive factor to formulate a contact-based hypothesis would be the presence of very early documented contact between Proto-Anatolian and Semitic, which appears to be out of the question. A development in historical times is excluded by the fact the clitic possessive is present in Old Hittite.21

Another example of an alleged grammatical influence of Akkadian on Hittite is represented by the proposed role of the Semitic language in the development of conditional periods in Hittite (Zorman 2017). Zorman developed a complex and well-argued hypothesis to account for a range of phenomena. She argues that the Hittite takku 'if' was a structural calque of Akkadian šumma (thus a true case of morpheme induction by etymological calque), which, if one follows Speiser's (1947) analysis, would involve the univerbation of the third person demonstrative pronoun *šu* and the particle *-ma*, thus matching the Indo-European etymology of the two components of takku, \*to (a pronoun) and \*-*k*<sup>w</sup>e (an additive marker). Assuming that Speiser's etymology is correct (although it does not provide a clear explanation for the gemination of /m/, nor for the non-conditional meanings observed by Moran 1954), the structural similarity of the Akkadian and Hittite (pseudo-)subordinator (see Cohen 2012 on the syntactic status of *šumma*) would be striking. However, it is only fair to acknowledge that other hypotheses exist, so Speiser's analysis should be presented as widely but not completely accepted (cf. Cohen 2012:115-116

E.g., the genitive of the clitic possessive *-maš* is attested in the Old Hittite version of the Anitta text, KBo 3.22 obv. 10. Listing all of the examples would not be productive.

and fn. 122; Cohen emphasizes that the presence of the *-ma* particle is virtually certain but does not commit himself to any interpretation of the first morph). Furthermore, the existence of a pronoun *\*to* in Old Hittite is merely conjectural. Melchert (personal communication) suggests rather an etymology from *\*toh*<sub>2</sub> with the meaning 'further,' which, combined with an early conditional value of the very clitic *-kku* (cf. Watkins 1985), provides an alternative explanation for the compound that would not require influence from Akkadian.

Zorman's second proposal regards the use of the preterit and present in Hittite conditional clauses with *mamman* at the protasis and the clitic *-man* in the apodosis. She suggests that such clauses may use tenses to mark aspectual nuances in a manner deriving from the grammar of western peripheral Akkadian with, once again, a striking formal match between the Hittite clitic modal particle *-man* and the clitic Akkadian conditional marker *-man*.<sup>22</sup> It is the similarity between the Hittite and Akkadian clitic elements that prompted Zorman's third proposal: that the Hittite *-man* developed from the orthotonic subordinator *mān* 'when, if', which can be used hypothetically in the protasis and this development was facilitated by the existence of the homophone Akkadian *-man*, which has a near-identical function.

The cases on which Zorman's three hypotheses rest are the only well-founded examples of proposed areal features involving Hittite and Akkadian. As all of the phenomena would be limited to Hittite and would not affect the Anatolian languages that were geographically more distant from Syro-Mesopotamia (Luwian and Palaic) and since the formal matches are as visible as the semantic ones, this hypothesis was well worth formulating. From the purely linguistic standpoint, it is difficult to propose a conclusive counterargument, but it is worth noting that the hypothesis about *takku* relies on speculative etymological explanations of both Hittite and Akkadian forms, the aspectual use of the tenses in the Hittite *mamman* + *-man* periods does not contradict the general uses of tenses in Hittite, and the development of modal *-man* in Hittite does not necessarily require a contact-based explanation. However, these points merely open the door to alternative explanations without disproving contact-based possibilities.

For Zorman's theory to hold water *historically*, it is necessary to identify a stage in which Hittite and Akkadian were in contact. It must have followed the hypothetical Proto-Anatolian stage (because the innovations only occur in Hittite), preceded the early written records from Hattuša (because all of these

<sup>22</sup> CAD M/1:202.

features are present in texts from the Old Kingdom), and predated them by long enough for us to be able to assume that \*-*ku* was still employed as a conjunction and *ta*, used only as a connective in Old Hittite, was still understood as a pronoun (provided, of course, that it ever had that function, which, as previously mentioned, it may not have had). The only reasonable candidate for such a stage and setting is the Old Assyrian age of pre-Hittite Anatolia, a possibility that Zorman herself seems to cautiously suggest.

The problem can be hence formulated as follows: could the Assyrian presence in Anatolia during the so-called Kārum age have been the factor that triggered a significant grammatical change and introduced some structural patterns of conditional clauses into Hittite? If this occurred, it would contradict the weak sociolinguistic pattern that we proposed relative to the interaction of Assyrian and the local vernaculars, which we characterized as limited in its effects and confined to specific portions of the lexical level. However, the detailed chronological inquiry by Barjamovic, Hertel, and Larsen (2012) reveals that the phase for which a strong presence of Assyrians could be assumed (based on documents from the archives of Kaneš) was limited to a period of approximately 40 to 50 years that corresponded to the last third of level II of the Kültepe site. As the three authors argue convincingly, very few Assyrians resided in the kārum before that date, and their business model did not entail a stable presence of traders in the city. Subsequently, in the period corresponding to level Ib of Kültepe, the presence of the Assyrians in the kārum again seems to have been very modest. Possibly local traders partly replaced Assyrians. Whether the significant presence of Assyrians lasted long enough to hypothesize that Assyrian was widely spoken and had a strong structural influence on the local vernacular rather than being a superstrate employed for the composition of technical texts is debatable. However, there was not a long period of coexistence between native speakers of Assyrian and Anatolian. A further consideration is the number of Assyrians who lived in the kārum. Although their presence was a phenomenon of the utmost historical importance, Barjamovic, Hertel, and Larsen (2012) estimate that fewer than 1,000 Assyrians resided in Anatolia or worked there for a part of the year when the Assyrian presence in Anatolia was at its height. Of these, a few hundred were probably stationed in Kaneš (which was inhabited by some 25,000 Anatolians, according to Barjamovic 2014, if we include the peripheral blocks and outskirts). Furthermore, the density of Assyrians was probably greater in Kaneš than in other gateways to the network: for instance, it would be unrealistic to assume that hundreds of Assyrians inhabited the kārum in Hattuša. If we add that Kloekhorst (2019) has shown that the Hittite dialect of Kaneš was not the same as that spoken in Hattuša, more problems become apparent.

Did a few hundred Assyrians scattered across the trading network in the Old Assyrian age constitute a strong enough presence for their language to project grammatical features on Hittite *in general*? If not, should we assume that the innovations occurred specifically in Kaneš, where the Assyrian to Hittite ratio was low but at least higher than in the north or west? But if we assume this, how would these innovations have spread to Hattuša Hittite, which was the Hittite variety used for the documents written in Hatti during the Late Bronze Age?

In light of these issues, we can only conclude that the hypotheses of Akkadian grammatical influences on Hittite that were proposed by Zorman (2017) are not impossible per se but contain speculative steps. It is currently impossible to propose a convincing sociolinguistic setting in which they could have occurred. We would have to assume earlier phases of contact—but no such phases are documented and, geohistorically, it is difficult to conceive how they could have taken place.

#### 3.3 *Hurrian and Hittite (and Anatolian)*

Despite the importance of the Hurrian documents from Hattuša for our understanding of the Hurrian language, the intensity of the historical contacts between the Hittites and Hurrians have probably been exaggerated in the literature, at least for the early ages. While Hurrians were important neighbors of the Anatolian peoples and polities by the Middle Bronze Age and the early kings of Hatti confronted them regularly during their own southeastern campaigns, there are no solid arguments to support the hypothesis that the Hurrian peoples and language had a widespread presence anywhere to the north of northwestern Syria and Cilicia. The Hurrians had penetrated beyond Upper Mesopotamia and the Jazira, but a Hurrian presence in the core area of the central Anatolian kingdom of Hatti seems to have been limited to specific historical phases. The first was the stage of the treaties with Kizzuwatna, and it is at this time that cultural and linguistic materials from the Hurrian world entered Anatolia. Significantly, Simon (2020b) observed that a vast number of Hurrian loanwords in Anatolia followed this path: they occur in Luwian, in texts that emerged from the mixed Hurro-Luwian environment of Late Bronze Age Cilicia. The second phase of Hurrian penetration into Anatolia can be dated to the mid-13th century when the Hurrian religious traditions were revamped at the time of Queen Puduheba. By then, however, the Hurrian materials were entering the Hittite archives in Hittite translation, so the presence of significant groups of Hurrian speakers in the capital city cannot be safely assumed. Therefore, the only stage that appears to be relevant to contact between languages is the early or proto-imperial one, roughly datable to the reigns of Tuthaliya I and Tuthaliya III. However, just as Luwian appears to be an important filter for the penetration of loanwords from Hurrian into Anatolian, it seems to have been the only Anatolian language that might have exhibited some level of grammatical interference with it.

As discussed in Chapter 10, § 4.1, the only credible case of a contact-induced morphosyntactic change in Luwian was identified by Yakubovich (2010:47-53), who spotted it in some Luwian texts from Hattuša that were considered to derive from a Kizzuwatna tradition. This change consisted of some idiosyncratic forms of genitival adjectives which are said to have exhibited a double inflection marker, thus expressing the number of the possessor in a way that recalls the agglutinative Suffixaufnahme of Hurrian. This hypothesis, not uncontroversial, has been criticized by Simon (2016), who proposes that the Kizzuwatna doubly marked genitival adjectives were an internal innovation (through reanalysis of the ending). The situation is further complicated by the fact that the construction seems to appear in a Luwian ritual tradition of Kuwattalla/Šilalluhi and documents connected with the central Anatolian city of Tauriša. For all these texts, a composition in Hattuša has been proposed (Mouton and Yakubovich 2021), which led the same Yakubovich to reconsider the role of the Hurrian influence in the development of the innovative genitival adjective. However, Hurrians and Luwians probably coexisted in Kizzuwatna by the early centuries of the Late Bronze Age, if not earlier. Luwian was certainly not endemic in the Hittite core-area before the imperial age of Hatti. It would not be unreasonable to assume that the penetration of forms that did not belong to the late local variety of the language, Empire Luwian, into some texts composed in Hattuša that had a clear connection to the Kizzuwatna tradition was due to the very origin of the composition. This might explain the unusual forms in the complex Kuwattalla/Šilalluhi ritual tradition, which is connected with the Tunnawiya ritual tradition that originated in the Lower Land (Miller 2004:454; Mouton 2015a) but was re-elaborated in Hattuša. While the Tunnawiya material notably lacks the usual Hurrian elements of other ritual texts and subcorpora, the situation is different for the texts composed or re-elaborated in the capital city. The name Šilalluhi, for instance, is Hurrian (more specifically, either a title or a noun of profession, as per Richter 2012:375). The Tauriša forms are more difficult to account for. Since the city was close to the Zuliya River (probably the modern Çekerek River), it must have been located to the east of the Hittite capital city, so one would expect the variety of Luwian written there to have been comparable to that written in Hattuša. However, Mouton and Yakubovich (2021) have pointed out differences that would indicate a dialectal diversification, which, given the MS date of some of the fragments of the rituals CTH 764-766, would have to have been completed no

later than the early 15th century BCE. While some of its features are reminiscent of Empire Luwian, the Luwian of the Tauriša tradition shares with Kizzuwatna Luwian the presence of a handful of doubly marked genitival adjectives. Most of the occurrences are instances of the phrase 'lord of the rituals' (e.g., the dative malhaššaššanzan EN-ya in KUB 36.78 iv 7), which may be explained as forms of influence of the Kizzuwatna authoritative religious tradition. The tablets, after all, were written in Hattuša, so the scribes may have extended a label they found in Kizzuwatna rituals to the documents relating to Tauriša, without Tauriša playing a role, especially since the phrase 'ritual lord' probably replaced the name of the afflicted person and was added only in the written versions of the rituals. However, the one occurrence in KUB 35.102+103 iii 9 (with parallels at iv 9 and at KBo 8.130 iii 6), wayammana ulipnaššanza 'the howlings of the wolves' (n. nom.-acc. pl., although all of the other known occurrences are in indirect cases), cannot be explained in terms of interference between scribal traditions. It contains a genuine intratextual genitival adjective that marks the number of 'wolves,' and there is no proof that the phrase was 'borrowed' from a different Luwian tradition.

Because of this last occurrence, it is impossible to doubt that the variety of Luwian used in the Tauriša ritual tradition featured this form. However, its other features (Mouton and Yakubovich 2021) do not fully coincide with Kizzuwatna Luwian, so it may have been a different variety of Luwian. Given the position of Tauriša, it is unlikely that any Hurrian-speaking areas were immediately geographically contiguous with it. Even if any were, the development of an identical outcome in two different Luwo-Hurrian bilingual areas would be unexpected.

Thus the problem should be tackled from a different perspective. What appears obvious is that, while the 'Cilician' geohistorical explanation given by Yakubovich (2010) is no longer valid, the doubly marked genitival adjective must be a monogenetic feature. This means that it was either 1) inherited from Proto-Luwian or common Luwic or 2) was introduced as an innovation in a dialect from which all of the dialects that contain it derived. Since no trace of similar developments is found in other Luwic languages, the first possibility appears unlikely.

That contact was the trigger of the innovation still appears to be the most likely explanation, as Mouton and Yakubovich (2021) also concede. One may add that, among the languages attested in and around Anatolia, Hurrian remains the best candidate to be the model language for this change, and Kizzuwatna, at some stage preceding the diffusion of the feature, remains a reasonable bilingual location in which it could have originated. All in all, while the new evidence testifies to a very complex diffusion of the varieties of Luwian in different areas of Anatolia over the centuries, it is hardly a conclusive piece of counterevidence regarding the possible Hurrian origin of the doubly marked genitival adjectives.

The arguments in support of this hypothesis, while structurally sound, are not conclusive, either. There appears to be no way to decide whether the contact-based explanation should be preferred, but it should at least be mentioned as the sole possible instance of proper grammatical interference of Hurrian on Anatolian during the history of the Hittite archives.

What can be stated with some degree of certainty and should certainly be emphasized to avoid misunderstandings, is that *if* the production of the doubly marked genitival adjectives was due to the contact of Hurrian and Luwian in Cilicia, the phenomenon was limited to these forms. An entirely different problem is whether the very emergence of the genitival adjective, regardless of the way number was marked, should be explained in terms of contact with Hurrian (cf. Stefanini 1969 and, for a much wider perspective on the Indo-European family and isolated languages of the Near East, Luraghi 2008).<sup>23</sup> While one cannot disagree with the historical reconstruction that postulates a coexistence of Luwians and Hurrians in Cilicia during an early phase of the Late Bronze Age, we remain unsure whether the pattern of relational adjectival agreement of the Luwic languages and the Suffixaufnahme of agglutinative Hurrian are so similar that they admit an areal explanation (especially considering that genitival adjectives also exist in Palaic and Lydian and are not uncommon in Indo-European; cf. the recent study by Melchert 2012). In conclusion, it seems that no traces of structural interference between Hurrian and Anatolian are safely documented except for the still partly obscure role that Hurrian may have played in the historical development of some of the features of relational adjectivation in Anatolian (or more precisely Luwian).<sup>24</sup>

<sup>23</sup> Luraghi (2008:148–149), in her cross-familiar areal perspective, adds Armenian to the equation and, possibly, the Caucasian languages that may have influenced it.

We cannot maintain Watkins's (often overlooked) claim of areal convergence in the phonemic inventories of Hittite, Hurrian, and Hattian (Watkins 2001;52–55). This view of the development of consonantal oppositions in Hurrian and Hattian is based on the way that these languages were written *by the Hittites* in Hattuša and is no longer current; the idea that the existence of consonants rendered with  $\langle h \rangle$ -cuneiform signs in Hurrian, Hattian, and Semitic contributed to the retention of the laryngeal in Anatolian appears far-fetched as well as overreliant on the idea that the sounds behind these graphemes matched a laryngeal in the non-Indo-European languages of the area.

#### 3.4 Luwian and Hittite

While the status of almost all of the languages attested in the Hattuša archives is open to debate—with Palaic and Sumerian being almost certainly the *only* written languages and Hattian, Akkadian, and Hurrian probably spoken by small minorities in specific phases of the Hittite history—it is now certain that Luwian was a language spoken by a significant number of speakers in central Anatolia at least during the imperial age and, in all likelihood, in the pre-imperial phase as well. Since the publication of Yakubovich's study on the sociolinguistic status of Luwian (2010), contact phenomena have become apparent in the corpus. In the following sections, we will attempt to review and catalog the evidence on grammatical interference between Luwian and Hittite.

#### 3.4.1 Phonological and Phonetic Interference

The alleged phenomena of Luwian phonetic interference on Hittite seem not to be systemic, at least in written Hittite, in which a clear tendency to resist the phenomena by restoring the standard Hittite features can be observed. Therefore, were such phenomena contact-induced, they should probably be regarded as characteristics of individual Luwian scribes and occasionally surfacing in Hittite texts.

Two phonetic changes occurring in New Hittite have been regarded as contact-induced: the loss of /n/ in syllabic coda and the occurrence of the vowel /i/ where /e/ would be expected, perhaps related to the change from /i/ to /e/ in New Hittite. Yakubovich (2010:324–325) suggested that the sporadic omission of the nasal in syllabic coda before stops and affricates in Hittite texts, which seems to be best explained through the formation of a nasalized vowel,<sup>25</sup> may represent "a hypocorrection, a transfer of the phonetic variation from the Luvian vernacular into the official language," based on the earliest attestation of the phenomenon in Kizzuwatna Luwian ritual passages, where it remained sporadic, and corroborated by its systemic occurrence in the Luwic languages of the first millennium BCE. But even though an explanation in terms of language contact is possible (if not likely), it is by no means assured.

The second phenomenon—the presence, from Middle Hittite onwards, of an unexpected *i*-vocalism in words in which /e/ should have been regular could have been due, according to Yakubovich (2010:326–333), to the imperfectly learned Hittite of Luwian native speakers, who did not have /e/ in their phonemic inventory and thus may have tended to replace a Hittite [e] with [i] in their pronunciation.<sup>26</sup> In consequence, the change of /i/ to /e/ that can

<sup>25</sup> See Yakubovich 2010:318–321.

<sup>26</sup> The opposite phenomenon—i.e., the occurrence of signs with the vowel *e* where /i/ would

be observed in various lexemes in New Hittite is regarded by Yakubovich as a "change from above," that is, "a puristic reaction to what was perceived, rightly or mistakenly, as the contact-induced or simply foreign pronunciation of individual Hittite words" (Yakubovich 2010:331).<sup>27</sup>

## 3.4.2 Morphological Interference

Luwian interference on Hittite morphology appears in different forms. We can find some cases of morpheme induction, changes in the inflectional paradigms of various parts of speech modeled on the corresponding Luwian paradigms, and changes affecting the nominal stems due to the intrusion of the Luwian *i*-mutation pattern. Some of these interference phenomena are found in Old Hittite, while others were the product of a later contact between the two languages and only emerge in New Hittite.

As shown by Melchert (2005:455–456), the Hittite agentive suffixes *-alla-* and *-alli-* should be regarded as adapted borrowings from Luwian, while the genuine Hittite cognate suffix was *-ala.* Luwian had a derivational suffix *-alla/i-*, with *i*-mutation, which formed both nouns and adjectives, as its Hittite counterpart. This Luwian suffix is found as a borrowing in Old Hittite, but the pattern of *i*-mutation was lost; as a result, two different nominal suffixes are found in Hittite, *-alla-* and *-alli-*. The latter, unlike the Luwian model, also forms nouns belonging to the neuter gender.<sup>28</sup> The same Luwian suffix following a stem ending with a dental stop led to the creation, through reanalysis, of the two Hittite suffixes -(V)*ttalla-* and -(V)*talla-*, also attested in Old Hittite, which formed agent nouns from nouns and verbs.<sup>29</sup>

Relative to inflectional morphology, it has been convincingly suggested that syncretism between the nominative and accusative plural in the New Hittite nominal declension depend on the Luwian model. Kizzuwatna/Lower Land

be expected—is also attested and may have the same explanation. As H. Craig Melchert (pers. comm.) points out, frequent spellings like -*Ci-en* for /-Cin/ (acc.sg.) or -*Ci-eš* for /-Cis/ (nom.sg.) probably also reflect the lack of phonemic contrast between /i/ and /e/ in Luwian.

As a further example of Luwian phonetic interference on Hittite, one might cite Yakubovich's (2009) hypothesis that Luwian scribes were responsible for the anaptyxis of /i/ in the Hittite verb šip(p)ant- 'libate'. He proposed that the verb /spand-/, originally spelled  $is-pa-an-t^{\circ}/si-pa-an-t^{\circ}$ , changed to /sipand-/ (graphically rendered by  $si-ip-pa-an-t^{\circ}$  from Middle Hittite on) due to the difficulty that Luwian speakers had in reproducing the initial cluster /sC-/. However, Melchert (2016) suggests a different explanation for the alternation between  $is-pa-an-t^{\circ}$  and  $si-pa-an-t^{\circ}$ , showing that it is not necessary to assume Luwian interference.

<sup>28</sup> For a thorough analysis of this Luwian suffix, see Sasseville 2014–2015.

<sup>29</sup> Cf. Melchert 2005:456. See also Oettinger 1986:43-47.

and Tauriša Luwian (attested in the ritual traditions) preserved the original distinction between the common gender nominative plural ending -nzi and the accusative plural ending -nz(a). But as is well known, Luwian words in Hittite transmission, the Luwian dialect of the later hieroglyphic inscriptions, and sporadic mistakes in Luwian ritual passages show that Empire Luwian-that is, the Luwian dialect spoken at Hattuša—extended the nominative ending -nzi to the accusative, thus producing a formal syncretism between the two plural cases. Hittite shows a similar development, also resulting in syncretism between the two cases but with different modalities. This shows that the Luwian pattern was not slavishly reproduced but rather adapted to the needs of the target language.<sup>30</sup> A clear distribution is found, with Hittite adjectival stems in -u-, most of the stems in *-t-*, and the relative pronoun extending the nominative plural ending -eš to the accusative. The other stems extend the accusative plural ending -uš to the nominative; only *i*-stems show a fluctuating situation. Note that the extension of the nominative ending *-eš* led, in the case of *u*-stems, to the elimination of the apparently irregular accusative ending *-amuš*, evidencing dissimilation of the approximant /w/.<sup>31</sup>

	Luwian of rituals	Empire Luwian	Old Hittite	New Hittite
Nom. pl. c.	-nzi	-nzi	-eš	-eš, -uš ▲
Acc. pl. c.	-nz(a)	-nzi ↓	-uš	↓ -eš, -uš

An analogous case of interference can be observed in the pronominal declension, in both the independent and the clitic pronouns.

From the Middle Hittite stage onwards, the dative and accusative forms of the 1sg. (*ammuk*), 1pl. (*anzāš*), and 2pl. ( $\check{s}um(m)\bar{a}\check{s}$ ) independent personal pronoun were used as nominatives in place of the original forms  $\bar{u}k$ ,  $w\bar{e}\check{s}$ , and  $\check{s}um\bar{e}\check{s}$ , respectively. Furthermore, the nominatives  $\bar{u}k$  (1sg.) and  $\check{s}ume\check{s}$  (2pl.) were also extended to the accusative and dative cases. The result is a formal syncretism between the nominative, accusative, and dative. What is relevant to our discussion is that such a declension perfectly matches the Luwian declension attested in the Iron Age, which shows the same forms for the nominative, accusative, accusative, and dative, accusative, and dative except the 2sg.,

<sup>30</sup> See Rieken 2006:273-274 and Yakubovich 2010:337-345.

<sup>31</sup> See GrHL:70-71.

which maintains the distinction between the nominative on the one hand and the accusative and dative on the other. The situation is represented in the following table, which includes only the relevant forms.

	Iron Age Luwian	Middle and New Hittite	Iron Age Luwian	Middle and New Hittite		
		Sing	ular			
	First	person	Seco	Second person		
nom.	ати	ūk, ammuk	ti	zik		
acc.	ати	ammuk, ūk	tu	tuk		
dat.	ати	ammuk, ūk	tu	tuk		
		Plu	ral			
	First person		Seco	Second person		
nom.	anzanz	wēš, anzāš	unzanz	šumēš, šum(m)āš		
acc.	anzanz	anzāš	unzanz	šum(m)āš, šumēš		
dat.	anzanz	anzāš	unzanz	šum(m)āš, šumēš		

As discussed by Rieken (2006:275–276) and Yakubovich (2010:345–351), such a situation is best explained through a contact scenario in which Empire Luwian, which probably had the same pronominal declension found later in Iron Age Luwian, provided the model to which Hittite conformed. An analogous development may have occurred in the plural forms of the third person clitic pronoun, in which the Old Hittite nom.c. *-e*, acc.c. *-uš*, and nom.-acc.n. *-e* were replaced in Middle Hittite by the new forms *-at*, *-aš*, and *-at*, respectively, thus almost perfectly matching the Luwian paradigm, with the identity of the nom.-acc.sg.n. and the nom.pl.c. and nom-acc.pl.n. forms (but note that Iron Age Luwian—thus possibly Empire Luwian as well—shows *-ada* in the acc.pl.c.).<sup>32</sup>

<sup>32</sup> See Rieken 2006:276–277.

	Luwian	Hittite	Luwian	Hittite
	Singular		Plural	
nom. c.	-as	-aš	-ada	$-e \rightarrow -at$
acc. c.	-an	-an	-as, -ada <sup>33</sup>	$-u\check{s} \rightarrow -a\check{s}$
nomacc. n.	-ada	-at	-ada	$-e \rightarrow -at$

In the verbal domain, the only likely case of Luwian grammatical interference on Hittite seems to be the creation of an allomorph, -(i)yai-, for the Hittite suffix -ye/a-, probably resulting from the adaptation of Luwian pres.3sg. forms ending in -(i)yai as Hittite *mi*-conjugation forms in -(i)yaizzi, coexisting with the original Hittite ending -ye/azzi because pres.3sg. forms in -(i)yai did not exist in Hittite. This allomorph was chiefly confined to the pres.3sg. of *mi*-conjugation verbs but sporadically spread elsewhere.<sup>34</sup>

However, a different solution for these forms has been recently suggested by Kümmel (2020), who rejects the hypothesis of a Luwian influence and argues that we are dealing not with a linguistic change but rather only with a graphical innovation. He argues that the cuneiform sign YA could also be used for /je/ due to the similarity between the allophonic realizations of /e/ and /a/ after /j/,<sup>35</sup> so the sequence °-*ya-iz-zi* should be explained as °-*ye-ez-zi* and considered a variant of the older spelling, °-*i-e-ez-zi*.

Finally, as shown by Rieken (1994), the Luwian pattern of *i*-mutation, that is, an alternation consisting of the occurrence of *i*-stem in the common-gender nominative and accusative forms and *a*-stems elsewhere in the nominal and adjectival paradigm, spread to native Hittite words in Middle Hittite, probably through lexical borrowing. It also affected consonantal stems and, according to Rieken, became part of the New Hittite grammar.<sup>36</sup> However, Yakubovich (2010:334–337) re-examined the issue and came to a different conclusion. Since the pattern was not consistent in Hittite words, and forms showing the phenomenon were sometimes corrected by the scribes, who restored the genuine Hittite forms, Yakubovich (2010:336) suggested that "[i]t was not a part of the New Hittite grammar, [...] but rather a part of the New Hittite usage in the

<sup>33</sup> Only Iron Age Luwian.

<sup>34</sup> See Melchert 2005:454–455 for a full discussion of this topic.

According to Kümmel (2020:181), /je/ was realized as  $[j\epsilon \sim je]$  and /ja/ as  $[ja \sim j\epsilon / je?]$ .

<sup>36</sup> See also Melchert 2005:456.

mouth of certain Luvian native speakers," with the implication that the drafting of many Hittite tablets—namely, the ones in which mutated forms occur—was entrusted to native Luwian scribes.

Thus our knowledge of the Luwian morphological influence on Hittite suggests that the only borrowing that can be assigned to the Old Hittite stage is the Luwian derivative suffix *-alla/i-* that entered Hittite and was reanalyzed and adapted in various ways. In the later stages of the language, the pressure of Luwian on Hittite morphology increased, which led to changes in the nominal and pronominal inflection, the creation of a new allomorph in the verbal paradigm of the *mi*-conjugation, and the spread of the Luwian pattern of *i*mutation to native Hittite nominal stems.

### 3.4.3 Syntactical Interference

As suggested by Rieken (2006:278), the repetition of the nom.sg. and acc.sg. clitic pronouns -*aš* and -*at* after the dat.sg. clitic pronoun -*ši* (n=aš=ši=aš and  $n=at=\check{s}i=at$  in place of the regular  $n=a\check{s}=\check{s}i$  and  $n=at=\check{s}i$ ) and, rarely, after the reflexive particle -z(a)-  $(n=a\check{s}=z=a\check{s}$  and n=at=z=at vs. regular  $n=a\check{s}=za$  and *n=at=za*) in Hittite texts from the kingdom of Muwattalli 11 onwards, as well as the frequent repetition of the acc.sg. clitic pronoun -an after the reflexive particle (*n*=*an*=*z*=*an* vs. *n*=*an*=*za*) that had come into use by the reign of Muršili II, can be explained as a compromise with the Luwian regular word order, in which the clitic pronouns for the subject and direct object followed the dative and reflexive clitic pronoun. While the sequence n=an=z=an seems to have become a grammatical rule in New Hittite-perhaps because it was not perceived as entirely anomalous, since =zan regularly resulted from -z(a) + -šanin Hittite-the other cases of clitic reduplication remained in free variation with the corresponding chains without the double clitic.<sup>37</sup> Thus, again, the New Hittite pattern was not a mechanical calque of the Luwian pattern but rather involved an adaptation process that selected, among the different possibilities, those most in line with possible internal developments.

Another possible example of syntactic interference between Luwian and Hittite may be the obligatory use of the reflexive particle -z(a) in nominal sentences in the first and second person, which is a Middle Hittite innovation and never occurs in Old Hittite. As remarked by Melchert (2005:457 fn. 14), this feature is typologically unusual and is also found in Iron Age Luwian (with the dative-reflexive pronoun), so a connection between the Hittite and Luwian usages can be suggested, although the direction of the interference cannot be established.

For a thorough analysis of this phenomenon, see Yakubovich 2010:357–367.

#### 4 Concluding Remarks

When the scope of observation is limited to Hattuša and its immediate area of geohistorical contiguity within the cuneiform koiné, there are few cases of true grammatical interference, and they are generally specific to precise areas of interference. Some would require projecting the contact scenarios back in time because no documented phase of coexistence is known or conceivable in historical times. Some of the reconstructable protohistorical scenarios are credible—for example, the existence of an Anatolian-Hattian superposition area that triggered changes in the typology of the latter, which provides a solid base for Goedegebuure's (2008) hypothesis. Other protohistorical scenarios are completely speculative and can therefore hardly contribute to confirming the theories that involve them (e.g., a coexistence of Akkadian and Hittite that was long enough to alter the grammar of Hittite conditional clauses).

During the historical age, Hurro-Hittite and Hittite-Akkadian grammatical interference appear to have been very weak, if such interference existed at all, which is consistent with a minor *linguistic* role of the two languages in Hattuša. The only true engine of grammatical change seems to have been the coexistence of Luwian and Hittite in central Anatolia (or specifically in Hattuša) from the late 14th or 13th century). Here, the traces of interference are many, and no reason exists to doubt the existence of an environment of bilingualism that must have lasted for over a century or perhaps even for two centuries. However, the increasing influence of Luwian on Hittite in the Empire period does not necessarily point to the death of Hittite as the native language of a more or less extensive group of speakers and its confinement to the written-only dimension of a *Kanzleisprache*, as sometimes suggested. Non-standardized textual genres such as the Anatolian glosses in the Akkadian medical texts, written in a strongly Luwianized variant of Hittite language, may rather provide insights into what native Hittite may have been in the late Empire period.

#### CHAPTER 16

## Conclusion to Volume 1

In this volume, we began by providing the reader with an overview of the methodology employed to investigate linguistic contacts from both a technical and a cultural-historical perspective. We then described the geohistorical context of Anatolia during the Bronze Age, starting from the proto-historical phases of the third millennium (roughly coinciding with the Early Bronze Age), continuing through the Old Assyrian age of the  $k\bar{a}rum$  (covering most of the Middle Bronze Age), and concluding with the mature and best documented Hittite period (coinciding with the Late Bronze Age).

Historical contextualization is of the utmost importance for the study of any aspect of the ancient world: it prevents overgeneralizations and guarantees that the hypotheses formulated have a credible background. Accordingly, our ability to investigate contacts is directly proportional not only to the extension of available documentary corpora (in terms of the number and variety of the documents) but also to the extension of the geographical areas for which we have information. Luckily, the size of the Old Assyrian network was large enough by the Middle Bronze Age for us to obtain useful data, especially when combined with information collected through archaeological investigations conducted within and outside the boundaries of the region in which the Assyrian markets were active. By the Kārum age, Anatolia was a mixed-salad of different cultures that were so historically and linguistically intertwined that trying to separate the Indo-European Anatolian groups from other cultures, especially that of Hatti, is simply impossible. Some linguistic features of Hattian testify to a long period of cohabitation with Indo-Europeans, and the administrative documents of the kārum archives show that families were mixed. Even in the eastern site of Kaneš, anthroponomastic data point to the presence of both Luwic and Hattian linguistic material.

The situation appears to have become quite complicated by the era for which we can access the first Old Assyrian documents. The few Anatolian loanwords in Assyrian are mostly very technical terms (realia, names, or local institutions), which, along with the grammatical mistakes in Assyrian texts written by local scribes, seem to point to a straightforward substrate-superstrate relationship. However, Hittite is not the only substrate, even in Kaneš: a few Anatolian loans are Luwic, forming a further reminder of the centuries of cultural mixing and superposition that produced Middle Bronze Anatolia.

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This is an open access chapter distributed under the terms of the CC BY-NC-NP to license Downloaded from Brill.com07/06/2023 07:59:14AM The third Bronze Age Anatolian language, Palaic, apparently played no role in the Kaneš documentation, which must have been the result of where it was spoken. A similarly minor role was played by Hattian, which is only attested in proper names; if any Palaic names are mentioned, they are probably indistinguishable from Hittite names and therefore unrecognizable to us. If we ever locate the archives of western or northern settlements, the situation that would emerge would probably be quite different.

Sociolinguistic patterns tend to evolve gradually but change rapidly when large political shifts occur. The single large political shift in preclassical Anatolia was the birth, reorganization, and expansion of the Hittite polity. This series of events took place between the final years of the Middle Bronze Age and the beginning of the Late Bronze Age. The wealth of epigraphic material from the Hittite archives, distributed over a period long enough to allow the identification of diachronic changes, and combined, for the final centuries of the Bronze Age, with occasional comparanda from the archives of the peri-Anatolian Near Eastern area, provide evidence of a politically centripetal but culturally multivariate system. The cultural diversity of the Hittite world was matched by linguistic diversity. There is evidence for a network of interacting languages, including a northwestern circle that involved Hattian and Palaic, which appear to have been entangled from an early date, and a broader group of languages that interfered with one another lexically and grammatically during the Late Bronze Age proper. By this time, Palaic was almost certainly an extinct language (and may have been so for a long time), and Hattian, while possibly still alive, seems to have been merely a written language in Hattuša, so any lexical exchange between it and Hittite probably occurred earlier or was merely a learned phenomenon (comparable to the Latin loans in modern Italian); most of the contact phenomena seem to pertain to the field of textual translation. Hattian-Hittite bilingual texts, whose composition hints at the involvement of Hattian native speakers, were still produced in the 13th century, but the later specimina were probably copies made from earlier redactions.

From the 16th or 15th centuries onwards, Hittite interacted with Luwian, Hurrian, and Akkadian in different and quite productive ways. The status of Akkadian in Hittite-controlled central Anatolia was complex. We have argued that waves of influence of the Mesopotamian culture(s) introduced different grapholects of Akkadian into the Hittite scribal offices. All shared some substrate-induced idiosyncrasies at the grammatical level, but the Akkadian variety at the base changed from the Old Babylonian with Syrianizing forms used in the Old Hittite political texts (similar to the variety of Old Babylonian used in the earliest land grants) to the Middle Babylonian of the diplomatic documents (the earliest being roughly contemporary to the land grants) to the

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Assyrianizing forms found in the Late Hittite correspondence with the Assyrian kings. The late technical and literary had a complex linguistic background depending on the traditions in which they originated. Contemporaneously, Mittanian and Assyrian were introduced, as well as mixed ducti in paleography.

As for Hurrian, we argued in this work for a minimalist approach to its sociolinguistic status in central Anatolia and Hatti proper. The sparse evidence for originally Hurrian loanwords in Middle Bronze Age Old Assyrian is, in general, explainable as the result of interference that occurred in northern Mesopotamia at an earlier stage. Encounters with Hurrian peoples and groups as well as the references to Hurrian polities or polities with Hurrian rulers were not indicative of a presence of a significant Hurrian minority in central Anatolia. Based on historical and contextual evidence, Hurrian culture did not strongly influence Hatti until the late 15th century BCE, after the intensification of the international relationships with the most 'Anatolian' of the Hurrian polities, the kingdom of Kizzuwatna in Cilicia. This is consistent with the philological evidence that strongly anchors the production of the earliest copies of Hurrian texts to the reigns of Tuthaliya I, Arnuwanda I, and Tuthaliya III. Sociolinguistically, this seems to be the phase when a Hurrian-speaking elite was present at the court of Hattuša and Hurrian termini technici began to appear in ritual, religious, and magical texts. Hurrian loanwords in both Hittite and Luwian seem to have been frequently transmitted via Kizzuwatna.

The role of Luwian is, however, very different than the role of the other *Sprachen der Boghazköi-Inschriften*. As shown in several studies published in the early 2000s, culminating with Yakubovich's (2010) sociolinguistic study, Luwian and Hittite converged in central Anatolia from the 14th century onwards, with reflexes both in the lexicon and the grammar. Judging from the limited but valuable evidence supplied by glosses and commentaries—for example, in some late technical texts in Akkadian such as medical *omina* (CTH 537) and recipes (CTH 808)—the language used in that era appears to have been a variety of Hittite with inclusions of Luwian lexemes and structures. It probably reflected the competencies of native Late Hittite speakers in Hattuša during the age of the Hittite Empire proper.

Late Hittite Hattuša appears to have been a bilingual location, but the language spoken was probably a 'L2-izing variety of Li' as in most bilingual settings. We can safely assume that Hittite speakers spoke a variety of Hittite that had undergone Luwian influence on both the levels of grammar and lexicon (with Luwian intervening to mediate borrowing from other languages, as testified by the processes of morphological adaptation that involved Luwian morphs). It was not a process of creolization because the main code remained Hittite despite the Luwo-Hittite glossing, at least for Hittite native speakers as opposed to the constantly growing group of Luwian speakers. Had Hittite not died out by the 12th century BCE, perhaps creolization would have been a possible outcome, but we can only speculate.

Similarly speculative would be any attempt to assess possible contact scenarios between Hittite and Luwian outside of Hattuša during the imperial age, when the Hittite political and military presence increased in the west-central portions of the Anatolian peninsula. There must have been contacts, but direct textual evidence is not available, and indirect hints that Hittite and Hittite texts circulated in the West—for example, the presence of Near Eastern topoi in the Homeric literature—do not permit us to draw any conclusions about the linguistic map of the Luwian regions during the Final Bronze Age. The situation in the Aegean interface area will be discussed in Volume 2.

The findings presented in this first volume center on Hattuša and the type of Hittite written by its scribes. This is the result, as previously stated, of the significance of the archives of Hatti and of the relative paucity of relevant material from other regions. Although archives from northern Syria and northern Mesopotamia provide some useful comparanda, neither the Hattian culture nor—except for sparse hieroglyphic materials—the Luwian culture left any direct written records for the Bronze Age. The archaeological failure to find any royal or private archives with Hurrian texts from the kingdom of Mittani proper increases the importance of the Hittite documentation. This situation may give the impression that most contact phenomena are localized and pertain to cities and small areas rather than larger regions. Volume 2, which will be dedicated to the Iron Age and Aegean interface, will give a similar impression, although not entirely for the same reasons. The fact that wider phenomena of convergence, such as the phonological constraints on initial sonority in Hittite, Hurrian, and Hattian, are rare and often questionable must be due, at least in part, to the limited number of areas where written documents have been discovered. But given the strong relationship between cultural and linguistic interference and the way people and populations moved and interacted in antiquity, the polarized, small-scale nature of linguistic interference may have been a consequence of a world in which groups perceived their identities as rather localized, and long-distance contacts were in fact very often a sum of short-distant ones.

# References

- Abay, Eşref (2005). The Expansion of Early Transcaucasian Culture: Cultural Interaction or Migration? *Altorientalische Forschungen* 32, pp. 115–131.
- Abusch, Tzvi and Schwemer, Daniel (2011). *Corpus of Mesopotamian Anti-Witchcraft Rituals. Volume One* (Studies in Ancient Magic and Divination 8 (1)). Leiden/Boston: Brill.
- Adams, W., Van Gerven, D. and Levy, R. (1978). The Retreat from Migrationism. *Annual Review of Anthropology* 7, pp. 483–532.
- Adiego, Ignasi-Xavier (2015). Lycian Nasalized Preterites Revisited. *Indogermanische Forschungen* 120 (1), pp. 1–30.
- Ahrens, Alexander (2019). 'Halbmondförmige' Tonobjekte. In: M. Novák, E. Kozal and D. Yasin, eds, Sirkeli Höyük: Ein urbanes Zentrum am Puruna-Pyramos im Ebenen Kilikien. Vorbericht der schweizerisch-türkischen Ausgrabungen 2006–2015 (Schriften zur Vorderasiatischen Archäologie 13), Wiesbaden: Harrassowitz, pp. 359–364.
- Alaura, Silvia (1998). Die Identifizierung der im "Gebäude E" von Büyükkale-Boğazköy gefundenen Tontafelfragmente aus der Grabung von 1933. *Altorientalische Forschungen* 25 (2), pp. 193–214.
- Alaura, Silvia (2004). Osservazioni sui luoghi di ritrovamento dei trattati internazionali a Boğazköy-Hattuša. In: D. Groddek and S. Rößle, eds, Šarnikzel: *Hethitologische Studien zum Gedenken Emil Orgetorix Forrer* (Dresdner Beiträge zur Hethitologie 10). Dresden: Verlag der TU Dresden, pp. 139–147.
- Alaura, Silvia (2006). "Nach Boghasköi!" Zur Vorgeschichte der Ausgrabungen in Boğazköy-Hattuša und zu den archäologischen Forschungen bis zum Ersten Weltkrieg, Sendschrift der Deutschen Orient-Gesellschaft 13. Berlin: Die Deutsche Bibliothek.
- Alaura, Silvia (2015). Dal testo al contesto. La ricostruzione degli archivi e delle biblioteche cuneiformi della capitale ittita Hattuša, *Atti della Pontificia Accademia Romana di Archeologia. Rendiconti* 87, pp. 89–116.
- Albayrak, Irfan (2005). Fünf Urkunden aus dem Archiv von Peruwa, Sohn von Šuppibra, *Jaarbericht "Ex Oriente Lux"* 39, pp. 95–105.

Algaze, Guillermo (1993). The Uruk World System. Chicago: University of Chicago Press.

- Algaze, Guillermo (2008). *Ancient Mesopotamia at the Dawn of Civilization*. Chicago: University of Chicago Press.
- Alp, Sedat (1968). *Zylinder- und Stempelsiegel aus Karahöyük bei Konya*. Ankara: Türk Tarih Kurumu.
- Alp, Sedat (1994). Konya-Karahöyük 1992 kazısı. *Kazı Sonuçları Toplantısı* 15 (1), pp. 269–272.
- Alp, Sedat (1991a). Maşat-Höyük'te Bulunan Çivi Yazılı Hitit Tabletleri / Hethitische Keilschrifttafeln aus Maşat-Höyük. Ankara: Türk Tarih Kurumu.

Alp, Sedat (1991b). Hethitische Briefe aus Maşat-Höyük. Ankara: Türk Tarih Kurumu.

- Alparslan, Metin (2017). The East: Upper Land, Išuwa-Malitiya, Azzi-Hayaša Philology.
   In: M. Weeden and L.Z. Ullmann, eds, *Hittite Landscape and Geography* (Handbuch der Orientalistik I/121). Leiden: Brill, pp. 209–218.
- Alster, Berndt (1991). Incantation to Utu. Acta Sumerologica 13, pp. 27-96.
- Altman, Amnon (2003). Rethinking the Hittite System of Subordinate Countries from a Legal Point of View. *Journal of the American Oriental Society* 123, pp. 741–756.
- Álvarez-Pedrosa, Juan Antonio (2016). The Terrible Mouth of Agni: A Comparison Between a Ritual Formula in Hittite and Vedic. In: H. Marquardt, S. Reichmuth, J.V. García Trabazo, eds, *Anatolica et Indogermanica. Studia linguistica in honorem Johannis Tischler septuagenarii dedicata* (Innsbrucker Beiträge zur Sprachwissenschaft 155). Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck, pp. 1–5.
- Ancillotti, Augusto (1981). La lingua dei Cassiti. Milano: Unicopli.
- Andrason, Alexander and Vita, Juan-Pablo (2016). Contact Languages of the Ancient Near East—Three more Case Studies (Ugaritic-Hurrian, Hurro-Akkadian and Canaano-Akkadian). *Journal of Language Contact* 9 (2), pp. 293–334.
- Anor, Netanel and Cohen, Yoram (2018). The Oil Omens from Hattuša: An Investigation of the History and Transmission of a Babylonian Divination Compendium. *Journal of Near Eastern Studies* 77 (2), pp. 195–206.
- Anthony, David W. (1990). Migration in Archeology: The Baby and the Bathwater. *American Anthropologist* 92, pp. 895–914.
- Anthony, David W. (1992). The Bath Refilled: Migration in Archeology Again. *American Anthropologist* 94, pp. 174–176.
- Anthony, David W. (1997). Prehistoric Migration as Social Process. In: J. Chapman and H. Hamerow, eds, *Migrations and Invasions in Archaeological Explanation* (British Archaeological Reports International Series 664), Oxford: Archeopress, pp. 21–32.
- Anthony, David W. (2007). *The Horse, the Wheel and Language: How Bronze Age Riders from the Eurasian Steppes Shaped the Modern World*. Princeton: Princeton University Press.
- Anthony, David W. and Ringe, Don (2015). The Indo-European Homeland from Linguistic and Archaeological Perspectives. *Annual Review of Linguistics* 1, pp. 199– 219.
- Arbuckle, Benjamin (2014). The Rise of Cattle Cultures in Bronze Age Anatolia. *Journal* of Eastern Mediterranean Archaeology and Heritage Studies 2, pp. 277–297.
- Archi, Alfonso (1968). Sulla formazione del testo delle leggi ittite. *Studi Micenei ed Egeo-Anatolici* 6, pp. 54–89.
- Archi, Alfonso (1983). Die Adad-Hymne ins Hethitische übersetzt. *Orientalia* N.S. 52, pp. 20–30.
- Archi, Alfonso (1984). The Personal Names in the Individual Cities. In: P. Fronzaroli, ed.

*Studies on the Language of Ebla* (Quaderni di Semitistica 13). Firenze: Università di Firenze, pp. 225–251.

- Archi, Alfonso (2000). Nawar-tahe, king of Purušhanda. *Nouvelles Assyriologiques Brèves et Utilitaires* 2000 (4), p. 67.
- Archi, Alfonso (2002). Ea and the Beast. A song related to the Kumarpi Cycle. In:
  P. Taracha, ed, Silva Anatolica. Anatolian Studies Presented to Maciej Popko on the Occasion of His 65th Birthday. Warsaw: Agade, pp. 1–10.
- Archi, Alfonso (2003). Middle Hittite—'Middle Kingdom'. In: G.M. Beckman, R.H. Beal and G. McMahon, eds, *Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday*, Winona Lake, IN: Eisenbrauns, pp. 1–12.
- Archi, Alfonso (2007). Transmission of Recitative Literature by the Hittites. *AoF* 34, pp. 185–203.
- Archi, Alfonso (2008). Le 'leggi ittite' e il diritto processuale. In: M. Liverani and C. Mora, eds, *I diritti nel mondo cuneiforme (Mesopotamia e regioni adiacenti, ca. 25*00–500 *a.C.*). Pavia: IUSS Press, pp. 273–292.
- Archi, Alfonso (2009). Orality, Direct Speech and the Kumarbi Cycle. *Altorientalische Forschungen* 36 (2), pp. 209–229.
- Archi, Alfonso (2010). When did the Hittite begin to write. In: Y. Cohen, A. Gilan, and J.L. Miller, eds, *Pax Hethitica: Studies on the Hittites and their Neighbours in Honour of Itamar* (Studien zu den Boğazköy Texten 51). Wiesbaden: Harrassowitz, pp. 37–46.
- Archi, Alfonso (2011). In Search of Armi. Journal of Cuneiform Studies 63, pp. 5-34.
- Archi, Alfonso (2013). History of Syria in the Third Millennium: The Written Sources. In: W. Orthmann, M. al-Maqdissi, and P. Matthiae, eds, Archéologie et Histoire de la Syrie. Vol. 1: La Syrie de l'époque néolitique à l'âge du Fer. Wiesbaden: Harrassowitz Verlag, pp. 75–88.
- Archi, Alfonso (2015). How the Anitta Text reached Hattuša. In: A. Müller-Karpe, E. Rieken, W. Sommerfeld, eds, Saeculum: *Gedenkschrift für Heinrich Otten anlässlich seines 100. Geburtstags* (Studien zu den Boğazköy-Texten 58). Wiesbaden: Harrassowitz, pp. 1–13.
- Archi, Alfonso and Venturi, Fabrizio (2012). Hittites at Tell Afis (Syria). Orientalia N.S. 81 (1), pp. 1–55.
- Arık, Remzi O. (1937). Les fouilles d'Alacahöyük. Entreprises par la Société d'Histoire Turque. Rapport préliminaire sur les travaux en 1935. Ankara: Türk Tarih Kurumu.
- Arnaud, Daniel (1985–1987). *Recherches au pays d'Aštata. Emar v1*. (4 vols). Paris: Editions Recherche sur les Civilisations.
- Arnaud, Daniel (2007). Corpus des textes de bibliothèque de Ras Shamra-Ougarit (1936– 2000) en sumérien, babylonien et assyrien (Aula Orientalis, Supplementa 23). Barcelona: Sabadell Editorial Ausa.
- Atakuman, Çiğdem (2008). Cradle or crucible: Anatolia and archaeology in the early

REFERENCES

years of the Turkish Republic (1923–1938). *Journal of Social Archaeology* 8, pp. 214–235.

- Bachhuber, Christoph (2013). James Mellaart and the Luwians: a culture (pre)-history.
  In: A. Mouton, I. Rutherford and I. Yakubovich, eds, *Luwian Identities: Culture, Language and Religion between Anatolia and the Aegean*. Leiden: Brill, pp. 279–304.
- Bachhuber, Christoph (2015). *Citadel and Cemetery in Early Bronze Age Anatolia* (Monographs in Mediterranean Archaeology 13). Sheffield: Equinox.
- Bachvarova, Mary R. (2014). Hurro-Hittite Narrative Song as a Bilingual Oral-Derived Genre. In: P. Taracha, ed, *Proceedings of the Eighth International Congress of Hittitology. Warsaw*, 5–9 September 2011. Warsaw: Agade, pp. 77–109.
- Bachvarova, Mary R. (2016). From Hittite to Homer: The Anatolian Background of Ancient Homeric Epic, Cambridge: Cambridge University Press.
- Badalyan, Ruben S. (2014). New data on the periodization and chronology of the Kura Araxes culture in Armenia. *Paléorient* 40.2, pp. 71–92.
- Badalyan, Ruben S., Harutyunyan, Armine, Chataigner, Christine, Le Mort, Françoise, Chabot, Jacques, Brochier, Jacques E., Balasescu, Adrian, Radu, Valentin and Hovseypan, Roman (2010). The Settlement of Aknashen-Khatunarkh, a Neolithic Site in the Ararat Plain (Armenia): Excavation Results 2004–2009. *TÜBA-AR* 13, pp. 185–218.
- Bagh, Tine (2003). The relationship between Levantine Painted Ware, Syro/Cilician Ware, and Khabur Ware and the chronological implications. In: M. Bietak, ed, *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium Bc. 11. Proceedings of the SCIEM 2000 Euro-Conference in Haindorf, 2nd-7th of May 2001.* Vienna: Verlag der Österreichischen Akademie der Wissenschaften, pp. 219–237.
- Bahar, Hasan and Koçak, Özdemir (2004). *Eskiçağ Konya Araştırmaları 2. Neolitik Çağ'dan Roma Dönemi Sonuna Kadar.* Konya: Kömen Yayınları.
- Balkan, Kemal (1957). *Letter of King Anum-Hirbi of Mama to King Warshama of Kanish*. Ankara: Türk Tarih Kurumu Basımevi.
- Balossi Restelli, Francesca (2019). Arslantepe II—Period VII. The Development of a Ceremonial/Political Centre in the First Half of the Fourth Millennium BCE (Late Chalcolithic 3–4) (Arslantepe II). Roma: Arbor Sapientiae.
- Baragli, Beatrice (2022). Sonnengrüsse. Die sumerischen Kiutu Gebetsbeschwörungen, (Ancient Magic and Divination 19). Leiden/Boston: Brill.
- Barjamovic, Gojko (2008). The Geography of Trade. Assyrian Colonies in Anatolia c. 1975–1725 BC and the Study of Early Interregional Networks of Exchange. In: J.G. Dercksen, ed, *Anatolia and the Jazira during the Old Assyrian Period* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 111). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 87–100.
- Barjamovic, Gojko (2011). A Historical Geography of Anatolia in the Old Assyrian Colony Period (CNI Publications 38). Copenhagen: Museum Tusculanum Press.

- Barjamovic, Gojko (2014). The Size of Kanesh and the Demography of Early Middle Bronze Age Anatolia. In: L. Atici, G. Barjamovic, A. Fairbairn and F. Kulakoğlu, eds, *Current Research at Kultepe/Kanesh: An Interdisciplinary and Integrative Approach to Trade Networks, Internationalism, and Identity* (Journal of Cuneiform Studies supplemental series 4). Boston: American School of Oriental Research, pp. 55–68.
- Barjamovic, Gojko (2018). Interlocking Commercial Networks and the Infrastructure of Trade in Western Asia during the Bronze Age. In: K. Kristiansen, T. Lindkvist, J. Myrdal, eds, *Trade and Civilisation Economic Networks and Cultural Ties, from Prehistory to the Early Modern Era*. Cambridge: Cambridge University Press, pp. 113–142.
- Barjamovic, Gojko (2019). Silver, Markets and Long-Distance Trade in the Konya Region, 2400–1700 BCE. In: Ç. Maner, ed, *Crossroads: Konya Plain from Prehistory to the Byzantine Period*. Istanbul: Ege Yayınları, pp. 71–81.
- Barjamovic, Gojko (2021). Comparing Borders: Written and Material Culture Approaches to Definitions of Political Frontiers in Anatolia 2000–1650 BCE. In: L. d'Alfonso, K. Rubinson, eds, *Borders in Archaeology: Anatolia and the South Caucasus ca 3500–500 BCE* (Ancient Near Eastern Studies Supplement Series 58). Leuven: Peeters, pp. 125–138.
- Barjamovic, Gojko and Gander, Max (2015). Ušša. In: *Reallexikon der Assyriologie* 14. Berlin/Boston: De Gruyter, pp. 507–508.
- Barjamovic, Gojko, Hertel, Thomas, Larsen, Mogens Trolle (2012). *Ups and Downs at Kanesh: Chronology, History and Society in the Old Assyrian Period* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 120). Leiden: Nederlands Instituut voor het Nabije Oosten.
- Barjamovic, Gojko and Schwemer, Daniel (2018). Texfunde der Kampagne 2017. Archäologischer Anzeiger 2019, pp. 84–89.
- Batiuk, Stephen D. (2005). *Migration Theory and the Distribution of Early Transcaucasian Culture* (unpublished PhD dissertation). University of Toronto.
- Bawanypeck, Daliah and Görke, Susanne (2007). Einige Bemerkungen zu den hurritischen Sprüchen des Gizija-Rituals. In: D. Groddek and M. Zorman, eds, *Tabularia Hethaeorum. Hethitologische Beitrage Silvin Košak zum 65. Geburtstag* (Dresdner Beiträge zur Hethitologie 25). Wiesbaden: Harrassowitz, pp. 59–68.
- Beal, Richard H. (1986). The History of Kizzuwatna and the Date of the Šunaššura Treaty. *Orienalia Nova Series* 55, pp. 424–445.
- Beal, Richard H. (1992). *The Organisation of the Hittite Military* (Texte der Hethiter 20).Heidelberg: Winter Verlag.
- Beal, Richard H. (2002). The Hurrian Dynasty and the Double Names of Hittites Kings.
  In: S. de Martino and F. Pecchioli Daddi, eds, *Anatolia antica. Studi in memoria di Fiorella Imparati*, (Eothen 11), Firenze: LoGisma, pp. 55–70.
- Beal, Richard H. (2003). The Predecessors of Hattušili I. In: G.M. Beckman, R.H. Beal and G. McMahon, eds, *Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday*. Winona Lake, IN: Eisenbrauns, pp. 13–35.

REFERENCES

- Beal, Richard H. (1992). *The Organisation of Hittite Military* (Texte der Hethiter 20). Heidelberg: Winter Verlag.
- Beckman, Gary M. (1983a). *Hittite Birth Rituals. Second Revised Edition* (Studien zu den Boğazköy Texten 29). Wiesbaden: Harrassowitz.
- Beckman, Gary M. (1983b). Mesopotamians and Mesopotamian Learning at Hattuša. *Journal of Cuneiform Studies* 35, pp. 97–114.
- Beckman, Gary M. (1990). Medizin. B. Bei den Hethitern. In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 7, Berlin/New York: de Gruyter, pp. 629–631.
- Beckman, Gary M. (1993). Some Observations on the Šuppiluliuma—Šattiwaza Treaties. In: M.E. Cohen, D.C. Snell and D.B. Weisberg, eds, *The Tablet and the Scroll. Near Eastern Studies in Honor of William W. Hallo*, Bethesda: CDL Press, pp. 53–57.
- Beckman, Gary M. (1995a). Hittite Provincial Administration in Anatolia and Syria. The View from Maşat and Emar. In: O. Carruba, M. Giorgieri and C. Mora, eds, Atti del 11 Congresso Internazionale di Hittitologia, Pavia 28 giugno–2 luglio 1993 (Studia Mediterranea 9), Pavia: Gianni Iuculano Editore.
- Beckman, Gary M. (1995b). The Siege of Uršu Text (*CTH* 7) and Old Hittite Historiography. *Journal of Cuneiform Studies* 47, pp. 23–34.
- Beckman, Gary M. (1996). *Hittite Diplomatic Texts* (Writings from the Ancient World 7). Atlanta: Society of Biblical Literature.
- Beckman, Gary M. (2003), Gilgamesh in Hatti. In: G.M. Beckman, R. Beal and G. McMahon, eds, *Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday*, Winona Lake: Eisenbrauns, pp. 37–57.
- Beckman, Gary M. (2007). A Hittite Ritual for Depression (CTH 432). In: D. Groddek and M. Zorman, eds, *Tabularia Hethaeorum. Hethitologische Beiträge Silvin Košak zum* 65. Geburtstag (Dresdner Beiträge zur Hethitologie 25), Wiesbaden: Harrassowitz, pp. 69–81.
- Beckman, Gary M. (2014). *The* babilili-*Ritual from Hattuša (CTH 718)* (Mesopotamian Civilizations 19). Winona Lake: Eisenbrauns.
- Beckman, Gary M. (2019a). Mesopotamians and Mesopotamian Learning at Hattusa, Thirty Years On. In: P.S. Avetisyan, R. Dan and Y.H. Grekyan, eds, Over the Mountains and Far Away. Studies in Near Eastern history and archaeology presented to Mirjo Salvini on the occasion of his 80th birthday. Oxford: Archaeopress, pp. 65– 70.
- Beckman, Gary M. (2019b). *The Hittite Gilgamesh* (Journal of Cuneiform Studies Supplemental Series 6). Atlanta: Lockwood Press.
- Beckman, Gary M. (2021). Akkadian and the Hittites. In: J.-P. Vita, ed, *History of the Akkadian Language* (Handbook of Oriental Studies 152), *Volume 2*. Leiden: Brill, pp. 1266–1292.
- Belardi, Walter (1951). Sui nomi ari nell'Asia anteriore antica. In: *Miscellanea Giovanni Galbiati*, vol. 3. Milano: Hoepli, pp. 55–74.

- Bellwood, Peter (2001). Early agriculturalist population diasporas? Farming, language, and genes. *Annual Review of Anthropology* 30, pp. 181–207.
- Benecke, Norbert (2002). Die frühbronzezeitlichen Pferde von Kırklareli-Kanlıgeçit, Thrakien, Türkei. *Eurasia Antiqua* 8, pp. 39–59.
- Bentley, R. Alexander (2006). Strontium isotopes from the earth to the archaeological skeleton: A review. *Journal of Archaeological Method and Theory* 13, pp. 135–187.
- Berman, Howard (1977). A Contribution to the Study of the Hattic-Hittite Bilinguals, Rev. of: Schuster 1974. *Orientalistische Literaturzeitung* 72, pp. 453–460.
- Bevan, Andrew (2007). *Stone Vessels and Values in the Bronze Age Mediterranean*. Cambridge: Cambridge University Press.
- Bezold, Carl and Wallis Budge, Ernest Alfred (1892). *The Tell el-Amarna Tablets in the British Museum*. London: The British Museum.
- Bianconi, Michele (2015). Contatti greco-anatolici e *Sprachbund* egeo-micrasiatico. Stato della ricerca e nuove prospettive. *Archivio Glottologico Italiano* 100 (2), pp. 129–178.
- Bilgiç, Emin (1945–1951). Die Ortsnamen der 'kappadokischen' Urkunden im Rahmen der alten Sprachen Anatoliens. *Archiv für Orientforschung* 15, pp. 1–37.
- Bilgiç, Emin (1954). *Die einheimischen Appellativa der Kappadokischen Texte und ihre Bedeutung für die anatolischen Sprachen*. Ankara: Türk Tarih Kurumu Basımevi.
- Bilgiç, Emin (1992). Ebla in Cappadocian Inscriptions. In: H. Otten, E. Akurgal, H. Ertem, and A. Süel, eds, *Hittite and Other Anatolian and Near Eastern Studies in Honour of Sedat Alp*. Ankara: Türk Tarih Kurumu Basimevi, pp. 61–66.
- Bilgin, Tayfun (2018). *Officials and Administration in the Hittite World* (Studies in Ancient Near Eastern Records 21). Berlin/Boston: de Gruyter.
- Bini, Monica, Zanchetta, Giovanni, Perşoiu, Aurel, Cartier, Rosine, Català, Albert, Cacho, Isabel, Dean, Jonathan R., Di Rita, Federico, Drysdale, Russell N., Finnè, Martin, Isola, Ilaria, Jalali, Bassem, Lirer, Fabrizio, Magri, Donatella, Masi, Alessia, Marks, Leszek, Mercuri, Anna Maria, Peyron, Odile, Sadori, Laura, Sicre, Marie-Alexandrine, Welc, Fabian, Zielhofer, Christoph, Brisset, Elodie (2019). The 4.2 ka BP Event in the Mediterranean region: an overview. *Climate of the Past* 15, pp. 555–577.
- Birot, Maurice (1933). *La correspondance des gouverneurs de Qațțunān* (Archives Royales de Mari 27). Editions Recherche sur les Civilisations: Paris.
- Blegen, Carl W. (1950). *Troy. General Introduction. The First and Second Settlements*. Princeton: Princeton University Press.
- Bloomfield, Maurice (1904). On Some Alleged Indo-European Languages in Cuneiform Character. *American Journal of Philology* 25, pp. 1–14.
- Blum, Stephan W.E. (2012). Die ausgehende frühe und die beginnende mittlere Bronzezeit in Troia: Archäologische Untersuchungen zu ausgewählten Fundkomplexen der Perioden Troia IV und Troia V (Studia Troica Monographien 4). Darmstadt: Philipp von Zabern.

- Blum, Stephan W.E. (2016). The Final Stages of the Early Bronze Age at Troy: Cultural Development, Chronology, and Interregional Contacts. In: E. Pernicka, S. Ünlüsöy and S.W.E. Blum, eds, *Early Bronze Age Troy: Chronology, Cultural Development, and Interregional Contacts* (Studia Troica Monographien 8). Bonn: Rudolf Habelt, pp. 89–109.
- Bryce, Trevor (2003). History. In: H.C. Melchert, ed, *The Luwians*, (Handbuch der Orientalistik 1/68). Leiden/Boston: Brill, pp. 27–127.
- Bryce, Trevor (2005). *The Kingdom of the Hittites* (2nd ed.). Oxford University Press: New York.
- Bulu, Müge (2017). A Syro-Cilician Pitcher from a Middle Bronze Age Kitchen at Tell Atchana, Alalakh. In: Ç. Maner, M.T. Horowitz and A.S. Gilbert, eds, Overturning Certainties in Near Eastern Archaeology. A Festschrift in Honor of K. Aslıhan Yener (Culture and History of the Ancient Near East 90). Leiden/Boston: Brill, pp. 101– 116.
- Burde, Cornelia (1974). *Hethitische medizinische Texte* (Studien zu den Boğazköy-Texten 19). Wiesbaden: Harrassowitz.
- Burgin, James Michael (2017). A Proposed Indo-Aryan Etymology for Hurrian timer(i)/ timar(i). Journal of the American Oriental Society 137, pp. 117–120.
- Burmeister, Stefan (2000). Archaeology and Migration: Approaches to an Archaeological Proof of Migration. *Current Anthropology* 41, pp. 539–567.
- Burrow, Thomas (1973). The Proto-Indoaryans. *Journal of the Royal Asiatic Society of Great Britain and Ireland* 105, pp. 123–140.
- Cammarosano, Michele (2018). *Hittite Local Cults* (Writings from the Ancient World 40). Atlanta: Society of Biblical Literature.
- Cammarosano, Michele and Marizza, Marco (2015). Das Land Tumanna und sein König in den hethitischen Quellen. *Die Welt des Orients* 45, pp. 158–192.
- Campbell, Dennis R.M. (2011). Translation among the Hittites. In: S. McElduff and E. Sciarrino, eds, *Complicating the history of western translation. The Ancient Mediter-ranean in perspective*. Manchester/Kinderhook, NY: St. Jerome Publ., pp. 161–175.
- Campbell, Dennis R.M. (2016a). The introduction of Hurrian religion into the Hittite empire. *Religion Compass* 10, pp. 295–306.
- Campbell, Dennis R.M. (2016b). The Old Hurrian verb. *Studi Micenei ed Egeo Anatolici* 49 (= A. Archi and R. Francia, eds, *v1 Congresso Internazionale di Ittitologia. Roma,* 5–9 settembre 2005), pp. 75–92.
- Campbell, Lyle (1993). On Proposed Universals of Grammatical Borrowing. In: H. Aertsen and R.J. Jeffers, eds, *Historical Linguistics 1989. Papers from the 9th International Conference on Historical Linguistics. Rutgers University, 14–18 August 1989* (Amsterdam Studies in the Theory and History of Linguistic Science 1V/106). Amsterdam/ Philadelphia: Benjamins, pp. 91–109.
- Carruba, Onofrio (1962). Review of Friedrich (1959). Kratylos 7, pp. 155-160.

- Carruba, Onofrio (1967). Über die "churritischen" Deklinationsformen im Hethitischen. *Revue hittite et asianique* 25, pp. 151–156.
- Carruba Onofrio (1970). *Das Palaische. Texte, Grammatik, Lexikon* (Studien zu den Boğazköy Texten 10). Wiesbaden: Harrassowitz.
- Carruba, Onofrio (1992). Luwier in Kappadokien. In: D. Charpin and F. Joannès, eds, *La circulation des biens, des personnes et des idées dans le Proche-Orient ancien. Actes de la XXXVIIIe Rencontre Assyriologique Internationale (Paris, 8–10 juillet 1991*). Paris: Éditions Recherche sur les civilisations, pp. 251–257.
- Carruba, Onofrio (2000). Zur Überlieferung einiger Namen und Appellativa der Indo-Arier von Mittani: 'a Luwian Look'? In: B. Forssman and R. Plath, eds, *Indoarisch, Iranisch und die Indogermanistik. Arbeitstagung der Indogermanischen Gesellschaft vom 2. bis 5. Oktober 1997 in Erlangen.* Wiesbaden: Reichert, pp. 51–67.
- Carruba, Onofrio (2003). *Anittae res gestae* (Studia Mediterranea 13). Pavia: Italian University Press.
- Carruba, Onofrio (2008). *Annali etei del Medio Regno* (Studia Mediterranea 18/ Series Hethaea 5). Pavia: Italian University Press.
- Carruba, Onofrio (2009). Indoeuropei ed Anatolia. In: F. Pecchioli Daddi, G. Torri, and C. Corti, eds, *Central-North Anatolia in the Hittite Period: New Perspectives in Light of Recent Research. Acts of the International Conference Held at the University of Florence.* 7–9 *February* 2007 (Studia Asiana 9). Roma: Herder, pp. 1–11.
- Cavigneaux, A. (2009). Duex hymnes sumériens à Utu. In: X. Faivre, B. Lion and C. Michel, eds, *Et il y eut un esprit dans l'Homme. Jean Bottéro et la Mésopotamie*. Paris: De Boccard, pp. 3–18.
- Černyh, E.N., Avilova, L.I., Barceva, T.B. Orlovskaja, L.B., and T.O. Tenejšvili (1992). The Circumpontic Metallurgical Province as a System. *East and West* 41, pp. 11–45.
- Çeçen, Salih and Hecker, Karl (1995). *ina mātika eblum*. Zu einem neuen Text zum Wegerecht. In: M. Dietrich and O. Loretz, eds, *Vom Alten Orient zum Alten Testament. Festschrift für Wolfram Freiherrn von Soden zum 85 Geburtstag am 19. Juli* 1993 (Alter Orient und Altes Testament 240), Münster: Butzon & Bercker, pp. 31– 41.
- Charpin, Dominique (2008). Die Beziehungen zwischen Anatolien und der syro-mesopotamischen Welt in der altbabylonischen Zeit. In: G. Wilhelm, ed, *Hattuša—Boğazköy—Das Hethiterreich im Spannungsfeld des Alten Orients. 6. Internationales Colloquium der Deutschen Orient-Gesellschaft 22.–24. März 2006. Würzburg*, Wiesbaden: Harrassowitz, pp. 95–107.
- Childe, Vere G. (1925). *The Dawn of European Civilization*. London: Gilbert and Rivington.
- Childe, Vere G. (1926). *The Aryans: A Study of Indo-European Origins*. London: Kegan Paul, Trench, Trubner & Co.
- Childe, Vere G. (1930). The Bronze Age. Cambridge: Cambridge University Press.

- Childe, Vere G. (1950). *Prehistoric Migrations in Europe* (Forelesninger 20). Oslo: Instituttet for Sammenlignende Kulturforskning.
- Childe, Vere G. (1958). The Prehistory of European Society. London: Penguin.
- Civil, Miguel (1964). The "Message of Lú-dingir-ra to his Mother" and a Group of Akkado-Hittite "Proverbs". *Journal of Near Eastern Studies* 23, pp. 1–11.
- Civil, Miguel (1975). Lexicography. In: S.J. Lieberman, ed, Sumerological Studies in Honor of Thorkild Jacobsen on His Seventieth Birthday, June 7, 1974 (Assyriological Studies 20). Chicago/London: The University of Chicago Press, pp. 123–157.
- Civil, Miguel (1979). Sur l'inscription de Lugalannemundu. *Revue d'Assyriologie et d'ar*chéologie orientale 73, p. 93.
- Civil, Miguel (1984). Bilingualism in Logographically Written Languages: Sumerian in Ebla. In: L. Cagni, ed, *Il bilinguismo a Ebla. Atti del Convegno Internazionale (Napoli, 19–22 aprile 1982)*. Napoli: Instituto Universitario Orientale, pp. 75–97.
- Clark, Walter Eugene (1917). The Alleged Indo-Iranian Names in Cuneiform Inscriptions. *American Journal of Semitic Languages and Literatures* 33, pp. 261–282.
- Cline, Eric H. (1991). Hittite Objects in the Bronze Age Aegean. *Anatolian Studies* 41, pp. 133–143.
- Clyne, Michael (2003). *Dynamics of Language Contact*. Cambridge: Cambridge University Press.
- Cohen, Eran (2012). *Conditional structures in Mesopotamian Old Babylonian*. Winona Lake: Eisenbrauns.
- Cohen, Yoram (2007). Akkadian Omens from Hattuša and Emar: The *šumma immeru* and *šumma ālu* Omens. Zeitschrift für Assyriologie und Vorderasiatische Archäologie 97, pp. 233–251.
- Cohen, Yoram (2013). *Wisdom from the Late Bronze Age* (Writings from the Ancient World 34). Atlanta: Society of Biblical Literature.
- Cohen, Yoram (2015). Review of De Vos (2013). Zeitschrift für Assyriologie und Vorderasiatische Archäologie 105, pp. 121–126.
- Cohen, Yoram (2017a). The Historical Geography of Hittite Syria: Philology. In: M. Weeden, L.Z. Ullmann, eds, *Hittite Landscape and Geography* (Handbuch der Orientalistik 121). Leiden: Brill, pp. 295–310.
- Cohen, Yoram (2017b). Parallel Hurrian and Hittite *šumma izbu* Omens from Hattuša and Corresponding Akkadian Omens. *Altorientalische Forschungen* 44 (1), pp. 9–18.
- Collins, Billie Jean (1987). § 54 of the Hittite Laws and the Old Kingdom Periphery. *Orientalia* N.S. 56, pp. 136–141.
- Cooper, Jerold S. (1971). Bilinguals from Boghazköi. 1. Zeitschrift für Assyriologie und Vorderasiatische Archäologie 61, pp. 1–22.
- Corti, Carlo (2005). Il racconto delle origini: alcune riflessioni sul testo di Zalpa. In: F. Pecchioli Daddi and M.C. Guidotti, eds, *Narrare gli eventi. Atti del Convegno degli*

*Egittologi e degli Orientalisti italiani in margine alla mostra "La battaglia di Qadesh"* (Studia Asiana 3). Roma: Herder, pp. 113–121.

- Corti, Carlo (2007). The so-called "Theogony" or "Kingship in Heaven". The name of the Song. *Studi Micenei ed Egeo-Anatolici* 49 (= A. Archi and R. Francia, eds, *v1 Congresso Internazionale di Ittitologia. Roma*, 5–9 settembre 2005), pp. 109–121.
- Corti, Carlo (2010). The Religious Traditions of the "Zalpa Kingdom". New Edition of CTH 733 and Related Documents. In: A. Süel, *VII. Uluslararası hititoloji kongresi bildirileri, Çorum 25–31 Ağustos 2008*, Ankara: Anit Matbaa, pp. 139–156.
- Corti, Carlo (2011). "Words of the Clay", "Words of the Water". Introduction to the Hutuši Magical Ritual. In: M. Hutter and S. Hutter-Braunsar, eds, *Hethitische Literatur*. *Überlieferungsprozesse, Textsrukturen, Ausdruckformen und Nachwirken* (AOAT 391). Münster: Ugarit-Verlag, pp. 47–62.
- Corti, Carlo (2017a). The North: Hanhana, Hattena, Ištahara, Hakpiš, Nerik, Zalpuwa, Tummana, Pala and the Hulana River Land. In: M. Weeden, L.Z. Ullmann, eds, *Hittite Landscape and Geography* (Handbuch der Orientalistik 121). Leiden: Brill, pp. 219–238.
- Corti, Carlo (2017b). From Mt. Hazzi to Šapinuwa. Cultural Traditions in Motion in the First Half of the 14th Century BC. *Mesopotamia* 52, pp. 3–20.
- Corti, Carlo and Pecchioli Daddi, Franca (2012). The Power in Heaven: Remarks on the So-Called Kumarbi Cycle. In G. Wilhelm, ed, *Organization, Representation and Symbols of Power in the Ancient Near East. Proceedings of the 54th Rencontre Assyriologique Intenrationale at Würzburg.* 20–25 July 2008. Winona Lake: Eisenbrauns, pp. 611–618.
- Cotticelli-Kurras, Paola (2007). Lessico di linguistica. Alessandria: Edizioni dell'Orso.
- Cotticelli-Kurras, Paola (2009). La ricostruzione della protolingua indoeuropea alla luce dei dati anatolici. *Incontri Linguistici* 32, pp. 117–136.
- Cotticelli-Kurras, Paola (2012). Integrazione lessicale e categorie morfologiche dei prestiti luvi in ittito. In: P. Cotticelli-Kurras, M. Giorgieri, C. Mora, and A. Rizza, eds, *Interferenze linguistiche e contatti culturali in Anatolia tra 11 e 1 millennio a.C. Studi in onore di Onofrio Carruba in occasione del suo 80° compleanno*. Genova: Italian University Press, pp. 73–85.
- Cotticelli-Kurras, Paola (2021). On the Concept of an Anatolian Greek Language Area. *Old World: Journal of Ancient Africa and Eurasia* 1 (1), pp. 1–19.
- Cotticelli-Kurras, Paola and Giusfredi, Federico (2018). Ancient Anatolian languages and cultures in contact: some methodological observations. *Journal of Language Relationship* 16 (3), pp. 172–193.
- Cotticelli-Kurras, Paola and Pisaniello, Valerio (2021). Writing in focus: Mistakes as traces of cognitive behaviour and more in the ancient Anatolian languages. In:
  G. Gabriel, K. Overmann, A. Payne, eds, *Signs—Sounds—Semantics—Nature and Transformation of Writing Systems in the Ancient Near East* (Wiener Offene Orientalistik 13). Münster: Ugarit-Verlag, pp. 49–67.

REFERENCES

- Crisostomo, Jay (2019). *Translation as Scholarship. Language, Writing, and Bilingual Education in Ancient Babylonia.* Berlin/Boston: De Gruyter.
- Czichon, Rainer M., Klinger, Jörg, Hnila, Pavol, Mielke, Dirk Paul, Behrendt, Sonja, Böhm, Herbert, Breuer, Michael, Forster, Christoph, Griggs, Carol, Klein, Marie, Koch, Marko, Kunst, Carl G., Lehmann, Monika, Lorentzen, Brita, Manning, Sturt W., Mahrklein, Kathryn, Purschwitz, Christoph, Rössner, Corinna, Tappert, Claudia and Gillmeister Valsecchi, Margherita A. (2019). Archäologische Forschungen am Oymaağaç Höyük/Nerik 2016–2018. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 151, pp. 37–200.
- Czyzewska, Izabella S (2012). *How to Pray to Hittite Gods: A Semantic and Contextual Analysis of Hittite Prayer Terminology with the New Editions of Selected Prayers of Muršili II*, Dissertation, School of Oriental and African Studies, London.
- D'Agostino, Franco, Spada, Gabriella, Greco, Angela, and Bramanti, Armando (2019). *La lingua dei Sumeri*. Milano: Hoepli.
- D'Alfonso, Lorenzo and Matessi, Alvise (2021). Extracting Cohesion: Fiscal Strategies in the Hittite Staple Economy. In: J. Valk and I. Soto Marín, eds, *Ancient Taxation. The Mechanics of Extraction in Comparative Perspective*. New York: New York University Press, pp. 128–159.
- Dardano, Paola (1997). *L'aneddoto e il racconto in età antico-hittita: la cosiddetta "Cronaca di Palazzo"* (Biblioteca di ricerche linguistiche e filologiche 43). Roma: Il Calamo.
- Dardano, Paola (2006). *Die hethitischen Tontafelkataloge aus Hattuša* (*CTH 276–282*) (Studien zu den Boğazköy-Texten 47). Wiesbaden: Harrassowitz.
- Dardano, Paola (2012). Contatti tra lingue nell'Anatolia preclassica: i rapporti tra l'ittito e l'accadico. *Studi italiani di linguistica teorica e applicata* 3, pp. 393–409.
- Dardano, Paola (2018). Semitic influences in Anatolian languages. In: Ł. Niesiołowski-Spanò and M. Węcowski, eds, *Change, Continuity, and Connectivity. North-Eastern Mediterranean at the turn of the Bronze Age and in the early Iron Age* (Philippika 118). Wiesbaden: Harrassowitz, pp. 345–375.
- Darden, Bill J. (2001). On the Question of the Anatolian Origin of Indo-Hittite. In: R. Drews, ed, *Greater Anatolia and the Indo-Hittite Language Family* (Journal of Indo-European Studies Monograph Series 38). Washington: Institute for the Study of Man, pp. 184–228.
- Dedeoğlu, Fulya and Abay, Eşref (2014). Beycesultan Höyük Excavation Project: New Archaeological Evidence from Late Bronze Layers. *Arkeoloji Dergisi* 19, pp. 1–39.
- De Martino, Stefano (1991). Alcune osservazioni su KBo 111 27. *Altorientalische Forschungen* 18, pp. 54–66.
- De Martino, Stefano (1992). *Die mantischen Texte* (Corpus der hurritischen Sprachdenkmäler 1/7). Roma: Bonsignori.
- De Martino, Stefano (1996). *L'Anatolia occidentale nel medio regno ittita* (Eothen 5). Firenze: Il Vantaggio Editore.

- De Martino, Stefano (1998). Problemi di traduzione per antichi scribi ittiti: il caso della "bilingue hurrico-ittita". *Traduzione, società e cultura* 8, pp. 29–42.
- De Martino, Stefano (2000). Il regno di Mittani. La Parola del Passato 50, pp. 68-102.
- De Martino, Stefano (2003). *Annali e res gestae antico ittiti* (Studia Mediterranea 12). Pavia: Italian University Press.
- De Martino, Stefano (2011). *Hurrian personal names in the kingdom of Hatti* (Eothen 18). Firenze: LoGisma.
- De Martino, Stefano (2012). The 'Song of Release' Twenty-nine Years after its Discovery. *Altorientalische Forschungen* 39 (2), pp. 208–217.
- De Martino, Stefano (2016a). *Da Kussara a Karkemish. Storia del Regno ittita*. Firenze: LoGisma.
- De Martino, Stefano (2016b). The tablets of the *itkalzi* Ritual. *Die Welt des Orients* 46 (2), pp. 202–212.
- De Martino, Stefano (2017a). Central West: Philology. In: M. Weeden and L.Z. Ullmann, eds, *Hittite Landscape and Geography* (Handbuch der Orientalistik 1/121). Leiden: Brill, pp. 253–261.
- De Martino, Stefano (2017b). The Hurrian Language in Anatolia in the Late Bronze Age. In: A. Mouton, ed, *Hittitology Today: Studies on Hittite and Neo-Hittite Anatolia in Honor of Emmanuel Laroche's 100th Birthday / L'Hittitologie Aujourd'hui: Études sur l'Anatolie Hittite et Néo-hittite à l'occasion du centenaire de la naissance d'Emmanuel Laroche—5èmes Rencontres d'Archéologie de l'IFÉA, Istanbul 21–22 novembre 2014.* Istanbul: Institut Français d'Études Anatoliennes Georges Dumézil, pp. 151–162.
- De Martino, Stefano (2019). The Hurrian Song of Release and Fall of Ebla. In *Studia Eblaitica* 5, pp. 124–155.
- De Martino, Stefano (2020). La civiltà degli Ittiti. xv11-x11 secolo a. C. Roma: Carocci.
- De Martino, Stefano (2021). The Origin of the Hittite Cuneiform and the Invention of the Hieroglyphic Luwian Writing. *Pasiphae* 15, pp. 109–116.
- De Martino, Stefano and Imparati, Fiorella (1998). Sifting Through the Edicts and Proclamations of the Hittite Kings. In: S. Alp and A. Süel, eds, *111. Uluslararası Hititoloji Kongresi Bildirileri, Çorum 16–22 Eylül 1996—Acts of the IIIrd International Congress of Hittitology, Çorum, September 16–22, 1996*. Ankara: Türk Tarih Kurumu, pp. 391–400.
- De Martino, Stefano, Murat, Leyla, Süel, Aygül (2013). The Eleventh Tablet of the *itkalzi* Ritual from Šapinuwa. *KASKAL* 10, pp. 131–148.
- De Martino, Stefano and Süel, Aygül (2017). *The "Great* itkalzi *Ritual". The Šapinuwa Tablet Or* 90/1473 and its Duplicate ChS 1/15 (Eothen 22—Essays on the Hurrian Šapinuwa Tablets 2). Firenze: LoGisma.
- De Vos, An (2013). *Die Lebermodelle aus Boğazköy* (Studien zu den Boğazköy-Texten Bh. 5). Wiesbaden: Harrassowitz.

- Del Olmo Lete, Gregorio (2018). *The private archives of Ugarit. A functional analysis* (Barcino Monographica Orientalia 11). Barcelona: Universitat de Barcelona Edicions.
- Del Olmo Lete, Gregoria and Sanmartín, Joaquín (2015). *A Dictionary of the Ugaritic Language in the Alphabetic Tradition Third Revised Edition* (Handbook of Oriental Studies 112). Leiden/Boston: Brill.
- Del Monte, Giuseppe F. (1980). Traduzione e interferenza nei trattati siro-hittiti. *Vicino Oriente* 3, pp. 103–119.
- Del Monte, Giuseppe F. (1981). Note sui trattati fra Hattuša e Kizuwatna. *Oriens Antiquus* 20, pp. 203–221.
- Del Monte, Giuseppe F. (1986a). *Il trattato fra Muršili 11 di Hattuša e Niqmepa' di Ugarit* (Orientis Antiqui Collectio 18). Roma: Istituto per l'Oriente C.A. Nallino.
- Del Monte, Giuseppe F. (1986b). "E gli dei camminano davanti a me …". *Egitto e Vicino Oriente* 9, pp. 59–70.
- Del Monte, Giuseppe F. (1992). *Die Orts- und Gewässernamen der hethitischen Texte. Supplement* (Répertoire Géographique des Textes Cuneiformes 6/2). Wiesbaden: Reichert.
- Del Monte, Giuseppe F. (1995). I testi amministrativi da Maşat Höyük/Tapika. *Orientis Antiqui Miscellanea 2*, pp. 89–138.
- Del Monte, Giuseppe F. (2008). L'opera storiografica di Mursili 11 re di Hattusa, vol. 1: le Gesta di Suppiluliuma. Traslitterazione, traduzione e commento. Pisa: Edizioni Plus— Pisa University Press.
- Del Monte, Giuseppe F. and Tischler, Johann (1978). *Die Orts- und Gewässernamen der hethitischen Texte* (Répertoire Géographique des Textes Cuneiformes 6). Wiesbaden: Reichert.
- Delnero, P. (2020). *How to Do Things With Tears. Ritual Lamenting in Ancient Mesopotamia.* Berlin/Boston: De Gruyter.
- Derakhshani, Jahanshah (1998). Die Arier in den nahöstlichen Quellen des 3. und 2. Jahrtausends v. Chr. *Iran & Caucasus* 2, pp. 141–237.
- Dercksen, J. Gerrit (1996). *The Old Assyrian Copper Trade in Anatolia* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 75). Istanbul/Leiden: Nederlands Instituut voor het Nabije Oosten.
- Dercksen, J. Gerrit (2001). 'When we met in Hattush.' Trade according to Old Assyrian texts from Alishar and Boğazköy. In: W.H. van Soldt et al., eds, Veenhof Anniversary Volume. Studies Presented to Klaas R. Veenhof on the Occasion of his Sixty-Fifth Birthday. (Publications de l'Institut historique-archéologique néerlandais de Stamboul 89). Istanbul/Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 39– 66.
- Dercksen, J. Gerrit (2002). Kultureller und wirtschaftlicher Austausch zwischen Assyrern und Anatoliern (Anfang des zweiten Jahrtausends v. Chr.). In: H. Blum, B. Faist, O. Pfälzner, and A.-M. Wittke, eds, *Brückenland Anatolien? Ursachen, Extensität und*

*Modi des Kulturaustausches zwischen Anatolien und seinen Nachbarn*. Tübingen: Attempto, pp. 25–44.

- Dercksen, J. Gerrit (2004a). Some Elements of Old Anatolian Society in Kaniš. In: J.G. Dercksen, ed, Assyria and Beyond. Studies Presented to Morgens Trolle Larsen (Publications de l'Institut historique-archéologique néerlandais de Stamboul 100). Istanbul/Leiden: Nederlands Instituut voor het nabije oosten, pp. 137–177.
- Dercksen, J. Gerrit (2004b). *Old Assyrian Institutions*. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Dercksen, J. Gerrit (2004c). Old Assyrian *uthurum* "characteristic, mark" and *lū uthurum* "it surely was a sign". *Nouvelles Assyriologiques Brèves et Utilitaires* 2004 (1), pp. 8–9.
- Dercksen, J. Gerrit (2005). Again on Old Assyrian *tuzinnum*. *Nouvelles Assyriologiques Brèves et Utilitaires* 2005 (2), p. 39.
- Dercksen, J. Gerrit (2007). On Anatolian Loanwords in Akkadian Texts from Kültepe. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 97, pp. 26–46.
- Dercksen, J. Gerrit (2010). Anitta and the Man of Purušhanda. In: Ş. Dönmez, ed, DUB.SAR É.DUB.BA.A—Veysel Donbaz'a Sunulan Yazılar / Studies Presented in Honour of Veysel Donbaz. Istanbul: Ege Yayınları, pp. 71–75.
- Deroy, L. (1956). L'emprunt linguistique. Paris: Les Belles Lettres.
- Deutscher, Guy (2000). Syntactic Change in Akkadian: The Evolution of Sentential Complementation. Oxford: Oxford University Press.
- Devecchi, Elena (2005). *Gli annali di Hattušili 1 nella versione accadica* (Studia Mediterranea 16). Pavia: Italian University Press.
- Devecchi, Elena (2015). Trattati internazionali ittiti. Brescia: Paideia.
- Devecchi, Elena (2018). Details that Make the Difference: The Akkadian Manuscripts of the "Šattiwaza-Treaties". *Die Welt des Orients* 48, pp. 72–95.
- Deventer, Hans J.M. van and Huÿssteen, Pieter J.J. (1992). The orthography and phonology of the Akkadian texts from Hatti found at Ugarit. *Journal for Semitics* 4, pp. 35–50.
- Diakonoff, Igor M. (1972). Die Arier im Vorderen Orient: Ende eines Mythos (Zur Methodik der Erforschung verschollener Sprachen), *Orientalia* N.S. 41, pp. 91–120.
- Dietrich, Manfried and Loretz, Oswald (1969). Die soziale Struktur von Alalah und Ugarit (II): Die sozialen Gruppen *hupše-namê*, *haniahhe-ekû*, *ehele-šūzubu* und *marjanne* nach Texten aus Alalah IV. *Die Welt des Orients* 5, pp. 57–93.
- Dijkstra, Meindert (2008). New Joins in the Hurrian Epic of Kešši and their Ramifications. *Ugarit-Forschungen* 40, pp. 205–223.
- Dijkstra, Meindert (2014). The Hurritic Myth about Šaušga of Nineveh and Hašarri (CTH 776.2). *Ugarit-Forschungen* 45, pp. 65–94.
- Dinçol, Ali M., Dinçol, Belkış, Hawkins, J. David, and Wilhelm, Gernot (1993). The 'Cruciform Seal' from Boğazköy-Hattusa. *Istanbuler Mitteilungen* 43 (= Festschrift für Peter Neve), pp. 87–106.

- Dommelen, Peter van (2014). Moving On: Archaeological Perspectives on Mobility and Migration. *World Archaeology* 46 (4), pp. 477–483.
- Draffkorn, Anne Elizabeth (1959). *Hurrians and Hurrian at Alalah: An Ethno-Linguistic Analysis*, Dissertation, University of Pennsylvania.
- Dumézil, Georges (1952). *Les dieux souverains des indo-européens*. Paris: Presses Universitaires de France.
- Dumont, Paul-Émile (1947). Indo-Aryan Names from Mitanni, Nuzi, and Syrian Documents. *Journal of the American Oriental Society* 67, pp. 251–253.
- Durand, Jean-Marie (2001). Une alliance matrimoniale entre un marchand assyrien de Kanesh et un marchand Mariote. In: W.H. van Soldt, J.G. Dercksen, N.J.C. Kouwenberg, and Th.J.H. Krispijn, eds, *Veenhof Anniversary Volume. Studies Presented to Klaas R. Veenhof on the Occasion of his Sixty-Fifth Birthday* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 89). Istanbul/Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 119–132.
- Durham, John W. (1976). *Studies in Boğazköy Akkadian*, Dissertation, Harvard University.
- Düring, Bleda (2011). *The Prehistory of Asia Minor: From Complex Hunter–Gatherers to Early Urban Societies*. Cambridge: Cambridge University Press.
- Ebeling, Erich (1954). Ein Hymnus auf die Suprematie des Sonnengottes in Exemplaren aus Assur und Boghazköi. *Orientalia* N.S. 23 (3), pp. 209–216.
- Edzard, Dietz Otto (1977). Der gegenwärtige Stand der Akkadistik (1975) und ihre Aufgaben. Zeitschrift der Deutschen Morgenländischen Gesellschaft, Supplement 111/1, pp. 47–51.
- Edzard, Dietz Otto (2003). *Sumerian Grammar* (Handbook of Oriental Studies 71). Leiden: Brill.
- Efe, Turan (2007). The theories of the 'Great Caravan Route' between Cilicia and Troy: the Early Bronze Age III period in inland western Anatolia. *Anatolian Studies* 57, pp. 47–64.
- Ehringhaus, Horst (2005). *Götter, Herrscher, Inschriften. Die Felsreliefs der hethitischen Großreichszeit in der Türkei.* Mainz am Rhein: Verlag Phillip von Zabern.
- Elsen-Novák, Gabriele and Novák, Mirko (2020). Eine *kārum*-zeitliche Route durch Kilikien? Ein Beitrag zu den mittelbronzezeitlichen Handelsrouten. In: M. Ceccarelli, J. Baldwin, and J. Matuszak, eds, *mu-zu an-za*<sub>3</sub>-še<sub>3</sub> *kur-ur*<sub>2</sub>-še<sub>3</sub> *he*<sub>2</sub>-ĝal<sub>2</sub>. *Altorientalistische Studien zu Ehren von Konrad Volk* (dubsar 17). Münster: Zaphon, pp. 49– 68.
- Emre, Kutlu (1979). The Early Bronze Age at Maşat Höyük. Belleten 43 (169), pp. 21-48.
- Erbil, Yığıt and Mouton, Alice (2018). From Ikkuwaniya to Ura: A Reassessment of the Geography of the Hulaya River Land According to the Hittite Archaeological and Philological Evidence. *Anatolica* 44, pp. 75–122.
- Ertekin, Ahmet, Ediz, İsmet (2003). The Unique Sword from Boğazköy/Hattuša. In:

M.J. Mellink, E. Porada, and T. Özgüç, eds, *Aspects of Art and Iconography: Anatolia and its Neighbors. Studies in Honor of Nimet Özgüç.* Ankara: Türk Tarih Kurumu Basımevi, pp. 720–725.

- Faist, Betina (2001). Die Handelsbeziehungen zwischen Assyrien und Anatolien in der zweiten Hälfte des 2. Jt.s v. ehr. unter besonderer Berücksichtigung des Metallhandels. In: H. Klinkott, ed, Anatolien im Lichte kultureller Wechselwirkungen. Akkulturationsphänomene in Kleinasien und seinen Nachbarregionen während des 2. und 1. Jahrtausends v. Chr. Tübingen: Attempto, pp. 53–66.
- Falk, Harry (2002). Vom Vorteil des Schreckens: Gesellschaft und Männerbund in Indien. In: R.P. Das and G. Meiser, eds, *Geregeltes Ungestüm. Bruderschaften und Jugendbünde bei indogermanischen Völkern*. Bremen: Hempen Verlag, pp. 27–42.
- Field, Fredric W. (2002). *Linguistic Borrowing in Bilingual Context* (Studies in Language Companion Series 62). Amsterdam: Benjamins.
- Feiler, Wolfgang (1939). Die Sprache der obermesopotamischen Arier. *Wiener Zeitschrift für die Kunde des Morgenlandes* 46, pp. 223–241.
- Fincke, Jeanette C. (2004). Zu den hethitischen Übersetzungen babylonischer Omentexte: die kalendarischen und astrologischen Omina in KUB VIII 35. *Studi Micenei ed Egeo-Anatolici* 46 (2), pp. 215–241.
- Fincke, Jeanette C. (2009a). KBo 36, 70: Duplikat zum Text mit Sonnenomina KUB 4, 63 und KUB 30, 9+. *Nouvelles Assyriologiques Brèves et Utilitaires* 2009 (3), pp. 52–53.
- Fincke, Jeanette C. (2009b). Zu den akkadischen Hemerologien aus Hattuša (*CTH* 546), Teil I. Eine Hemerologie für das "Rufen von Klagen" (*šigû šasû*) und das "Reinigen seines Gewandes" (*şubāt-su ubbubu*): *KUB* 4, 46 (+) *KUB* 43, 1. *Journal of Cuneiform Studies* 61, pp. 111–125.
- Fincke, Jeanette C. (2010a). Zu den akkadischen Hemerologien aus Hattuša (*CTH* 546), Teil II: die "Opferbrot-Hemerologie". *Journal of Cuneiform Studies* 62, pp. 127–145.
- Fincke, Jeanette C. (2010b). KBo 36, 63: Duplikat zum Text mit Erdbebenomina KUB 37, 163. *Nouvelles Assyriologiques Brèves et Utilitaires* 2010 (1), pp. 9–11.
- Fleming, Daniel E. (2004). *Democracy's Ancient Ancestors: Mari and Early Collective Governance*. Cambridge: Cambridge University Press.
- Forlanini, Massimo (1984). Die 'Götter von Zalpa'. Hethitische Götter und Städte am Schwarzen Meer. *Zeitschrift für Assyriologie* 74, pp. 245–266.

Forlanini, Massimo (1987). Toponymie antique d'origine hattie? *Hethitica* 8, pp. 105–122.

Forlanini, Massimo (1998). L'Anatolia occidentale e gli Hittiti: Appunti su alcune recenti scoperte e le loro conseguenze per la geografia storica. *Studi Micenei ed Egeo-Anatolici* 40, pp. 219–253.

- Forlanini, Massimo (2004a). La nascita di un impero. Considerazioni sulla prima fase della storia ittita: da Kaneš a Hattuša. *Orientalia* N.S. 73, pp. 363–389.
- Forlanini, Massimo (2004b). Considerazioni sullo spostamento del centro del potere nel periodo della formazione dello stato hittita. In: M. Mazoyer and O. Casabonne,

REFERENCES

eds, *Studia Anatolica et Varia. Mélanges offerts au Professeur René Lebrun* (Collection KUBABA / Série Antiquité 6), Paris: L'Harmattan, pp. 249–269.

- Forlanini, Massimo (2007). The Offering List of KB0 4.13 (117'-48') to the local gods of the kingdom, known as 'Sacrifice List', and the history of the formation of the early Hittite state and its initial growing beyond central Anatolia. *Studi Micenei ed Egeo-Anatolici* 49 (= A. Archi and R. Francia, eds, VI Congresso Internazionale di Ittitologia. Roma, 5–9 settembre 2005), pp. 259–280.
- Forlanini, Massimo (2008). The Historical Geography of Anatolia and the Transition from the kārum-Period to the Early Hittite Empire. In: J.G. Dercksen, ed, *Anatolia* and the Jazira during the Old Assyrian Period (Publications de l'Institut historiquearchéologique néerlandais de Stamboul 111). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 57–86.
- Forlanini, Massimo (2010). An Attempt at Reconstructing the Branches of the Hittite Royal Family of the Early Kingdom Period. In: Y. Cohen, A. Gilan, J.L. Miller, *Pax Hethitica: Studies on the Hittites and their Neighbours in Honour of Itamar* (Studien zu den Boğazköy Texten 51). Wiesbaden: Harrassowitz, pp. 115–135.
- Forlanini, Massimo (2012). Rev. Barjamovic 2011. Bibliotheca Orientalis 69, pp. 290–299.
- Forlanini, Massimo (2017a). South Central: The Lower Land and Tarhuntassa. In: M. Weeden and L.Z. Ullmann, eds, *Hittite Landscape and Geography*. Leiden: Brill, pp. 239–252.
- Forlanini, Massimo (2017b). Le rôle de Purušhanda dans l'histoire hittite. In: A. Mouton, ed, *Hittitology Today: Studies on Hittite and Neo-Hittite Anatolia in Honor of Emmanuel Laroche's 100th Birthday / L'Hittitologie Aujourd'hui: Études sur l'Anatolie Hittite et Néo-hittite à l'occasion du centenaire de la naissance d'Emmanuel Laroche— 5èmes Rencontres d'Archéologie de l'IFÉA, Istanbul 21–22 novembre 2014.* Istanbul: Institut Français d'Études Anatoliennes, pp. 125–150.
- Forrer, Emil O. (1919). Die acht Sprachen der Boghazköi-Inschriften. Sitzungsberichte der Preussischen Akademie der Wissenschaften 35, pp. 1029–1041.
- Forrer, Emil (1922). Die Inschrfiten und Sprachen des Hatti-Reiches. Zeitschrift der Deutschen Morgenländischen Gesellschaft 76 [n.F. 1], pp. 174–269.
- Fournet, Arnaud (2010). About the Mitanni-Aryan Gods. *Journal of Indo-European Studies* 38, pp. 1–15.
- Fournet, Arnaud (2012). La question des mots et noms mittanni-aryens, légués par les Indo-Iraniens du Mittanni. *Res Antiquae* 9, pp. 221–250.
- Frachetti, Micheal D. (2011). Migration Concepts in Central Eurasian Archaeology. *Annual Review of Anthropology* 40, pp. 195–212.
- Francia, Rita (2015a). Archivi e biblioteche a Hattuša: alcune riflessioni. In: E. Asero, ed, Strade di Uomini e di Idee. La circolazione materiale e interculturale tra Mediterraneo orientale e Vicino Oriente antico. Atti del convegno (Milano, 8–9 luglio 2013). Roma: Aracne, pp. 33–44.

- Francia, Rita (2015b). L'archivio di tavolette del complesso B-C-H di Büyükkale e l'organizzazione degli archivi reali ittiti. Considerazioni preliminari. *Vicino Oriente* 19, pp. 251–264.
- Frangipane, Marcella (2001). Centralization Processes in Greater Mesopotamia: Uruk 'Expansion' as the Culmination of an Early System of Intra-Regional Relations. In: M.S. Rothman, ed, Uruk Mesopotamia and its Neighbors: Cross-Cultural Interactions in the Era of State Formation. Santa Fe: School of American Research, pp. 307–348.
- Frangipane, Marcella (2011). Arslantepe-Malatya: A Prehistoric and Early Historic Center in Eastern Anatolia. In: S.R. Steadman and G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia* 10,000–323 B.C.E. Oxford: Oxford University Press, pp. 968– 992.
- French, David H. (1965). Prehistoric Sites in the Göksu Valley. *Anatolian Studies* 15, pp. 177–201.
- Friedmann, Elizabeth S. (2000). *Technological Style in Early Bronze Age Anatolia: The Interrelationship between Ceramic and Metal Production at Göltepe*, Dissertation, University of Chicago.
- Friedman, Victor A. (2006). Balkans as a Linguistic Area. In: K. Brown, ed, *Encyclopedia of Language & Linguistics*, Second Edition, volume 1. Oxford: Elsevier, pp. 657–672.
- Friedrich, Johannes (1925). Ein Bruchstück des Vertrages Mattiwaza-Suppiluliuma in hethitischer Sprache? *Archiv für Keilschriftforschung* 2, pp. 119–124.
- Friedrich, Johannes (1928). Arier. In: E. Ebeling and B. Meissner, eds, *Reallexikon der Assyriologie*. Berlin/Leipzig: de Gruyter, pp. 144–148.
- Friedrich, Johannes (1943). Mitraššil Uruuanaššel. Orientalia N.S. 12, pp. 311–317.
- Friedrich, Johannes (1959). *Die hethitischen Gesetze. Transkription, Übersetzung, sprachliche Erläuterungen und vollständiges Wörterverzeichnis* (Documenta et monumenta Orientis antiqui 7). Leiden: Brill.
- Furlan, Metka (2007). Eine anatolisch-slawische Parallele—Palaisch *tarta* und urslawisch \**tort*<sup>\*</sup>. In: D. Groddek and M. Zorman, eds, *Tabularia Hethaeorum. Hethitologische Beiträge Silvin Košak zum 65. Geburtstag* (Dresdner Beiträge zur Hethitologie 25). Wiesbaden: Harrassowitz, pp. 293–298.
- Gait, John, Müller, Noémi S., Kiriatzi, Evangelia and Baird, Douglas (2018). Examining the Dynamics of Early Bronze Age Pottery Production and Distribution in the Konya Plain of South Central Anatolia, Turkey. In: E. Alram-Stern and B. Horejs, eds, *Pottery Technologies and Sociocultural Connections Between the Aegean and Anatolia During the 3rd Millennium Bc*. Vienna: Österreichischen Akademie der Wissenschaften, pp. 105–117.
- Gamkrelidze, Tamaz V. (2008). The problem of the Origin of the Hittite Cuneiform. *Bulletin of the Georgian National Academy of Sciences* 2 (3), pp. 169–174.
- Gander, Max (2010). *Die geographischen Beziehungen der Lukka-Länder* (Texte der Hethiter 27). Heidelberg: Universitätsverlag Winter.

- Gander, Max (2017a). The West: Philology. In: M. Weeden and L.Z. Ullmann, eds, *Hittite Landscape and Geography* (Handbuch der Orientalistik 1/121). Leiden: Brill, pp. 262–281.
- Gander, Max (2017b). An Alternative View on the Location of Arzawa. In: A. Mouton, ed, Hittitology Today: Studies on Hittite and Neo-Hittite Anatolia in Honor of Emmanuel Laroche's 100th Birthday / L'Hittitologie Aujourd'hui: Études sur l'Anatolie Hittite et Néo-hittite à l'occasion du centenaire de la naissance d'Emmanuel Laroche—5èmes Rencontres d'Archéologie de l'IFÉA, Istanbul 21–22 novembre 2014. Istanbul: Institut Français d'Études Anatoliennes Georges Dumézil, pp. 163–190.
- García Ramón, José Luis (2015 [2017]). Old Indo-Aryan Lexicon in the Ancient Near East: Proto-Indo-European, Anatolian and Core Indo-European. *Atti del Sodalizio Glottologico Milanese* 10, pp. 17–33.
- Garelli, Paul (1963). *Les Assyriens en Cappadoce*. Paris: Bibliotheque archéologique et historique de l'Institut Français d'Archéologie d'Istanbul.
- Garelli, Paul (1969). *Le Proche-Orient asiatique. Des origines aux invasions des peuples de la mer.* Paris: PUF.
- Gelb, Ignace J. (1947). *Glossary of Old Akkadian*. Chicago: The University of Chicago Press.
- Gentile, Simone (2019). Indo-Iranian personal names in Mitanni: A source for cultural reconstruction. *Onoma* 54, pp. 137–159.
- Genz, Hermann (2011). Foreign Contacts of the Hittites. In: H. Genz and D.P. Mielke, eds, *Insights into Hittite History and Archaeology* (Colloquia Antiqua 2). Leuven/Paris/ Walpole, MA: Peeters, pp. 301–332.
- Genz, Hermann, and Mielke, Dirk-Paul (2011). Research on the Hittites: A Short Overview. In: H. Genz and D.P. Mielke, eds, *Insights into Hittite History and Archaeology* (Colloquia Antiqua 2). Leuven/Paris/Walpole, MA: Peeters, pp. 1–29.
- George, Andrew R. (2003). *The Babylonian Gilgameš Epic. Introduction, Critical Edition and Cuneiform Texts.* Oxford: Oxford University Press.
- Gerçek, N. İlgi (2012). *The Kaška and the Northern Frontier of Hatti*, Dissertation, University of Michigan.
- Gerçek, N. İlgi (2017). Approaches to Hittite Imperialism: A View from the >Old Kingdom< and >Early Empire< Periods (c. 1650–1350 BCE). In: A. Schachner, ed, Innovation versus Beharrung. Was macht den Unterschied des hethitischen Reichs im Anatolien des 2. Jahrtausends v. Chr.? Internationaler Workshop zu Ehren von Jürgen Seeher Istanbul, 23–24. Mai 2014 (Byzas 23). Istanbul: Ege Yayınları, pp. 21–38.</li>
- Gilan, Amir (2014). The Hittite Offering Lists of Deceased Kings and Related Texts (CTH 610–611) as Historical Sources. *KASKAL* 11, pp. 86–101.
- Gilan, Amir (2015). *Formen und Inhalte althethitischer Literatur* (Texte der Hethiter 29). Heidelberg: Carl Winter.
- Gimbutas, Marija (1970). Proto-Indo-European Culture: The Kurgan Culture during the

Fifth, Fourth, and Third Millennia B.C. In: G. Cardona, H. Hoenigswald and A. Senn, eds, *Indo-European and the Indo-Europeans*. Philadelphia: University of Pennsylvania Press, pp. 155–198.

- Giorgadze, Grigol (2000). Zur ethnischen Herkunft der Kaškäer (Kaskäer) und Abeschläer von hethitischen und assyrischen Keilschrifttexten. Akhaltsikhe.
- Giorgieri, Mauro (2000a). Schizzo grammaticale della lingua hurrica. *La Parola del Passato* 55, pp. 171–277.
- Giorgieri, Mauro (2000b). L'onomastica hurrita. La Parola del Passato 55, pp. 278–295.
- Giorgieri, Mauro (2005). Bedeutung und Stellung der 'mittanischen' Kultur im Rahmen der Kulturgeschichte Vorderasiens. In: D. Prechel, ed, *Motivation und Mechanismen des Kulturkontaktes in der späten Bronzezeit*. Firenze: LoGisma Editore, pp. 77–101.
- Giorgieri, Mauro (2009). Das Öl und der Löwe in der mythologischen Text KBo. 27.217 (ChS 1/6 Nr. 10). In: G. Wilhelm, ed, *General Studies and Excavations at NUZI 11/2, Studies in honor of David I. Owen on the occasion of his 65th birthday, October 28,* 2005 (Studies on the Civilization and Culture of Nuzi and the Hurrians 17). Bethesda, MD: Eisenbrauns, pp. 249–258.
- Giorgieri, Mauro (2010). Zu den sogenannten Wurzelerweiterungen des Hurritischen. Allgemeine Probleme und Einzelfälle. In: L. Kogan, N. Koslova, S. Loesov, and S. Tishchenko, eds, *Language in the Ancient Near East. Proceedings of the* 53<sup>e</sup> Rencontre Assyriologique Internationale. Vol. 1, Part 2 (Orientalia et Classica 30/2). Winona Lake: Eisenbrauns, pp. 927–947.
- Giorgieri, Mauro (2012). Anahi, anahiti: luvio o hurrico? In: P. Cotticelli Kurras, M. Giorgieri, C. Mora, and A. Rizza, eds, *Interferenze linguistiche e contatti culturali in Anatolia tra 11 e 1 millennio a.C. Studi in onore di Onofrio Carruba in occasione del suo 80° compleanno* (Studia Mediterranea 24). Genova: Italian University Press, pp. 139–152.
- Giorgieri, Mauro (2013). Diffusion et caractéristiques de la culture écrite d'origine hourrite dans le Proche-Orient asiatique et à Ougarit. In: P. Bordreuil, F. Ernst-Pradal, M.G. Masetti-Rouault, H. Rouillard-Bonraisin, and M. Zink, eds, Les écritures mises au jour sur le site antique d'Ougarit (Syrie) e leur déchiffrement. 1930–2010. Commémoration du quatre-vingtième anniversaire du déchiffrement de l'alphabet cunéiforme de Ras Shamra-Ougarit. Colloque international tenu au Collège de France le jeudi 2 décembre 2010, et à l'Académie des Inscriptions et Belles-Lettres le vendredi 3 décembre 2010. Paris: Académie des Inscriptions et Belles-Lettres, pp. 157–185.
- Giorgieri, Mauro, and Mora, Clelia (2010). Kingship in Hatti during the 13th Century: Forms of Rule and Struggles for Power before the Fall of the Empire. In: Y. Cohen, A. Gilan and J.L. Miller, eds, *Pax Hethitica. Studies on the Hittites and their Neighbours in Honour of Itamar Singer* (Studien zu den Boğazköy Texten 51). Wiesbaden: Harrassowitz, pp. 136–157.
- Giorgieri, Mauro and Wilhelm, Gernot (1995). Privative Opposition im Syllabar der hurritischen Texte aus Boğazköy. In: D.I. Owen and G. Wilhelm, eds, *Edith Porada*

*Memorial Volume* (Studies on the Civilization and Culture of Nuzi and the Hurrians 7). Bethesda: Capital Decisions, pp. 37–55.

- Girginer, K. Serdar and Collon, Dominique (2014). Cylinder and Stamp Seals from Tatarlı Höyük. *Anatolian Studies* 64, pp. 59–72.
- Giusfredi, Federico (2012). The Akkadian Medical Text KUB 37.1. *Altorientalische Forschungen* 39, pp. 49–63.
- Giusfredi, Federico (2018). Lahan, *lahannum*, <sup>DUG</sup>*lahanni-*: an exotic flask. *Nouvelles* Assyriologiques Brèves et Utilitaires 2018 (1), pp. 9–12.
- Giusfredi, Federico (2020a). On the Old Assyrian *tuzzinnum*. In: M. Cammarosano, and E. Devecchi, eds, talugaeš witteš *Ancient Near Eastern Studies Presented to Stefano de Martino on the Occasion of his 65th Birthday* (Kasion 2). Münster: Zaphon, pp. 215– 224.

Giusfredi, Federico (2020b). I luvi a Kaneš e i loro nomi. Aula Orientalis 38, pp. 245–254.

- Giusfredi, Federico (2020c). *A Study in the Syntax of the Luwian Language* (Texte der Hethiter 30). Heidelberg: Carl Winter.
- Giusfredi, Federico (2020d). *Il Vicino Oriente antico. Breve storia dalle origini alla caduta di Babilonia.* Firenze: Carocci.
- Giusfredi, Federico (forthcoming-a). Interculturality and Linguistic Legacy in the Syro-Anatolian Polities at the Turn of the Second Millennium BCE. Forthcoming in:
  L. d'Alfonso, I. Calini, R. Hawley, and M.G. Masetti-Rouault, eds, *Between the Age of Diplomacy and the First Great Empire (1200–900 BCE): Ancient Western Asia beyond the Paradigm of Collapse and Regeneration* (ISAW Monographs Series). New York: NYU Press.
- Giusfredi, Federico (forthcoming-b). On the Aegean-Anatolian historical and linguistic interface in the Final Bronze Age. *News from the Lands of the Hittites*.
- Giusfredi, Federico (forthcoming-c). Was Hurrian spoken in Central Anatolia during the Middle Bronze Age and the early Age of Hatti? Forthcoming in the proceedings of the conference *Crossroads IV Migration and Mobility in the Ancient Near East and Egypt*.
- Giusfredi, Federico and Matessi, Alvise (2021). Archaeolinguistics and the historical study of contacts in Anatolia. In: F. Giusfredi and Z. Simon, eds, *Studies in the Languages and Language Contact in Pre-Hellenistic Anatolia* (Barcino Monographica Orientalia 17/ Series Anatolica et Indogermanica 7). Barcelona: Universitat de Barcelona, pp. 11–44.
- Giusfredi, Federico, Merlin, Stella, and Pisaniello, Valerio (forthcoming). Phraseology and literary *topoi* between Anatolia, the Aegean and the ancient Near East. Paper presented at the International Workshop *Languages and Cultures in Contact in the Ancient Mediterranean*. Verona, 21–22 February 2019.
- Giusfredi, Federico and Pisaniello, Valerio (2019a). KUB 37.122: a Mesopotamian Lexical List? *Vicino Oriente* 23, pp. 65–80.

- Giusfredi, Federico and Pisaniello, Valerio (2019b). Three Cuneiform Notes. *Bibliotheca Orientalis* 76, pp. 25–35.
- Giusfredi, Federico and Pisaniello, Valerio (2020). Grammatical categories in contact: gender assignment criteria in the Hittite borrowings from the neighbouring languages. In: L. Repanšek, H. Bichlmeier, and V. Sadovski, eds, *Proceedings of the international conference of the Society for Indo-European Studies and IWoBA XII, Ljubljana* 4–7 June 2019. Celebrating one hundred years of Indo-European comparative linguistics at the University of Ljubljana (Studien zur historisch-vergleichenden Sprachwissenschaft 17). Hamburg: Baar-Verlag, pp. 209–233.
- Giusfredi, Federico and Pisaniello, Valerio (2021). The population, the language and the history of Yadiya/Sam'al. In: A. Payne, S. Velhartická, and P. Wintjes, eds, *Beyond all Boundaries. Anatolia in the First Millennium BC* (Orbis Biblicus et Orientalis 295). Leuven/Paris/Bristol: Peeters, pp. 151–185.
- Glatz, Claudia (2020). *The Making of Empire in Bronze Age Anatolia. Hittite Sovereign Practice, resistance, and Negotiation.* Cambridge: Cambridge University Press.
- Glatz, Claudia and Matthews, Roger (2005). Anthropology of a Frontier Zone: Hittite-Kaska Relations in Late Bronze Age North-Central Anatolia. *Bulletin of the American School of Oriental Research* 339, pp. 47–65.
- Goedegebuure, Petra M. (2008). Central Anatolian Languages and Language Communities in the Colony Period: A Luwian-Hattian Symbiosis and the Independent Hittites. In: J.G. Dercksen, ed, *Anatolia and the Jazira during the Old Assyrian Period* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 111). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 137–180.
- Goedegebuure, Petra M. (2010). The Alignment of Hattian: An Active Language with an Ergative Base. In: Proceedings of the 53e Rencontre Assyriologique Internationale.
  Vol. 1: Language in the Ancient Near East (Babel und Bibel 4/1-2). Winona Lake: Eisenbrauns, pp. 949–981.
- Goetze, Albrecht (1933). *Die Annalen des Muršiliš* (Mitteilungen der Vorderasiatisch-Agyptischen Gesellschaft 38). Leipzig: J.C. Hinrichsche Buchhandlung.
- Goetze, Albrecht (1954). Some Groups of Ancient Anatolian Proper Names. *Language* 30, pp. 349–359.
- Goetze, Albrecht (1957). *Kleinasien. Kulturgeschichte des Alten Orient. 111, 1.* München: Beck.
- Goetze, Albrecht (1958). The Sibilants of Old Babylonian. Revue d'Assyriologie et d'archéologie orientale 52, pp. 137–149.
- Gokcumen, Omer and Frachetti, Micheal (2020). The Impact of Ancient Genome Studies in Archaeology. *Annual Review of Anthropology* 49, pp. 277–298.
- Goldman, Hetty (1956). *Excavations at Gözlü Kule, Tarsus. 11: From the Neolithic through the Bronze Age*. Princeton: Princeton University Press.
- Goodnick Westenholz, Joan (1997). *Legends of the Kings of Akkade. The Texts* (Mesopotamian Civilizations 7). Winona Lake, IN: Eisenbrauns.

- Gordin, Shai (2010). *Scriptoria* in Late Empire Period Hattusa: The Case of the É GIŠ. KIN.TI. In: Y. Cohen, A. Gilan, and J.L. Miller, eds, *Pax Hethitica. Studies on the Hittites and their Neighbours in Honour of Itamar Singer* (Studien zu den Boğazköy-Texten 51). Wiesbaden: Harrassowitz, pp. 158–177.
- Görke, Susanne (2010). Das Ritual der Aštu (CTH 490). Rekonstruktion und Tradition eines hurritisch-hethitischen Rituals aus Boğazköy/Hattuša (Culture and History of the Ancient Near East 40). Leiden/Boston: Brill.
- Gorke, Suzanne (2018). Die palaischen Texte aus Hattusa. Paper presented at the 64th *Rencontre Assyriologique Internationale*, Innsbruck, July 16–20, 2018.
- Görke, Susanne (2020a). Hatti, Pala und Luwiya. Ausgewählte palaische und luwische Festrituale im Vergleich. In: S. Görke and C.W. Steitler, eds, *Cult, Temple, Sacred Spaces. Cult Practices and Cult Spaces in Hittite Anatolia and Neighbouring Cultures* (Studien zu den Boğazköy Texten 66). Wiesbaden: Harrassowitz, pp. 292– 304.
- Görke, Susanne (2020b). Heterogramme in hurritischen Texten aus Boğazköy und Nordsyrien. *Journal of Language Relationship* 18, pp. 1–12.
- Gosden, Chris (2003). *Prehistory: A Very Short Introduction*. Oxford: Oxford University Press.
- Greenberg, Raphael (2007). Transcaucasian Colors: Khirbet Kerak Ware at Khirbet Kerak (Tel Bet Yerah). In: B. Lyonnet, ed, *Les cultures des Caucase (VIe–IIIe mil-lénaires avant notre ère*). Paris: CNRS Éditions, pp. 257–268.
- Greenberg, Raphael and Palumbi, Giulio (2015). Corridors and Colonies: Comparing Fourth–Third Millennia BC Interactions in Southeast Anatolia and the Levant. In:
  B. Knapp and P. van Dommelen, eds, *The Cambridge Prehistory of the Bronze and Iron Age Mediterranean*. Cambridge: Cambridge University Press, pp. 111–138.
- Guichard, Michaël (2008). Naḥur et la route des marchands assyriens à l'époque de Zimrî-Lîm. In: J.G. Dercksen, ed, *Anatolia and the Jazira during the Old Assyrian Period* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 111). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 43–56.
- Günbattı, Cahit (1997). Kültepe'den Akadli Sargon'a Âit Bir Tablet. Archivum Anatolicum 3, pp. 131–155.
- Günbattı, Cahit (2001). The River Ordeal in Ancient Anatolia. In: J.G. Dercksen, N.J.C. Kouwenberg, Th.J.H. Krispijn, and W.H. van Soldt, eds, *Veenhof Anniversary Volume. Studies Presented to Klaas R. Veenhof on the Occasion of his Sixty-Fifth Birthday* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 89). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 151–160.
- Günel, Sevinç (1999a). Panaztepe 11. M.Ö. 2. Bine Tarihlendirilen Panaztepe Seramiğinin Batı Anadolu ve Ege Arkeolojisindeki Yeri ve Önemi / Die Keramik von Panaztepe und ihre Bedeutung für Westkleinasien und die Ägäis im 2. Jahrtausend. Ankara: Türk Tarih Kurumu.

- Günel, Sevinç (1999b). Vorbericht über die mittel- und spätbronzezeitliche Keramik vom Liman Tepe. *Istanbuler Mitteilungen* 49, pp. 41–82.
- Gunter, Ann C. (1991). *The Bronze Age. Gordion Excavations*. Philadelphia: University Museum.
- Gunter, Ann C. (2006). Issues in Hittite Ceramic Production: A View from the Western Frontier. In: D.-P. Mielke, ed, *Strukturierung und Datierung in der hethitischen Archäeologie/Stucturing and Dating in Hittite Archaeology* (Byzas 4). Istanbul: Phoibos Verlag, pp. 349–363.
- Gurney, Oliver (1973a). Anatolia ca. 1700–1600 B.C. In: *The Cambridge Ancient History* 1/2. Cambridge: Cambridge University Press, pp. 228–255.
- Gurney, Oliver (1973b). Anatolia ca. 1600–1380 B.C. In: *The Cambridge Ancient History* 1/2. Cambridge: Cambridge University Press, pp. 659–685.
- Gürsan-Salzmann, Ayşe (1992). *Alaca Höyük: A Reassessment of the Excavation and Sequence of the Early Bronze Age Settlement*, Dissertation, University of Pennsylvania.
- Gusmani, Roberto (1986). *Saggi sull'interferenza linguistica. Seconda edizione accresciuta.* Firenze: Le Lettere.
- Güterbock, Hans Gustav (1938). Die historische Tradition und ihre literarische Gestaltung bei Babyloniern und Hethitern bis 1200 (2 Teil: Hethiter). Zeitschrift für Assyriologie 44, pp. 45–149.
- Güterbock, Hans Gustav (1946). *Kumarbi. Mythen vom churritischen Kronos aus den hethitischen Fragmenten zusammengestellt, übersetzt und erklärt* (Istanbuler Schriften 16). Zürich/New York: Europa Verlag.
- Güterbock, Hans Gustav (1956a). The Deeds of Suppiluliuma as Told by His Son, Mursili II. *Journal of Cuneiform Studies* 10, pp. 41–68, 75–98, 107–130.
- Güterbock, Hans Gustav (1956b). Notes on Luwian Studies (A propos B. Rosenkranz' Book "Beiträge zur Erforschung des Luvischen"). *Orientalia* N.S. 25: 113–140.
- Güterbock, Hans Gustav (1957). Towards a definition of the term "Hittite". *Oriens* 10, pp. 233–239.
- Güterbock, Hans Gustav (1983). A Hurro-Hittite Hymn to Ishtar. *Journal of the American Oriental Society* 103/1, pp. 155–164.
- Güterbock, Hans Gustav (1997a). Hittite Liver Models. In: H.A. Hoffner, ed, *Perspectives* on *Hittite Civilization: Selected Writings of Hans Gustav Güterbock* (Assyriological Studies 26). Chicago: The Oriental Institute of the University of Chicago, pp. 157– 160.
- Güterbock, Hans Gustav (1997b). Bilingual Moon Omens from Boğazköy. In. H.A. Hoffner, ed, *Perspectives on Hittite Civilization: Selected Writings of Hans Gustav Güterbock* (Assyriological Studies 26). Chicago: The Oriental Institute of the University of Chicago, pp. 161–169.
- Haas, Volkert (1984). Die Serien itkahi und itkalzi des AZU-Priesters, Rituale für Tašmiš-

*arri und Tatuḥepa sowie weitere Texte mit Bezug auf Tašmišarri* (Corpus der hurritischen Sprachdenkmäler 1/1). Roma: Multigrafica Editrice.

- Haas, Volkert (2006). *Die hethitische Literatur: Texte, Stilistik, Motive*. Berlin/Boston: De Gruyter.
- Haas, Volkert and Thiel, Hans Jochen (1978). *Die Beschwörungsrituale der Allaiturah(h)i* und verwandte Texte (Alter Orient und Altes Testament 31 / Hurritologische Studien 2). Kevelaer: Butzon & Bercker / Neukirchen-Vluyn: Neukirchener Verlag.
- Haas, Volkert and Wegner, Ilse (1988). *Die Rituale der Beschwörerinnen <sup>SAL</sup>ŠU.GI. Teil 1: Die Texte* (Corpus der hurritischen Sprachdenkmäler 1/5). Roma: Multigrafica Editrice.
- Haas, Volkert and Wilhelm, Gernot (1974). Zum hurritischen Lexikon 2. Orientalia Nova Series 43, pp. 87–93.
- Haase, Richard (1993). Ehescheidung auf hethitisch: Anmerkungen zu den §§ "26 a", "26 b", 31 bis 33 und "33" der hethitischen Gesetze. *Die Welt des Orients* 24, pp. 50–54.
- Hacar, Abdullah (2017). İlk Tunç Çağı'na Tarihlenen Anadolu Metalik Çanak Çömleğine İlişkin Yeni Bilgiler: Göltepe Buluntuları. *ADALYA* 20, pp. 21–40.
- Hajnal, Ivo (2014). Die griechisch-anatolischen Sprachkontakte zur Bronzezeit— Sprachbund oder loser Sprachkontakt? *Linguarum Varietas* 3, pp. 105–116.
- Hajnal, Ivo (2018). Graeco-Anatolian contacts in the Mycenaean period. In: Jared Klein, Brian Joseph and Matthias Fritz, eds, *Handbook of Comparative and Historical Indo-European Linguistics* (Handbücher zur Sprach- und Kommunikationswissenschaft 41/3). Berlin/Boston: de Gruyter, pp. 2037–2055.
- Hart, Gillian R. (1983). Problems of writing and phonology in Cuneiform Hittite. *Transactions and Proceedings of the American Philological Association* 1983, pp. 100–154.
- Haspelmath, Martin (2008). Loanword Typology: Steps toward a systematic crosslinguistic study of lexical borrowability. In: T. Stolz, D. Bakker, R. Salas Palomo, eds, *Aspects of language contact: New theoretical, methodological and empirical findings with special focus on Romancisation processes*. Berlin/New York: Mouton de Gruyter, pp. 43–62.
- Haugen, Einar (1950). The Analysis of Linguistic Borrowing. Language 26, pp. 210–231.
- Hauptmann, Andreas, Schmitt-Strecker, Sigrid, Begemann, Friedrich, and Palmieri, Alberto M. (2002). Chemical composition and lead isotopy of metal objects from the 'royal' tomb and other related finds at Arslantepe, Eastern Anatolia. *Paléorient* 28 (2), pp. 43–69.
- Hauschild, Richard (1962). Über die frühesten Arier im Alten Orient (Berichte über die Verhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig. Philologisch-historische Klasse 106/6). Berlin: Akademie-Verlag.
- Hawkins, J. David (1995). *The Hieroglyphic inscription of the sacred pool complex at Hat tusa. With an archaeological introduction by Neve P*. (Studien zu den Boğazköy Texten Beiheft 3). Wiesbaden: Harrassowitz.

- Hawkins, J. David (1998). Tarkasnawa King of Mira: 'Tarkondemos', Boğazköy sealings and Karabel. *Anatolian Studies* 48, pp. 1–31.
- Hawkins, J. David (2003). Scripts and Texts. In Melchert, H.C., ed, *The Luwians* (Handbook of Oriental Studies 1/68). Leiden/Boston: Brill, pp. 128–169.

Hawkins, J. David (2013a). A New Look at the Luwian Language. Kadmos 52, pp. 1-18.

Hawkins, J. David (2013b). Luwians versus Hittites. In: A. Mouton, I. Rutherford, and I. Yakubovich, eds, *Luwian Identities: Culture, Language and Religion Between Anatolia and the Aegean*. Leiden: Brill, pp. 25–40.

- Hawkins, J. David and Weeden, Mark (2021). The New Inscription from Türkmenkarahöyük and its Historical Context. *Altorientalische Forschungen* 48, pp. 384–399.
- Hecker, Karl (1968), Review of H. Otten, *Keilschrifttexte aus Boghazköi 15 (Insbes. Texte aus Gebäude A)*, Berlin, 1965. *Mundus* 4, pp. 36–37.
- Hecker, Karl (1996). Zur Herkunft der hethitischen Keilschrift. In: D.I. Owen and G. Wilhelm, *Richard F. S. Starr Memorial Volume* (Studies in the Civilization and Culture of Nuzi and the Hurrians 8). Bethesda, MD: CDL Press, pp. 291–303.
- Hecker, Karl (1997). Über den Euphrat ... Ortsbezogene Restriktionen in aA Kaufurkunden. *Archivum Anatolicum* 3, pp. 157–172.
- Heffron, Yağmur (2016). Stone Stelae and Religious Space at Kültepe-Kaneš. *Anatolian Studies* 66, pp. 23–42.
- Heffron, Yağmur (2017). Testing the Middle Ground in Assyria Anatolian Marriages of the Kārum Period. *IRAQ* 79, pp. 71–83.
- Heinhold-Krahmer, Susanne, Hoffmann, Inge, Kammenhuber, Annelies, and Mauer, Gerlinde, eds (1979). Probleme der Textdatierung in der Hethitologie. Beiträge zu umstrittenen Datierungskriterien für Texte des 15. bis 13. Jahrhunderts v.Chr (Texte der Hethiter 9). Heidelberg: Carl Winter Universitätsverlag.
- Helft, Susan (2010). *Patterns of Exchange/Patterns of Power: A New Archaeology of the Hittite Empire*, Dissertation, University of Pennsylvania.
- Heltzer, Michael (1999). The Economy of Ugarit. In: W.G.E. Watson and N. Wyatt, eds, *Handbook of Ugaritic Studies* (Handbuch der Orientalistik 1/39). Leiden/Boston: Brill, pp. 423–454.
- Herbordt, Suzanne, Bawanypeck, Daliah, and Hawkins, J. David (2011). *Die Siegel der Grosskönige und Grossköniginnen auf Tonbullen aus dem Nişantepe-Archiv in Hattusa* (Boğazköy–Ḥattuša 23). Darmstadt-Mainz: Philipp von Zabern.
- Highcock, Nancy (2017). Assyrians Abroad: Expanding Borders through Mobile Identities in the Middle Bronze Age. *Journal of Ancient Near Eastern History* 4, pp. 61– 93.
- Highcock, Nancy and Matessi, Alvise (2021). The Early Bronze Age at Niğde-Kınık Höyük: A Preliminary Analysis. In: F. Kulakoğlu, G. Kryszat and C. Michel, eds, *Cultural Exchanges and Current Research at Kültepe and its Surroundings* (SUB-ARTU 46/ Kültepe International Meetings 4). Turnhout: Brepols, pp. 275–292.

- Hodge, Carleton T. (1981). Indo-Europeans in the Near East. *Anthropological Linguistics* 23, pp. 227–244.
- Hoffmann, Ingeborg (1984). *Der Erlass Telipinus* (Texte der Hethiter 11). Heidelberg: Winter Verlag.
- Hoffner, Harry A. (1964). An Anatolian Cult Term in Ugaritic. *Journal of Near Eastern Studies* 23, pp. 66–68.
- Hoffner, Harry A. (1993). Akkadian *šumma immeru* Texts and their Hurro-Hittite Counterparts. In: M.E. Cohen, D.C. Snell, and D.B. Weisberg, eds, *The Tablet and the Scroll. Near Eastern Studies in Honor of William W. Hallo*. Bethesda: CDL Press, pp. 116–119.
- Hoffner, Harry A. (1997). The Laws of the Hittites. A Critical Edition. Leiden: Brill.
- Hoffner, Harry A. (2001). Some Thoughts on Merchants and Trade in the Hittite Kingdom. In: T. Richter, D. Prechel, and J. Klinger, eds, *Kulturgeschichte. Altorientalische Studien für V. Haas zum 65. Geburtstag.* Saarbrücken: Saarbrücker Druckerei und Verlag, pp. 179–189.
- Hoffner, Harry A. (2002). The Treatment and Long-Term Use of Persons Captured in Battle according to the Maşat Texts. In: K.A. Yener and H.A. Hoffner, eds, *Recent Developments in Hittite Archaeology and History. Papers in Memory of Hans G. Güterbock*. Winona Lake, IN: Eisenbrauns, pp. 61–72.
- Holland, Gary B. and Zorman, Marina (2007). *The Tale of Zalpa. Myth, Morality, and Coherence in a Hittite Narrative* (Studia Mediterranea 19 / Serie Hethaea 6). Pavia: Italian University Press.
- Homan, Zenobia S. (2019). *Mittanian Palaeography* (Cuneiform Monographs 48). Leiden/Boston: Brill.
- Hommel, Fritz (1898). *Hethiter und Skythen und das erste Auftreten der Iranier in der Geschichte*. Prag: Verlag der Königlich Böhmischen Gesellschaft der Wissenschaften.
- Hommel, Fritz (1899). Die ältesten Bevölkerungsverhältnisse Kleinasiens. In: R. Oberhummer and H. Zimmerer, eds, *Durch Syrien und Kleinasien. Reiseschilderungen und Studien*. Berlin: Dietrich Reimer, pp. 422–435.
- House, Juliane (1977). A Model for Translation Quality Assessment. Tübingen: TBL-Verlag Narr.
- House, Juliane (1986). Acquiring translational competence in interaction. In: J. House and S. Blum-Kulka, eds, *Interlingual and intercultural communication: Discourse and cognition in translation and second language acquisition studies*. Tübingen: G. Narr Verlag, pp. 179–191.
- Houwink ten Cate, Philo (1998). An alternative Date for the Sunassuras Treaty (KBo 1.5). *Altorientalische Forschungen* 25, pp. 34–53.
- Hrouda, Barthel (1997). Vorläufiger Bericht über die Ausgrabungs-ergebnisse auf dem Sirkeli Höyük/Südtürkei von 1992–1996. *Istanbuler Mitteilungen* 47, pp. 91–150.
- Hrozný, Bedřich (1919). Hethitische Keilschrifttexte aus Boghazköi I (Boghazköi-Studien 3). Leipzig: Hinrichs.

- Hrozný, Bedřich (1929a). Hethiter und Inder. Zeitschrift für Assyriologie und verwandte Gebiete 38, pp. 184–185.
- Hrozný, Bedřich (1929b). Die Länder Churri und Mitanni und die ältesten Inder. *Archiv Orientální* 1, pp. 91–110.
- Hrůša, Ivan (2010). Die Akkadische Synonymenliste malku = šarru: Eine Textedition Mit Ubersetzung Und Kommentar (Alter Orient Und Altes Testament 50). Münster: Ugarit-Verlag.
- HSK 26 = H. Kittel et al., eds, Übersetzung—Tranlsation—Traduction. Ein internationales Handbuch zur Übersetzungsforschung. An international encyclopedia of tranlsation studies. Encyclopédie internationale de la recherche sur la traduction (Handbücher zur Sprach- und Kommunikationswissenschaft 26), 3 voll. Berlin: de Gruyter 2004 (26.1)—2007 (26.2)—2011 (26.3).
- Huehnergard, John (1979). The Akkadian dialects of Carchemish and Ugarit, PhD Dissertation, Harvard University.
- Huehnergard, John (1989). The Akkadian of Ugarit. Atlanta: Scholars Press.
- Huehnergard, John (2000). *A Grammar of Akkadian* (Harvard Semitic Studies 45). Winona Lake: Eisenbrauns.
- Hutter, Manfred (2003). Aspects of Luwian Religion. In: H.C. Melchert, ed, *The Luwians* (Handbuch der Orientalistik I/68). Leiden/Boston: Brill, pp. 211–280.
- Hutter, Manfred (2006). Hutter M., Tiere als materia magica im Ritual der Zuwi (CTH 412). In: Y.L. Arbeitman, ed, *The Asia Minor Connexion. Studies on the Pre-Greek Languages in Memory of Charles Carter*, Paris/Leuven: Peeters, pp. 95–106.
- Hutter, Manfred (2013). The Luwian Cult of the Goddess Huwassanna vs. Her Position in the 'Hittite State Cult'. In: A. Mouton, I. Rutherford and I. Yakubovich, eds, *Luwian Identities: Culture, Language and Religion Between Anatolia and the Aegean* (Culture and History of the Ancient Near East 64). Leiden/Boston: Brill, pp. 177–190.
- Hutter-Brausar, Sylvia (2022). The Cult of Ištanuwa (and Lallubiya) between Hattian and Aegean Cultures. *Altorientalische Forschungen* 49 (1), pp. 158–168.
- Imparati, Fiorella (1964). *Le leggi ittite. Con prefazione di Pugliese Carratelli G*. (Incunabula Graeca 7). Roma: Edizioni dell'Ateneo.
- Imparati, Fiorella (1988). Interventi di politica economica dei sovrani ittiti e stabilità del potere. In: *Stato, Economia, Lavoro nel Vicino Oriente antico. Istituto Gramsci Toscano. Scritti del Seminario di Orientalistica antica.* Milan: FrancoAngeli, pp. 225–239.
- Ivanova, Mariya (2012). Perilous waters: early maritime trade along the western coast of the Black Sea (fifth millennium BC). *Oxford Journal of Archaeology* 31, pp. 339–365.
- Jacobi, Hermann G. (1909). On the Antiquity of Vedic Culture. *Journal of the Royal Asiatic Society of Great Britain and Ireland* 41, pp. 721–726.
- Jäntti, Oscar (2017). *Geminate Stops in Anatolian: Evidence and Typological Implications*, Degree Thesis, University of Leiden.

- Jean, Eric (2010). Sociétés et pouvoirs en Cilicie au 2nd millénaire av. J.-C.: Approche archéologique, Dissertation, Université Paris 1—Panthéon-Sorbonne.
- Jensen, Peter (1919). Indische Zahlwörter in keilschrifthittitischen Texten. Sitzungsberichte der Preussischen Akademie der Wissenschaften 1919, pp. 367–372.
- Joukowsky, Martha S. (1986). *Prehistoric Aphrodisias 1–11*. Providence, RI: Brown University / Louvain-la-Neuve: Université Catholique de Louvain.
- Kamış, Yalçın (2017). Erken Tunç Cağı'nda Acemhöyük ve Konya Ovası. In: S. Özkan,
  H. Hüryılmaz, and A. Türker, eds, Samsat'tan Acemhöyüğ'e Eski Uygarlıkların İzinde: Aliye Öztan'a Armağan. İzmir: Ege Üniversitesi Basımevi, pp. 165–176.
- Kammenhuber, Annelies (1959a). Das Palaische: Texte und Wortschatz. *Revue Hittite et Asianique* 17 (64), pp. 1–92.
- Kammenhuber, Annelies (1959b). Esquisse de grammaire palaïte. *Bulletin de la Société de Linguistique de Paris* 54, pp. 18–45.
- Kammenhuber, Annelies (1961). Hippologia Hethitica. Wiesbaden: Harrassowitz.
- Kammenhuber, Annelies (1968). *Die Arier im Vorderen Orient*. Heidelberg: Winter Verlag.
- Kammenhuber, Annelies (1969). Hattisch, in *Handbuch der Orientalistik*. Abt. I, Bd.
  2: Keilschriftforschung und alte Geschichte Vorederasiens. Erster und zweiter Abschnitt, Lfg. 2: *Altkleinasiatische Sprachen*. Leiden: Brill, pp. 428–546, 584–588.
- Kammenhuber, Annelies (1976). Orakelpraxis, Träume und Vorzeichenschau bei den Hethitern (Texte der Hethiter 7). Heidelberg: Winter Verlag.
- Kammenhuber, Annelies (1977). Die Arier im Vorderen Orient und die historischen Wohnsitze der Hurriter. *Orientalia* N.S. 46, pp. 129–144.
- Kassian, Alexei S. (2010), Хаттский язык [Hattic], in N.N. Kazansky, A.A. Kibrik, and Y.B. Koryakov, eds, Языки мира. Древние реликтовые языки Передней Азии / *Languages of the world: ancient relict languages of the Near East*. Moscow: Academia, pp. 168–184.
- Kassian, Alexei S. and Shatskov, Andrei (2013). Палайский язык (Palaic). In: Y. Koryakov and A.A. Kibrik, eds, Языки мира. Реликтовые индоевропейские языки Передней и Центральной Азии / Languages of the World: Relict Indo-European languages of Western and Central Asia. Moscow: Academia, pp. 97–106.

Kawakami, Naohiko (2006). The Location of Purušhanta. *al Rāfijidān* 27, pp. 59–99.

- Keith, A. Berriedale (1909). On the Antiquity of Vedic Culture. *Journal of the Royal Asiatic Society of Great Britain and Ireland* 41, pp. 1100–1106.
- Kelly, Marilyn and Buccellati, Giorgio (2004). Andirons at Urkesh: New Evidence for the Hurrian Identity of Early Trans-Caucasian Culture. In: A. Sagona, ed, A View from the Highlands: Archaeological Studies in Honour of Charles Burney (Ancient Near Eastern Studies Supplement 12). Herent: Peeters, pp. 67–89.
- Kempinski, Aharon (1983). Syrien und Palästina (Kanaan) in der letzten Phase der Mittelbronze IIB-Zeit (1650–1570 v. Chr.). Wiesbaden: Harrassowitz.

- Kennedy, John (1909). The Prehistoric Aryans and the Kings of Mitani. *Journal of the Royal Asiatic Society of Great Britain and Ireland* 41, pp. 1107–1119.
- Keswani, Priscilla S. (2005). Death, prestige, and copper in Bronze Age Cyprus. *American Journal of Archaeology* 109, pp. 341–401.
- Kitazumi, Tomoki (2020). Drei indo-arische Personennamen und der Gott Akni in CTH 13. In: M. Fritz, T. Kitazumi, and M. Veksina, eds, Maiores philologiae pontes. *Festschrift für Michael Meier-Brügger zum 70. Geburtstag.* Ann Arbor/New York: Beech Stave Press, pp. 90–98.
- Kleinerman, Alexandra (2011). *Education in Early 2nd Millennium Bc Babylonia*. *The Sumerian Epistolary Miscellany*, Leiden/Boston: Brill.
- Klengel, Horst (1974). 'Hungerjahre' in Hatti. *Altorientalische Forschungen* 1, pp. 165–174.
- Klengel, Horst (1979). Handel und Kaufleute im hethitischen Reich. *Altorientalische Forschungen* 6, pp. 69–80.
- Klengel, Horst (1999). *Geschichte des hethitischen Reiches* (Handbuch der Orientalistik 34). Leiden/Boston/Köln: Brill.
- Klengel, Horst (2007). Ura, Ugarit und der hethitische Mittelmeerhandel. In: M. Alparslan, M. Doğan-Alparslan, and H. Peker, eds, *VITA: Festschrift in Honor of Belkıs Dinçol and Ali Dinçol*. Istanbul: Ege Yayınları, pp. 383–388.
- Klinger, Jörg (1994). Hattisch und Sprachverwandtschaft. Hethitica 12, pp. 23-40.
- Klinger, Jörg (1996). *Untersuchungen zur Rekonstruktion des hattischen Kultschicht* (Studien zu den Boğazköy-Texten 37). Wiesbaden: Harrassowitz.
- Klinger, Jörg (1998). «Wer lehrte die Hethiter das Schreiben?» Zur Paläographie früher Texte in akkadischer Sprache aus Boğazköy: Skizze einiger Überlegungen und vorläufiger Ergebnisse. In: S. Alp and A. Süel, eds, *111. Uluslararası Hititoloji Kongresi Bildirileri, Çorum 16–22 Eylül 1996.* Ankara: Uyum Ajans, pp. 365–375.
- Klinger, Jörg (2005). *Hattisch*. In: M.P. Streck, ed, *Sprachen des Alten Orients*. Darmstadt: Wissenschaftliche Buchgesellschaft, pp. 128–134.
- Klinger, Jörg (2010). Literarische sumerische Texte aus den hethitischen Archiven aus paläographischer Sicht—Teil II. *Altorientalische Forschungen* 37, pp. 306–340.
- Klinger, Jörg (2014). The Imperial Space: The Early Hittite Kingdom. In: E. Cancik-Kirschbaum, N. Brisch, and J. Eidem, eds, *Constituent, Confederate, and Conquered Space in Upper Mesopotamia. The Emergence of the Mittani State*, Berlin/Boston: de Gruyter, pp. 75–90.
- Klinger, Jörg (2015). Suppiluliuma II. und die Spätphase der hethitischen Archive. In: A. Müller-Karpe, E. Rieken, and W. Sommerfeld, eds, *Saeculum: Gedenkschrift für Heinrich Otten anlässlich seines 100. Geburtstags* (Studien zu den Boğazköy Texten 58), Wiesbaden: Harrassowitz, pp. 87–111.
- Klinger, Jörg (2022). Zu den Anfängen der hethitischen Überlieferung überhaupt und zur Methode der paläographischen Textdatierung. In: E. Cancik-Kirschbaum and

I. Schrakamp, eds, *Transfer, Adaption und Neukonfiguration von Schrift- und Sprachwissen im Alten Orient* (Episteme in Bewegung. Beiträge zu einer transdisziplinären Wissensgeschichte 25). Wiesbaden: Harrassowitz, pp. 255–340.

- Klinger, Jörg, Hofmann, Kerstin P., Bernbeck, Reinhard, Grozdanova, Lily, Longo, Federico, Peter, Ulrike, Schreiber, Stefan, and Wiedemann, Felix (2016). The Trialectics of Knowledge, Space and Identity in Ancient Civilizations and in the Study of Antiquity. *eTopoi. Journal for Ancient Studies* 6, pp. 349–388.
- Kloekhorst, Alwin (2004). The Preservation of  $*h_1$  in Hieroglyphic Luwian. Two Separate *a*-Signs. *Historische Spachforschung* 117, pp. 26–49.
- Kloekhorst, Alwin (2010). Initial stops in Hittite (with an excursus on the spelling of stops in Alalah Akkadian). Zeitschrift für Assyriologie und Vorderasiatische Archäologie 100, pp. 197–241.
- Kloekhorst, Alwin (2016). The Anatolian Stop System and the Indo-Hittite Hypothesis. *Indogermanische Forschungen* 121, pp. 213–248.
- Kloekhorst, Alwin (2019). *Kanišite Hittite. The Earliest Attested Record of Indo-European*, (Handbuch der Orientalistik 132). Leiden/Boston: Brill.
- Kloekhorst, Alwin (2021). A New Interpretation of the Old Hittite Zalpa-Text (CTH 3.1): Nēša as the Capital under Ḫuzzii̯a I, Labarna I, and Ḫattušili I. *Journal of the American Oriental Society* 141, pp. 557–575.
- Kloekhorst, Alwin (2022). Anatolian. In: T. Olander, ed., *The Indo-European Language Family: A Philogenetic Perspective*, Cambridge: Cambridge University Press, pp. 63–82.
- Kloekhorst, Alwin and Waal, Willemijn (2019). A Hittite Scribal Tradition Predating the Tablet Collections of Hattuša? The origin of the 'cushion-shaped' tablets KBo 3.22, KBo 17.21+, KBo 22.1, and KBo 22.2. Zeitschrift für Assyriologie und Vorderasiatische Archäologie 109, pp. 189–203.
- Knapp, A. Bernard (2008). *Prehistoric and Protohistoric Cyprus: Identity, Insularity and Connectivity*. Oxford: Oxford University Press.
- Knapp, A. Bernard (2012). Metallurgical Production and Trade on Bronze Age Cyprus: Views and Variations. In: V. Kassianidou and G. Papasavvas, eds, *Eastern Mediterranean Metallurgy and Metalwork in the Second Millennium Bc*. Oxford: Oxbow Books, pp. 14–25.
- Knapp, A. Bernard (2018). *Seafaring and Seafarers in the Bronze Age Eastern Mediterranean*. Leiden: Sidestone Press.
- Knudtzon, Jørgen A. (1902). Die zwei Arzawa-Briefe. Die ältesten Urkunden in indogermanischer Sprache. Leipzig: Hinrichs.
- Knudtzon, Jørgen A. (1907). Die El-Amarna-Tafeln 1. Leipzig: Hinrichs.
- Koch Westenholz, Ulla (1993). Mesopotamian Astrology at Hattusas. In: H.D. Galter, ed, Die Rolle der Astronomie in den Kulturen Mesopotamiens. Beiträge zum 3. Grazer Morgenländischen Symposion (23.–27. September 1991), Graz, pp. 231–246.

- Kocharov, Petr, and Andrej Shatskov (2021). Proto-Indo-European Initial \**r* Revisited. *Iran and the Caucasus* 25, pp. 398–419.
- Köcher, Franz (1952–1953). Ein akkadischer medizinischer Schülertext aus Boğazköy. *Archiv für Orientforschung* 16, pp. 47–56.
- Köcher, Franz (1953). Keilschrifturkunden aus Boghazköi 37. Literarische Texte in akkadischer Sprache (KUB 37). Berlin: Akademie Verlag.
- Kogan, Leonid and Krebernik, Manfred (2020). *Etymological Dictionary of Akkadian. Volume 1: Roots Beginning with P and B.* Boston/Berlin: de Gruyter.
- Kohlmeyer, Kay (1983). Felsbilder der hethitischen Grossreichszeit. *Acta Praehistorica et Archaeologica* 15, pp. 7–53.
- Konow, Sten (1921). *The Aryan gods of the Mitani people* (Kristiania Etnografiske Museums Skrifter 3/1). Kristiania: Brøgger.
- Korošec, Viktor (1963). Les lois hittites et leur évolution. Revue d'Assyriologie et d'archéologie orientale 57, pp. 121–144.
- Košak, Silvin (1995). The Palace Library "Building A" on Büyükkale. In: Th.P.J. van den Hout and J. de Roos, eds, Studio Historiae Ardens. Ancient Near Eastern Studies Presented to Philo H.J. Houwink ten Cate on the Occasion of his 65th Birthday (Publications de l'Institut historique-archéologique néerlandais de Stamboul 74). Istanbul: Nederlands Historisch-Archaeologisch Instituut / Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 173–179.
- Kossinna, Gustaf (1911). Die Herkunft der Germanen: Zur Methode der Siedlungarchäologie. Leipzig: Kabitzsch.
- Koşay, Hâmit Z. (1944). Ausgrabungen von Alaca Höyük: ein Vorbericht über die im Auftrage der Türkischen Geschichtskommission im Sommer 1936 durchgeführten Forschungen und Entdeckungen. Ankara: Türk Tarih Kurumu.
- Koşay, Hâmit Zübeyr and Akok, Mahmut (1966). *Alaca Höyük Kazısı: 1940–1948'deki Çalışmalara ve Kesiflere Aitilk Rapor*. Ankara: Türk Tarih Kurumu.
- Kouwenberg, Norbert J.C. (2017a). Introduction to Old Assyrian. Münster: Zaphon.
- Kouwenberg, Norbert J.C. (2017b). *A Grammar of Old Assyrian* (Handbook of Oriental Studies 118). Leiden: Brill.
- Kozal, Ekin (2003). Analysis of the Distribution Patterns of Red Lustrous Wheel-Made Ware, Mycenean and Cypriot Pottery in Anatolia in the 15th–13th Centuries BC. In:
  B. Fischer, H. Genz, E. Jean, and K. Koroğlu, eds, *Identifying Changes: The Transition from Bronze to Iron Ages in Anatolia and its Neighbouring Regions*. Istanbul: Ege Yayınları, pp. 65–77.
- Kozal, Ekin (2006). Anatolien im 2. Jt. v.u.Z. und die Hinterlassenschaften materieller Kultur aus dem Ostmittelmeerraum, insbesondere Zyperns, Dissertation, Eberhard-Karls-Universität Tübingen.
- Kozal, Ekin (2017). Fremdes in Anatolien: Importgüter aus dem Ostmittelmeerraum und Mesopotamien als Indikator für spätbronzezeitliche Handels- und Kulturkontakte. Wiesbaden: Harrassowitz.

- Kozal, Ekin and Novák, Mirko (2007). Geschenke, Tribute und Handelswaren im Hethiterreich: Eine archäologische Bestandaufnahme am Fallbeispiel Hattuša. In: H. Klinkott, S. Kubisch, and R. Müller-Wollermann, eds, *Geschenke und Steuern, Zölle und Tribute: antike Abgabenformen in Anspruch und Wirklichkeit*. Leiden: Brill, pp. 323–346.
- Kretschmer, Paul (1927). Weiteres zur Urgeschichte der Inder. Zeitschrift für vergleichende Sprachforschung 55, pp. 75–103.
- Kronasser, Heinz (1957). Indisches in den Nuzi-Texten. *Wiener Zeitschrift für die Kunde des Morgenlandes* 53, pp. 181–192.
- Kroonen, Guus (2016). Hittite *kapart-/kapirt-* 'small rodent' and Proto-Semitic \*<sup>*fkbr-t-*</sup> 'mouse, jerboa'. *Indogermanische Forschungen* 121, pp. 53–62.
- Kroonen, Guus, Barjamovic, Gojko, and Peyrot, Michaël (2018). Linguistic supplement to Damgaard et al. 2018: Early Indo-European languages, Anatolian, Tocharian and Indo-Iranian. Leiden University Scholarly Publications, available on https://hdl.han dle.net/1887/87765.
- Kryszat, Guido (2008a). Herrscher, Kult und Kulttradition in Anatolien nach den Quellen aus den altassyrischen Handelskolonien. Teil 3/1: Grundlagen für eine neue Rekonstruktion der Geschichte Anatoliens und der assyrischen Handelskolonien in spätaltassyrischer Zeit. *Altorientalische Forschungen* 35, pp. 156–189.
- Kryszat, Guido (2008b). Herrscher, Kult und Kulttradition in Anatolien nach den Quellen aus den altassyrischen Handelskolonien. Teil 3/2: Grundlagen für eine neue Rekonstruktion der Geschichte Anatoliens und der assyrischen Handelskolonien in spätaltassyrischer Zeit II. Altorientalische Forschungen 35, pp. 195–219.
- Kryszeń, Adam (2016). *A Historical Geography of the Hittite Heartland* (Alter Orient und Altes Testament 437). Münster: Ugarit-Verlag.
- Kryszeń, Adam (2017). Hatti and Hattuša. Altorientalische Forschungen 44, pp. 212–220.
- Kudrinski, Maksim (2017). Heterograms in Hittite, Palaic, and Luwian context. *Journal* of Language Relationship 15 (4), pp. 238–249.
- Kudrinski, Maksim and Yakubovich, Ilya (2016). Sumerograms and Akkadograms in Hittite: Ideograms, Logograms, Allograms, or Heterograms? *Altorientalische Forschungen* 43, pp. 53–66.
- Kühne, Cord and Otten, Heinrich (1971) *Der Saušgamuwa-Vertrag (Eine Untersuchung zu Sprache und Graphik)* (Studien zu den Boğazköy-Texten 16). Wiesbaden: Harrassowitz.
- Kulakoğlu, Fikri (2014). Kanesh after the Assyrian Colony Period: Current Research at Kültepe and the Question of the End of the Bronze Age Settlement. In: L. Atıcı, F. Kulakoğlu, G. Barjamovic, and A. Fairbairn, eds, *Kültepe-Kanesh: An Interdisciplinary and Integrative Approach to Trade Networks, Internationalism, and Identity* (Journal of Cuneiform Studies Supplemental Series 4). Atlanta: Lockwood Press, pp. 85–94.

- Kümmel, Hans Martin (1967). *Ersatzrituale für den hethitischen König* (Studien zu den Boğazköy-Texten 3). Wiesbaden: Harrassowitz.
- Kümmel, Hans Martin (1985). *Keilschrifttexte aus Boghazköi 28. Nichtliterarische Texte in akkadischer Sprache* (KBo 28). Berlin: Akademie Verlag.
- Kümmel, Martin Joachim (2020). Über die hethitische 3. Sg. Präsens auf -ia-Iz-zi. In: R.I. Kim, J. Minářová, and P. Pavúk, eds, Hrozný and Hittite. The First Hundred Years. Proceedings of the International Conference Held at Charles University, Prague, n– 14 November 2015. Leiden/Boston: Brill, pp. 176–194.
- Kuzucuoğlu, Catherine (2012). Dimensions territoriales des changements climatiques et des grandes ruptures culturelles de l'Age du Bronze en Méditerranée orientale et au Proche-Orient. In: *Actes du Colloque « Fonder les sciences du territoire »*. Paris: GIS Collège International des sciences du territoire, pp. 159–169.
- Kuzuoğlu, Remzi (2016). Two Cuneiform Texts Found in Acemhöyük from the Old Assyrian Period. *Belleten* 80 (289), pp. 685–699.
- Labat, René (1932). L'Akkadien de Boghaz-Köi. Etude sur la langue des lettres, traités et vocabulaires akkadiens trouvés à Boghaz-Köi, Dissertation, Bordeaux University.
- Lambert, Wilfred. G. (1962). A Catalogue of Texts and Authors. *Journal of Cuneiform Studies* 16, pp. 59–77.
- Landsberger, Benno (1950a). 'Hettiterland' und 'Hettiter' in den Kültepe-Tafeln. *Archiv Orientální* 18, pp. 321–329.
- Landsberger, Benno (1950b). Kommt Hattum 'Hettiterland' und Hattī'um 'Hettiter' in den Kültepe-Tafeln vor? *Archiv Orientální* 18, pp. 329–350.
- Laroche Emmanule (1947b). Hattic Deities and Their Epithets, *Journal of Cuneiform Studies* 1, pp. 187–216 (Republished in Laroche 2106).
- Laroche, Emmanuel (1947a). Études "protohittites". *Revue d'Assyriologie et d'archéologie orientale* 41, pp. 67–98 (Republished in Laroche 2016).
- Laroche, Emmanuel (1959). *Dictionnaire de la langue louvite* (Bibliothèque archéologique et historique de l'Institut français d'archéologie d'Istanbul 6). Paris: Maisonneuve.
- Laroche, Emmanuel (1964). Un hymne trilingue à Iškur-Adad. *Revue d'Assyriologie et d'Archéologie Orientale* 58, pp. 69–78.
- Laroche, Emmanuel (1966). Les noms des hittites. Paris: Klincksieck.
- Laroche, Emmanuel (1971). *Catalogue des textes hittites* (Études et commentaires 75). Paris: Klincksieck.
- Laroche Emmanuel (2016). Études anatoliennes (Recueillies par Alfonso Archi & Hatice Gonnet. Avec la collaboration de Patrick M. Michel & Giulia Torri) (Subartu 37). Turnhout: Brepols.
- Larsen, Mogens Trolle (1972). A revolt against Hattusa. *Journal of Cuneiform Studies* 24 (2), pp. 100–101.
- Larsen, Mogens Trolle (1976). *The Old Assyrian City-State and its Colonies* (Mesopotamia 4). Copenhagen: Akademisk Forlag.

- Larsen, Mogens Trolle (2015). Ancient Kanesh: A Merchant Colony in Bronze Age Anatolia. New York: Cambridge University Press.
- Larsen, Mogens Trolle and Wisti Lassen, Agnete (2014). Cultural Exchange at Kültepe. In: M. Kozuh, W. Henkelman, C.E. Jones, and C. Woods, eds, *Extraction & Control. Studies in Honor of Matthew W. Stolper* (Studies in Ancient Oriental Civilization 68). Chicago: The Oriental Institute of the University of Chicago Press, pp. 171–188.
- Lauinger, Jacob (2015). *Following the Man of Yamhad: Settlement and Territory at Old Babylonian Alalah* (Culture and History of the Ancient Near East 75). Leiden/Boston: Brill.
- Lehmann, Winfred P. (1951). The Distribution of Proto-Indo-European /r/. *Language* 27, pp. 13–17.
- Lehner, Joseph W. and Yener, K. Aslıhan (2014). Organization and Specialization of Early Mining and Metal Technologies in Anatolia. In: B.W. Roberts and C.P. Thornton, eds, Archaeometallurgy in Global Perspective: Methods and Syntheses. New York: Springer, pp. 529–557.
- Lehner, Joseph W., Yener, K. Aslıhan, and Burton, James H. (2009). Lead isotope analysis and chemical characterization of metallic residues of an early Bronze Age crucible from Göltepe using ICP-MS. *TÜBA-AR* 12, pp. 165–174.
- Lemaire, André (1993). Ougarit, Oura et la Cilicie vers la fin du XIIIe s. av. J.-C. *Ugarit-Forschungen* 25, pp. 227–236.
- Lesný, Vincenc (1932). The Language of the Mitanni Chieftains—A Third Branch of the Aryan Group. *Archiv Orientální* 4, pp. 257–260.
- Lewy, Julius (1950). Hatta, Hattu, Hatti, Hattusa and 'Old Assyrian' Hattum. Archiv Orientální 18, pp. 366–441.
- Lewy, Julius (1956). On Some Institutions of the Old Assyrian Empire. *Hebrew Union College Annual* 27, pp. 1–79
- Lindeman, F. Otto (1997). Indo-European and Proto-Anatolian Vowels: A Phonologic Remark. *Academiae Scientiarum Hungaricae* 50 1(3), pp. 185–193.
- Liverani, Mario (1973). Storiografia politica hittita. I. Šunaššura, ovvero della reciprocità. *Oriens Antiquus* 12, pp. 267–297.
- Liverani, Mario (1988). Antico Oriente. Storia, società, economia. Bari: Laterza.
- Liverani, Mario (1998a). Uruk la prima città. Roma: Laterza.
- Liverani, Mario (1998b). *Le lettere di el-Amarna. 1. Le lettere dei «Piccoli Re»* (Testi del Vicino Oriente Antico 2.3.1). Brescia: Paideia.
- Liverani, Mario (1999). *Le lettere di el-Amarna. 2. Le lettere dei «Grandi Re»* (Testi del Vicino Oriente Antico 2.3.2). Brescia: Paideia.
- Lloyd, Seton and Mellaart, James (1962). *Beycesultan, Vol. 2. Middle Bronze Age Architecture and Pottery* (Occasional Publications of the British Institute of Archaeology at Ankara 8). London: The British Institute of Archaeology at Ankara.
- Lorenz, J. and Rieken, E. (2010). Überlegungen zur Verwendung mythologischer Texte

bei den Hethitern. In: J.C. Fincke, ed, *Festschrift für Gernot Wilhelm anläßlich seines* 65. *Geburtstages am 28. Januar 2010*. Dresden: ISLET, pp. 217–234.

- Lumsden, Stephen (2008). Material Culture and the Middle Ground in the Old Assyrian Colony Period. In: C. Michel, ed, *Old Assyrian Studies in Memory of Paul Garelli* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 112). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 21–43.
- Luraghi, Silvia (2008). Possessive Constructions in Anatolian, Hurrian and Urartian as Evidence for Language Contact. In: B.J. Collins, M. Bachvarova, and I. Rutherford, eds, *Anatolian Interfaces: Hittites, Greeks, and Their Neighbors in Ancient Anatolia*. Oxford: Oxbow, pp. 143–151.
- MacSweeney, Naoise (2010). Hittites and Arzawans: A View from Western Anatolia. *Anatolian Studies* 60, pp. 7–24.
- Mansfeld, Günther (2001). Die 'Königsgräber' von Alaca Höyük und ihre Beziehungen nach Kaukasien. *Archäologische Mitteilungen aus Iran und Turan* 33, pp. 19– 62.
- Marazzi, Massimiliano (1986). *Beiträge zu den akkadischen Texten aus Boğazköy in althethitischer Zeit* (Biblioteca di ricerche linguistiche e filologiche 18). Rome: Dipartimento di studi glottoantropologici, Università "La Sapienza".
- Marazzi Massimiliano (2010). Fenomeni interlinguistici e interscrittorî nella più antica documentazione hittita: qualche riflessione e alcune precisazioni di carattere linguistico-storico. *Orientalia* N.S. 73 (2) (= R. Francia and G. Torri, eds, *Studi di ittitologia in onore di Alfonso Archi*), pp. 184–206.
- Marchesi, Gianni (2013). Tilmen Höyük: An Inscribed Bulla from the 1962 Campaign. *Gaziantep Regional Project Occasional Paper* 2013 (7), pp. 1–6.
- Marchetti, Nicolò (2011). *Kinku. Sigilli dell'Età del Bronzo nella regione di Gaziantep in Turchia*. Bologna: AnteQuem.
- Marro, Catherine (2010). Where Did Late-Chalcolithic Chaff-Faced Ware Originate? Cultural Dynamics in Anatolia and Transcaucasia at the Dawn of Urban Civilization (ca. 4500–3500 BC). *Paléorient* 36 (2), pp. 35–55.
- Martinéz, Javier (2016). The Evidence for Hurma as Early Hittite Capital in the Old Kingdom. In: H. Marquardt, S. Reichmuth and J.V. García Trabazo, eds, *Anatolica et indogermanica. Studia linguistica in honorem Johannis Tischler septuagenarii ded icata* (Innsbrucker Beiträge zur Sprachwissenschaft 155). Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck, pp. 173–190.
- Massa, Michele (2014a). Early Bronze Age burial customs on the central Anatolian plateau: a view from Demircihöyük-Sarıket. *Anatolian Studies* 64, pp. 73–93.
- Massa, Michele (2014b). Destructions, Abandonments, Social Reorganisation and Climatic Change in West and Central Anatolia at the End of the Third Millennium вс. In: B. Erciyas and E. Sökmen, eds, *Regional Studies in Archaeology Symposium Proceedings*. Istanbul: Ege Yayınları, pp. 101–123.

- Massa, Michele (2016). Networks before Empires: Cultural Transfers in West and Central Anatolia during the Early Bronze Age, Dissertation, University College London.
- Massa, Michele, Bachhuber, Christoph, Şahin, Fatma, Erpehlivan, Hüseyin, Osborne, James, and Lauricella, Anthony J. (2020). A landscape-oriented approach to urbanisation and early state formation on the Konya and Karaman plains, Turkey. *Anatolian Studies* 70, pp. 45–75.
- Massa, Michele, McIlfatrick, Orlene, and Fidan, Erkan (2017). Patterns of metal procurement, manufacture and exchange in Early Bronze Age northwestern Anatolia: Demircihüyük and beyond. *Anatolian Studies* 67, pp. 51–63.
- Massa, Michele and Palmisano, Alessio (2018). Change and Continuity in the Long-Distance Exchange Networks between Western/Central Anatolia, Northern Levant and Northern Mesopotamia, c. 3200–1600 BCE. *Journal of Anthropological Archaeology* 49, pp. 65–87.
- Matessi, Alvise (2016). The Making of Hittite Imperial Landscapes: Territoriality and Balance of Power in South-Central Anatolia during the Late Bronze Age. *Journal of Ancient Near Eastern History* 3, pp. 117–162.
- Matessi, Alvise (2021). The ways of an empire: Continuity and change of route landscapes across the Taurus during the Hittite Period (ca. 1650–1200 BCE). *Journal of Anthropological Archaeology* 62, pp. 1–20.
- Matessi, Alvise (2023). On the Far Side of the River: Shifting Territorialities and Reorienting Political Discourses in Hittite Anatolia. In: S. Mohr and S. Thompson, eds, *Power and Identity at the Margins of the Ancient Near East*. Luisville, CO: University Press of Colorado, pp. 82–101.
- Matras, Yaron (2007). The Borrowability of Grammatical Categories. In Y. Matras and J. Sakel, eds, *Grammatical borrowing in cross-linguistic perspective*. Berlin/Boston: de Gruyter, pp. 31–74.
- Matras, Yaron (2009). Language Contact. Cambridge: Cambridge University Press.
- Matthews, Roger (2007). An Arena for Cultural Contact: Paphlagonia (North-Central Turkey) through Prehistory. *Anatolian Studies* 57, pp. 25–34.
- Matthews, Roger and Glatz, Claudia, eds (2009a). *At Empires' Edge: Project Paphlagonia. Regional Survey in North-Central Turkey* (British Institute at Ankara Monograph 44). London: British Institute at Ankara.
- Matthews, Roger and Glatz, Claudia (2009b). The historical geography of north-central Anatolia in the Hittite period: texts and archaeology in concert. *Anatolian Studies* 59, pp. 51–72.
- Mayrhofer, Manfred (1959a). Zu den arischen Sprachresten in Vorderasien. *Die Sprache* 5, pp. 77–95.
- Mayrhofer, Manfred (1959b). Über einige arische Wörter mit hurrischem Suffix. *Annali dell'Istituto Universitario Orientale di Napoli, sez. Linguistica* 1, pp. 1–11.

- Mayrhofer, Manfred (1960). Indo-iranisches Sprachgut aus Alalaḥ. *Indo-Iranian Journal* 4, pp. 136–149.
- Mayrhofer, Manfred (1965a). Sichtung vorderasiatisch-arischer Personennamen. *Indo*germanische Forschungen 70, pp. 146–163.
- Mayrhofer, Manfred (1965b). Ein arisch-hurritischer Rechtsausdruck in Alalah? *Orientalia* N.S. 34, pp. 336–337.
- Mayrhofer, Manfred (1966). *Die Indo-Arier im alten Vorderasien. Mit einer analytischen Bibliographie*. Wiesbaden: Harrassowitz.
- Mayrhofer, Manfred (1969). Die vorderasiatischen Arier. *Asiatische Studien* 23, pp. 139–154.
- Mayrhofer, Manfred (1974a). *Die Arier im Vorderen Orient—ein Mythos?* (Sitzungsberichte der Österreichischen Akademie der Wissenschaften. Philosophisch-historische Klasse 294/3). Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- Mayrhofer, Manfred (1974b). Aus einer neuen Bibliographie zu den Indo-Ariern von Mitanni. *Acta Antiqua Academiae Scientiarum Hungaricae* 22, pp. 275–279.
- Mayrhofer, Manfred (1982). Welches Material aus dem Indo-arischen von Mitanni verbleibt für eine selektive Darstellung? In: E. Neu, ed, *Investigationes philologicae et comparativae. Gedenkschrift für Heinz Kronasser*. Wiesbaden: Harrassowitz, pp. 72–90.
- Mayrhofer, Manfred (1983). The Earliest Linguistic Traces of Aryans outside India and Iran. *Journal of the K. R. Cama Oriental Institute* 50, pp. 87–95.
- Mayrhofer, Manfred (1996). Ein indo-arischer Rechtsterminus im Mittanni-Brief? *Historische Sprachforschung* 109, pp. 161–162.
- Mayrhofer, Manfred (2007). Eine Nachlese zu den indo-arischen Sprachresten des Mittanni-Bereichs. *Anzeiger der philosophisch-historischen Klasse* 141, pp. 83–102.
- McMahon, Gregory (2010). Agency, Identity, and the Hittite State. In: S.R. Steadman and J.C. Ross, eds, *Agency and Identity in the Ancient Near East. New Paths Forward*. London: Equinox, pp. 181–189.
- Mee, Christopher (1978). Aegean Trade and Settlement in Anatolia in the Second Millennium B.C. *Anatolian Studies* 28, pp. 121–156.
- Meier, Gerhard (1939). Ein akkadisches Heilungsritual aus Boğazköy. Zeitschrift für Assyriologie und Vorderasiatische Archäologie 45, pp. 195–215.
- Mellaart, James (1958). The End of the Early Bronze Age in Anatolia and the Aegean. *American Journal of Archaeology* 62, pp. 9–33.
- Mellaart, James (1963). Early Cultures of the South Anatolian Plateau, 11: The Late Chalcolithic and Early Bronze Ages in the Konya Plain. *Anatolian Studies* 13, pp. 169– 236.
- Mellaart, James (1970). The Second Millennium Chronology of Beycesultan. *Anatolian Studies* 20, pp. 55–67.

- Mellaart, James (1981). Anatolia and the Indo-Europeans. *Journal of Indo-European Studies* 9, pp. 135–149.
- Mellaart, James and Murray, Ann (1995). *Beycesultan, Vol. 3. Late Bronze Age and Phrygian Pottery and Middle and Late Bronze Age Small Objects* (Occasional Publications of the British Institute of Archaeology at Ankara 12). London: The British Institute of Archaeology at Ankara.
- Mellink, Matcheld J. (1963). An Akkadian illustration of a campaign in Cilicia? *Anatolia* 7, pp. 101–115.
- Mellink, Matcheld J. (1967). Beycesultan: A Bronze Age Site in Southwestern Turkey. *Bibliotheca Orientalis* 24, pp. 1–9.
- Melchert, H. Craig (1978). The Acts of Hattušili I. *Journal of Near Eastern Studies* 37, pp. 1–22.
- Melchert, H. Craig (1988). Luwian Lexical Notes. *Historische Sprachforschung* 101 (2), pp. 211–243.
- Melchert, H. Craig (1993). *Cuneiform Luvian Lexicon* (Lexica Anatolica Volume 2). Chapel Hill.
- Melchert, H. Craig (1994). Anatolian Historical Phonology. Leiden/Boston: Brill.
- Melchert, H. Craig (2000). Aspects of the Cuneiform Luvian Nominal Inflection. In:
  N. Arbeitman, ed, *Studies in the Pre-Greek Languages in Memory of Charles Carter*.
  Leuven: Peeters, pp. 173–183.
- Melchert, H. Craig (2003a). Prehistory. In: H.C. Melchert, ed, *The Luwians* (Handbuch der Orientalistik 1/68). Leiden/Boston: Brill, pp. 8–26.
- Melchert, H. Craig (2003b). Language. In: H.C. Melchert, ed, *The Luwians* (Handbuch der Orientalistik 1/68). Leiden/Boston: Brill, pp. 170–210.
- Melchert, H. Craig (2004). A Dictionary of the Lycian Language. Ann Arbor: Beech Stave.
- Melchert, H. Craig (2005). The Problem of Luvian Influence of Hittite. In: G. Meiser and O. Hackstein, eds, *Sprachkontakt und Sprachwandel. Akten der x1. Fachtagung der Indogermanischen Gesellschaft, 17.–23. September 2000, Halle an der Saale*. Wiesbaden: Reichert, pp. 445–459.
- Melchert, H. Craig (2006). Indo-European Verbal Art in Luvian. In: G.-J. Pinault and D. Petit, eds, La langue poétique indo-européenne. Actes du Colloque de travail de la Société des Études Indo-Européennes, Paris, 22–24 octobre 2003. Leuven: Peeters, pp. 291–298.
- Melchert, H. Craig (2007). PIE h<sub>2</sub>esp- "to cut". In: A.J. Nussbaum, ed, Verba docenti, Studies in historical and Indo-European loinguistics presented to Jay H. Jasanoff by students, colleagues and friends. Ann Arbor/New York: Beech Stave Press, pp. 253– 258.
- Melchert, H. Craig (2008a). Middle Hittite Revisited. *Studi Micenei ed Egeo-Anatolici* 50 (= A. Archi and R. Francia, eds, *VI Congresso Internazionale di Ittitologia, Roma, 5–*

*9 settembre 2005, Parte II*). Roma: CNR–Istituto di Studi sulle Civiltà dell'Egeo e del Vicino Oriente Antico, pp. 525–531.

- Melchert, H. Craig (2008b). Palaic. In: R.D. Woodard, ed, *The Ancient Languages of Asia Minor*. Cambridge/New York: Cambridge University Press, pp. 40–45.
- Melchert, H. Craig (2011). Indo-Europeans. In: S.R. Steadman and G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia* 10,000–323 B.C.E. Oxford: Oxford University Press, pp. 704–716.
- Melchert, H. Craig (2012). Genitive Case and Possessive Adjective in Anatolian. In:
  V. Orioles, ed, *Per Roberto Gusmani. Linguistica storica e teorica: Studi in ricordo.*Udine: Forum, vol. 1, pp. 273–286.
- Melchert, H. Craig (2013). Luvian Language in 'Luvian' Rituals in Hattuša. In: B.J. Collins and P. Michalowski, eds, *Beyond Hatti: A Tribute to Gary Beckman*. Atlanta: Lockwood Press, pp. 159–172.
- Melchert, H. Craig (2014). Anatolian Nominal Stems in \*-C(o)-. In: N. Oettinger and Th. Steer, eds, Das Nomen im Indogermanischen. Morphologie, Substantiv vs. Adjektiv, Kollektivum. Akten der Arbeitstagung der Indogermanischen Gesellschaft vom 14. bis 16. September 2011 in Erlangen. Wiesbaden: Reichert, pp. 205–214.
- Melchert, H. Craig (2015). Translation Strategies in the Hurro-Hittite Bilingual from Boğazköy. In: J.L. García Ramón and D. Kölligan, eds, *Strategies of Translation: language contact and poetic language, Akten des Workshops Köln, 17.–18. Dezember 2010,* vol. 2 (Fascicoli Monografici di «Linguarum Varietas» 4). Pisa: Fabrizio Serra, pp. 61– 75.
- Melchert, H. Craig (2016). Initial \**sp* in Hittite and *šip*(*p*)*and* 'to libate'. *Journal of Language Relationship* 14, pp. 187–205.
- Melchert, H. Craig (2020a). Luwian. In: R. Hasselbach-Andee, ed, *A Companion to Ancient Near Eastern Languages*. Hoboken, NJ: Wiley Blackwell, pp. 239–256.
- Melchert, H. Craig (2020b). Hittite Historical Phonology after 100 Years (and after 20 years). In: R.I. Kim, J. Mynářová and P. Pavúk, eds, *Hrozný and Hittite: The First Hundred Years. Proceedings of the International Conference Held at Charles University, Prague, 11–14 November 2015* (Culture and History of the Ancient Near East 107). Leiden/Boston: Brill, pp. 258–276.
- Melchert, H. Craig (forthcoming-a). The Position of Anatolian. In: A. Garrett, M. Weiss, eds, *Handbook of Indo-European Studies*. Oxford: Oxford University Press, pp. 1–78.

Melchert, Harold C. (forthcoming-b). A myth of Perwa. (Provisional title).

Merlin, Stella (2020). "Pre-Greek" between theories and linguistic data. Examples from the Anatolian area. In: L. Repanšek, H. Bichlmeier, and V. Sadovski, eds, Proceedings of the international conference of the Society for Indo-European Studies and IWoBA XII, Ljubljana 4–7 June 2019. Celebrating one hundred years of Indo-European comparative linguistics at the University of Ljubljana (Studien zur historisch-vergleichenden Sprachwissenschaft 17). Hamburg: Baar-Verlag, pp. 487–507.

- Metcalf, Christopher (2011). New Parallels in Hittite and Sumerian Praise of the Sun. *WO* 41, pp. 168–176.
- Meyer, Eduard (1908a). Die ältesten datierten Zeugnisse der iranischen Sprache und der zoroastrischen Religion. *Zeitschrift für vergleichende Sprachforschung* 42, pp. 1–27.
- Meyer, Eduard (1908b). Das erste Auftreten der Arier in der Geschichte. *Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften zu Berlin* 1908/1, pp. 14–19.
- Meyer, Gerhard R. (1953). Zwei neue Kizzuwatna-Verträge. *Mitteilungen des Instituts für Orientforschung* 1, pp. 108–124.
- Michalowski, Piotr. (2011). *The Correspondence of the Kings of Ur. An Epistolary History of an Ancient Mesopotamian Kingdom*. Winona Lake, IN: Eisenbrauns.
- Michel, Cécile (2001). *Correspondance des marchands de Kaniš au début du 11<sup>e</sup> millénaire avant J.-C.* (Littératures anciennes du Proche-Orient 19). Paris: Les Éditions du Cerf.
- Michel, Cécile (2010). Deux textes atypiques découverts à Kültepe. *Journal of Cuneiform Studies* 62, pp. 71–80.
- Michel, Cécile (2011a). The Private Archives from Kaniš Belonging to Anatolians. *Altorientalische Forschungen* 38, pp. 94–115.
- Michel, Cécile (2011b). The *Kārum* Period on the Plateau. In: S.R. Steadman, G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia* (10000–323B.C.E.). New York: Oxford University Press, pp. 313–336.
- Michel, Cécile (2014a). Considerations on the Assyrian settlement at Kaneš. In: L. Atici,
  F. Kulakoğlu, G. Barjamovic, and A. Fairbairn, eds, *Current Research at Kultepe/ Kanesh. An Interdisciplinary and Integrative Approach to Trade Networks, Internationalism, and Identity* (Journal of Cuneiform Studies Supplement Series 4). Atlanta: Lockwook Press, pp. 69–84.
- Michel, Cécile (2014b). Central Anatolia in the Nineteenth and Eighteenth Centuries BC. In: E. Cancik-Kirschbaum, N. Brisch, and J. Eidem, eds, *Constituent, Confederate, and Conquered Space in Upper Mesopotamia. The Emergence of the Mittani State.* Berlin/Boston: de Gruyter, pp. 111–136.
- Michel, Cécile (2020). *Women of Assur and Kanesh: Texts from the Archives of Assyrian Merchants* (Writings from the Ancient World 42). Atlanta: Society of Biblical Literature.
- Michel, Cécile and Garelli, Paul (1996). Heurts avec une principauté anatolienne. Wiener Zeitschrift für die Kunde des Morgenlandes 86, pp. 277–279.
- Mielke, Dirk-Paul (2006). Inandıktepe und Sarissa: Ein Beitrag zur Datierung althethitische Fundkomplexe. In: D.-P. Mielke, ed, *Strukturierung und Datierung in der hethitischen Archäeologie/ Structuring and Dating in Hittite Archaeology* (Byzas 4). Istanbul: Phoibos Verlag, pp. 251–276.

- Mielke, Dirk-Paul (2011). Key Sites of the Hittite Empire. In: S.R. Steadman and G. Mc-Mahon, eds, *The Oxford Handbook of Ancient Anatolia*, 10,000–323B.C.E. Oxford: Oxford University Press, pp. 1031–1054.
- Mielke, Dirk-Paul (2017). Hittite Settlement Policy. In: M. Alparslan, ed, *Places and Spaces in Hittite Anatolia 1: Hatti and the East: Proceedings of an International Workshop on Hittite Historical Geography in Istanbul, 25th–26th October 2013,* Istanbul: Ege Yayınları, pp. 13–28.
- Miller, Jared (2001). Anum-Hirbi and His Kingdom. *Altorientalische Forschungen* 28, pp. 65–101.
- Miller, Jared (2004a). *Studies in the Origins, Development and Interpretation of the Kizzuwatna Rituals* (Studien zu den Boğazköy Texten 46). Wiesbaden: Harrassowitz.
- Miller, Jared (2004b). Anum-Hirbi and His Kingdom. *Altorientalische Forschungen* 28, pp. 65–101.
- Miller, Jared (2013). *Royal Hittite Instructions and Related Administrative Texts* (Society of Biblical Literature—Writings from the Ancient World 31). Atlanta: Society of Biblical Literature.
- Miller, Jared (2014). Review of Taracha 2009. Orientalia N.S. 83, pp. 284–288.
- Mironov, Nikolaj D. (1933). Aryan Vestiges in the Near East of the Second Millenary B.C. *Acta Orientalia* 11, pp. 140–217.
- MZL = Borger, Rykle (2010). *Mesopotamisches Zeichenlexikon* (Alter Orient und Altes Testament 305). Münster: Ugarit-Verlag.
- Mora, Clelia (1988). Scambi di beni e movimenti di persone nell'impero ittita. La traccia del sigillo. *Athenaeum* 66, pp. 165–178.
- Mora, Clelia (2008). Principi di Karkemiš a Hattuša: attività e rapporti con il potere ittita. *Studi Micenei ed Egeo-Anatolici* 50 (= A. Archi and R. Francia, eds, *v1 Congresso Internazionale di Ittitologia, Roma, 5–9 settembre 2005, Parte 11*) Roma: CNR–Istituto di Studi sulle Civiltà dell'Egeo e del Vicino Oriente Antico, pp. 555–563.
- Mora, Clelia and Giorgieri, Mauro (2004). *Le lettere tra i re ittiti e i re assiri ritrovate a Hattuša* (History of the Ancient Near East Monographs 7). Padova: S.a.r.g.o.n.
- Mora-Marín, David (2003). The Origin of Mayan Syllabograms and Orthographic Conventions. *Written Language and Literacy* 6 (2), pp. 193–237.
- Moravcsik, Edith A. (1978). Language Contact. In: J.H. Greenberg, C.A. Ferguson, and E.A. Moravcsik, eds, *Universals of Human Language. Vol. 1: Method and Theory*. Stanford: Stanford University Press, pp. 93–123.
- Mouton, Alice (2013). Le rituel d'Allī d'Arzawa contre un ensorcellement (CTH 402): une nouvelle édition. In: B.J. Collins and P. Michalowski, eds, *Beyond Hatti: A Tribute to Gary Beckman*. Atlanta: Lockwood Press, pp. 195–230.
- Mouton, Alice (2014). Rituels de 'boucs émissaires' en Anatolie hittite. In: P. Taracha, ed, Proceedings of the 8th International Congress of Hittitology, Warsaw, September 5–9, 2011. Warsaw: Agade, pp. 558–587.

- Mouton, Alice (2015a). Les rituels de la Vieille Femme Tunnawiya : témoignages du Bas Pays hittite? In: D. Beyer, O. Henry, and A. Tibet, eds, *La Cappadoce méridionale de la Préhistoire à la période byzantine*. Istanbul: Institut Français d'Études Anatoliennes Georges Dumézil, pp. 79–87.
- Mouton, Alice (2015b). Hépatoscopie à Hattuša. In: C. Roche-Hawley and R. Hawley, eds, *Devins et lettrés dans l'orbite de Babylone* (Orient & Méditerranée, Archéologie 16). Paris: De Boccard, pp. 207–237.
- Mouton, Alice and Ilya Yakubovich (2020). Proleptic Construction in the Luwian Language [in Russian with an English abstract]. *Indo-European Linguistics and Classical Philology* 24, pp. 206–233.
- Mouton, Alice and Yakubovich, Ilya (2021). Where did one speak luwili? Geographic and linguistic diversity of Luwian cuneiform texts. *Journal of Language Relationship* 19, pp. 25–53.
- Muhly, James D. (1993). Early Bronze Age tin and the Taurus. *American Journal of Archaeology* 97, pp. 239–253.
- Muhly, James D. (2011). Metals and Metallurgy. In: S.R. Steadman and G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia* 10,000–323 B.C.E. Oxford: Oxford University Press, pp. 858–876.
- Müller-Karpe, Andreas (2001). Untersuchungen in Kuşaklı 2000. Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin 133, pp. 225–250.
- Müller-Karpe, Andreas (2017). Sarissa. Die Wiederentdeckung einer hethitischen Königsstadt. Darmstadt: Philipp von Zabern.
- Müller-Karpe, Andreas and Müller-Karpe, Vuslat (2019). Die Fundsituation der Tontafelfunde in Kayalıpınar 1999–2017. In: E. Rieken, ed, *Keilschrifttafeln aus Kayalıpınar l. Textfunde aus den Jahren 1999–2017* (Documenta Antiqua Asiae Minoris 1). Wiesbaden: Harrassowitz, pp. 1–29.
- Muysken, Pieter (1981). Halfway between Quechua and Spanish: the case for relexification. In: A. Highfield and A. Valdman, eds, *Historicity and Variation in Creole Studies*. Ann Arbor: Karoma, pp. 52–78.
- Nashef, Khaled (1976). *Ein Beitrag zu den geographischen Bezeichnungen Hattum und libbi mātim in der altassyrischen Zeit*, Dissertation, Universität Wien.
- Neu, Eric (1974). *Der Anitta-Text* (Studien zu den Böğazköy-Texten 18). Wiesbaden: Harrassowitz.
- Neu, Erich (1980). *Althethitische Ritualtexte im Umschrift* (Studien zu den Boğazköy Texten 25). Wiesbaden: Harrassowitz.
- Neu, Erich (1996). *Das hurritische Epos der Freilassung 1. Untersuchung zu einem hurritisch-hethitischen Textensemble aus Hattuša* (Studien zu den Boğazköy Texten 32). Wiesbaden: Harrassowitz.
- Neu, Erich (1997). Akkadisches Lehnwortgut im Hurritischen. *Archivum Anatolicum* 3, pp. 255–263.

- Nikolaev, Alexander (2019). Shame and Insult in Anatolia: Luvo-Hittite *zammurāi*-. *Journal of the American Oriental Society* 139, pp. 183–194.
- Nougayrol, Jean (1968). Textes suméro-accadiens des archives et biblothèques privées d'Ugarit. In: J. Nougayrol, E. Laroche, Ch. Virolleaud, and C.F.A. Schaeffer, *Ugaritica v. Nouveaux textes accadiens, hourrites et ugaritiques des archives et bibliothèques privées d'Ugarit. Commentaires de textes historiques (première partie)*. Paris: Imprimerie Nationale, pp. 1–446.
- Novák, Mirko (2010). Kizzuwatna—Hiyawa—Que. Ein Abriss der Kulturgeschichte des Ebenen Kilikien. In: J. Becker, R. Hempelmann, and E. Rehm, eds, *Kulturlanschaft Syrien—Zentrum und Peripherie. Festschrift für Jaan-Waalke Meyer* (Altes Orient und Altes Testament 371). Münster: Ugarit-Verlag, pp. 397–425.
- Ökse, A. Tuba (2011). The Early Bronze Age in Southeastern Anatolia. In: S.R. Steadman and G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia* 10,000–323B.C.E. Oxford: Oxford University Press, pp. 260–289.
- Oldenberg, Hermann (1909). On the Antiquity of Vedic Culture. *Journal of the Royal Asiatic Society of Great Britain and Ireland* 41, pp. 1095–1100.
- Oliva Monpeán, Juan Carlos (1999). Consideraciones sobre el hibridismo hurro-semítico en el Alalah VII. *Veleia* 16, pp. 19–32.
- Oettinger, Norbert (1986). Anatolische "Kurzgeschichten". Zeitschrift für vergleichende Sprachforschung 99, pp. 43–53.
- Oettinger, Norbert (2004). Zur Einwanderung und ersten Entfaltung der Indogermanen in Anatolien. In: J.-W. Meyer and W. Sommerfeld, eds, 2000 v. Chr.—Politische, wirtschaftliche und kulturelle Entwicklung im Zeichen einer Jahrtausendwende, CDOG 3, 4.–7. April 2000 Frankfurt/Main—Marburg/Lahn. Saarbrücken: Harrassowitz, pp. 357–369.
- Oreshko, Rostislav (2012). *Studies in Hieroglyphic Luwian: Towards a Philological and Historical Reinterpretation of the SÜDBURG Inscription*, Dissertation, Freien Universität Berlin.
- Oreshko, Rostislav (2013). Hieroglyphic Inscriptions of Western Anatolia: Long Arm of the Empire or Vernacular Tradition(s)? In: A. Mouton, I. Rutherford, and I. Yakubovich, eds, *Luwian Identities, Culture, Language and Religion Between Anatolia and the Aegean* (Culture and History of the Ancient Near East 64). Leiden/Boston: Brill, pp. 345–420.
- Oreshko, Rostislav (2018). Anatolian linguistic influences in Early Greek (1500–800 BC)? Critical observations against sociolinguistic and areal background. *Journal of Language Relationship* 16, pp. 93–118.
- Orthmann, Winfried (1967). Zu den Standarten aus Alaca Höyük. *Istanbuler Mitteilungen* 17, pp. 34–54.
- Osborne, James (2018). History and Temporality in Bronze Age Anatolia: The King of Battle Narrative in Archaeological and Historical Tradition. *World Archaeology* 50, pp. 706–722.

- Osten, Hans H. von der (1937). *The Alishar Hüyük: Seasons of 1930–32*, vols. I–II. Chicago: The University of Chicago Press.
- Otten, Heinrich (1944). Zum Palaischen. Zeitschrift für Assyriologie und vorderasiatische Archäologie 48, pp. 119–145.
- Otten, Heinrich (1951). Die hethitischen 'Königslisten' und die altorientalische Chronologie. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 83, pp. 47–71.
- Otten, Heinrich (1957). Die altassyrischen Texte aur Boğazköy. *Mitteilungen der Deutschen Orient-Gesellschaft* 89, pp. 68–80.
- Otten, Heinrich (1973). *Eine althethitische Erzählung um die Stadt Zalpa* (Studien zu den Boğazköy Texten 17). Wiesbaden: Harrassowitz.
- Otten, Heinrich (1974–1977). Hethitisch <sup>LÚ</sup>apiši-: akkadisch <sup>LÚ</sup>ĀŠIPU. Archiv für Orientforschung 25, pp. 175–178.
- Otten, Heinrich (1986a). *Die Bronzetafel Aus Boğazköy: Ein Staatsvertrag Tuthalijas IV* (Studien zu den Boğazköy Texten Beihefte 1). Wiesbaden: Harrassowitz.
- Otten, Heinrich (1986b). Ein Ritual von Ašdu, der Hurriterin. In H.A. Hoffner and G.M. Beckman, eds, Kaniššuwar. *A Tribute to Hans G. Güterbock on his seventy-fifth Birthday, May 27, 1983* (Assyriological Studies 23). Chicago: The Oriental Institute of the University of Chicago, pp. 165–171.
- Otten, Heinrich and Souček, Vladimir (1969). *Ein althethitisches Ritual für das Königspaar*, (Studien zu den Boğazköy Texten 8). Wiesbaden: Harrassowitz.
- Özbal, Hadı (2009). New analytical data from Göltepe crucibles. *TÜBA-AR* 12, pp. 155– 163.
- Ozdoğan, Mehmet (2011). Eastern Thrace: The Contact Zone between Anatolia and the Balkans. In: S.R. Steadman and G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia 10,000–323 B.C.E.* Oxford: Oxford University Press, pp. 657–682.
- Ozdoğan, Mehmet and Parzinger, Hermann (2012). Die frühbronzezeitliche Siedlung von Kanlıgeçit bei Kırklareli: Ostthrakien während des 3. Jahrtausends v. Chr. im Spannungsfeld von anatolischer und balkanischer Kulturentwicklung. Darmstadt: Philipp von Zabern.
- Özgüç, Nimet (1966). Excavations at Acemhöyük. Anadolu 10, pp. 29–52.
- Özgüç, Nimet (2015). Acemhöyük—Burušhaddum I: Silindir mühürler ve mühür baskılı bullalar/Cylinder Seals and Bullae with Cylinder Seal Impressions. Ankara: Türk Tarih Kurumu Basımevi.
- Özgüç, Tahsin (1956). The Dagger of Anitta. Belleten 20, pp. 33–35.
- Özgüç, Tahsin (1986). New Observations on the Relationship of Kültepe with Southeast Anatolia and North Syria during the Third Millennium B.C. In: J.V. Canby, E. Porada, B.S. Ridgway, and T. Stech, eds, *Ancient Anatolia. Aspects of Change and Cultural Development. Essays in Honor of Machteld J. Mellink*. Wisconsin: University of Wisconsin Press, pp. 31–47.
- Öztan, Aliye (1989). A group of Early Bronze Age Pottery from the Konya and Niğde

Region. In: K. Emre, M. Mellink, B. Hrouda and N. Özgüç, eds, *Anatolia and the Ancient Near East. Studies in Honor of Tahsin Özgüç*. Ankara: Türk Tarih Kurumu, pp. 407–418.

- Özyar, Aslı (1999). Reconsidering the 'Royal' Tombs of Alacahöyük: Problems of Stratigraphy According to the Topographical Location of the Tombs. *TÜBA-AR* 2, pp. 75–85.
- Palmisano, Alessio (2018). The Geography of Trade: Landscapes of Competition and Long-Distance Contacts in Mesopotamia and Anatolia in the Old Assyrian Colon Period. Oxford: Archaeopress Publishing.
- Palumbi, Giulio (2008a). The Red and the Black. Social and Cultural Interaction between the Upper Euphrates and Southern Caucasus Communities in the Fourth and Third Millennium BC (Studi di Preistoria Orientale 2). Roma: Sapienza Università di Roma.
- Palumbi, Giulio (2008b). Mid-Fourth Millennium Red-Black Burnished Wares from Anatolia: A Cross-Comparison. *Ancient Near Eastern Studies* 27, pp. 39–58.
- Palumbi, Giulio (2012). Bridging the Frontiers. Pastoral Groups in the Upper Euphrates Region in the Early Third Millennium BCE. *Origini* 34, pp. 261–278.
- Palumbi, Giulio (2016). The Early Bronze Age of the Southern Caucasus. *Oxford Handbooks Online*, DOI: 10.1093/0xfordhb/9780199935413.013.14.
- Pavúk, Peter (2015). Between the Aegean and the Hittites: The Western Anatolia in Second Millennium BC. In: N. Stampolidis, Ç. Maner, and K. Kopanias, eds, NOSTOI: Indigenous Culture, Migration and Integration in the Aegean Islands and Western Anatolia during the Late Bronze and Early Iron Ages. Istanbul: Ege Yayınları, pp. 81–114.
- Pavúk, Peter and Horejs, Barbara (2018). Ceramics, Surveys, and Connectivity in Western Anatolia: The Middle and Late Bronze Age Bakırçay/Kaikos Valley Restudied. *Ägypten und Levante/Egypt and the Levant* 28, pp. 457–485.
- Payne, Annick (2015). *Schrift und Schriftlichkeit: Die anatolische Hieroglyphenschrift.* Wiesbaden: Harrassowitz.
- Paz, Sarit (2009). A home away from home? The settlement of Early Transcaucasian migrants at Tel Bet Yerah. *Tel Aviv* 36, pp. 196–217.
- Pecchioli Daddi, Franca (1987). Aspects du culte de la divinité hattie Teteshapi. *Hethitica* 8, pp. 361–379.
- Pecchioli Daddi, Franca (2003). *Il vincolo per i governatori di provincia* (Studia Mediterranea 14 / Series Hethaea 3). Pavia: Italian University Press.
- Pecchioli Daddi, Franca and Polvani, Anna Maria (1990). *La mitologia ittita*. Brescia: Paideia.
- Pedersén, Olof (1998). Archives and Libraries in the Ancient Near East 1500–300 B.C. Bethesda: CDL.
- Peyronel, Luca (2017). From Ebla to Kanesh and Vice Versa: Reflections on Commercial Interactions and Exchanges between Northern Syria and Anatolia during the Middle Bronze Age. In: F. Kulakoğlu and G. Barjamovic, eds, *Proceedings of the 2nd Kül*-

*tepe International Meeting. Kültepe, 26–30 July 2015. Studies Dedicated to Klaas Veenhof* (Kültepe International Meetings 2 / SUBARTU 39). Turnhout: Brepols, pp. 197– 215.

- Pinault, Georges-Jean (1998). Le nom indo-iranien de l'hôte. In: W. Meid, ed, Sprache und Kultur der Indogermanen. Akten der x. Fachtagung der Indogermanischen Gesellschaft, Innsbruck, 22.–28. September 1996 (Innsbrucker Beiträge zur Sprachwissenschaft 93). Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, pp. 451–477.
- Pisaniello, Valerio (2015a). La collezione di tavolette del complesso B-C-H di Büyükkale. *Vicino Oriente* 19, pp. 265–295.
- Pisaniello, Valerio (2015b). Parallel Passages among Hittite-Luwian Rituals: For the Restoration of KUB 35.146. *Vicino Oriente* 19, pp. 25–37.
- Pisaniello, Valerio (2017). Hittite (NINDA) kaz(za)mi(t)-. Vicino Oriente 21, pp. 71–82.
- Pisaniello, Valerio (2020a). I suffissi verbali ittiti -anna/i- e -šš(a)-: studio sul sistema aspettuale ittita (Studi Linguistici Pisani 10). Pisa: Pisa University Press.
- Pisaniello, Valerio (2020b). *Glossenkeil* and Indentation on Hittite Tablets. *Altorientalische Forschungen* 47, pp. 123–142.
- Pisaniello, Valerio and Giusfredi, Federico (2021). Anatolian glosses in the Akkadian "medizinischen Omina". *KASKAL* 18, pp. 257–281.
- Pisaniello, Valerio and Giusfredi, Federico (forthcoming). The Anatolian glosses in the Akkadian medical texts from Boğazköy and the sociolinguistic situation of the late imperial Hattuša. Forthcoming in the Proceedings of the conference *The Luwic dialects of the Anatolian group: writing systems, grammar, lexicon and onomastics. 7th Luwic Workshop*.
- Polvani, Anna Maria (2008). The god Eltara and the Theogony. *Studi Micenei ed Egeo-Anatolici* 49 (= A. Archi and R. Francia, eds, VI Congresso Internazionale di Ittitologia. *Roma*, 5–9 settembre 2005), pp. 617–624.
- Popko, Maciej (2007). Althethitisch? Zu den Datierungsfragen in der Hethitologie. In: D. Groddek and M. Zorman, eds, *Tabularia Hethaeorum. Hethitologische Beiträge Silvin Košak zum 65. Geburtstag* (Dresdner Beiträge zur Hethitologie 25). Wiesbaden: Harrassowitz, pp. 575–581.
- Porzig, Walter (1927). Kleinasiatisch-Indische Beziehungen. Zeitschrift für Indologie und Iranistik 5, pp. 265–280.
- Rahmstorf, Lorenz (2010). Indications of Aegean-Caucasian relations during the third millennium BC. In: S. Hansen, A. Hauptmann, I. Moztenbaker, and E. Pernicka, eds, *Von Majkop bis Trialeti: Gewinnung und Verbreitung von Metallen und Obsidian in Kaukasien im 4.–2. Jt. v. Chr.* Bonn: Rudolph Habelt, pp. 263–295.
- Raulwing, Peter (2000). Horses, Chariots and Indo-Europeans. Foundations and Methods of Chariotry Research from the Viewpoint of Comparative Indo-European Linguistics (Archaeolingua, Series Minor 13). Budapest: Archaeolingua Alapítvány.

- Raulwing, Peter (2005). The Kikkuli Text (CTH 284). Some Interdisciplinary Remarks on Hittite Training Texts for Chariot Horses in the Second Half of the 2nd Millennium B.C. In: A. Gardeisen, ed, Les Équidés dans le monde méditerranéen antique. *Actes du colloque organisé par l'École française d'Athènes, le Centre Camille Jullian, et l'UMR 5140 du CNRS, Athènes, 26–28 novembre 2003.* Lattes: Éd. de l'Association pour le développement de l'archéologie en Languedoc-Rousillon, pp. 61– 75.
- Raulwing, Peter (2013). Manfred Mayrhofer's Studies on Indo-Aryan and the Indo-Aryans in the Ancient Near East: A Retrospective and Outlook on Future Research. In: Th. Schneider and P. Raulwing, eds, *Egyptology from the First World War to the Third Reich. Ideology, Scholarship, and Individual Biographies*. Leiden/Boston: Brill, pp. 248–285.
- Reiner, Erica and Güterbock, Hans Gustav (1967). The Great Prayer to Ishtar and Its Two Versions from Boğazköy. *Journal of Cuneiform Studies* 21, pp. 255–266.
- Renfrew, Colin (1987). Archaeology and Language: The Puzzle of Indo-European Origins. London: Penguin Books.
- Renfrew, Colin (2001). The Anatolian Origins of Proto-Indo-European and the Autochthony of the Hittites. In: R. Drews, ed, *Greater Anatolia and the Indo-Hittite Language Family: Papers Presented at a Colloquium Hosted by the University of Richmond, March 18–19, 2000* (Journal of Indo-European Studies Monograph 38), Washington: Institute for the Study of Man, pp. 36–63.
- Renfrew, Colin, Dixon, Jacqueline E., and Cann, Johnson R. (1966). Obsidian and Early Cultural Contact in the Near East. *Proceedings of the Prehistoric Society* 32, pp. 30–72.
- Richter, Thomas (2012). *Bibliographisches Glossar des Hurritischen*. Wiesbaden: Harrassowitz.
- Richter, Thomas (2016). Vorarbeiten zu einem hurritischen Namenbuch. Wiesbaden: Harrassowitz.
- Rieken, Elisabeth (1994). Der Wechsel *-a-/-i-* in der Stammbildung des hethitischen Nomens. *Historische Sprachforschung* 107, pp. 42–53.
- Rieken, Elisabeth (2000). Die Partikeln -a, -ja, -ma im Althehtitischen und das Akkadogramm Ù. In: M. Ofitsch and C. Zinko, eds, 125 Jahre Indogermanistik in Graz. Festband anläßlich des 125jährigen Bestehens der Forschungrischtung "Indogermanistik" and der Karl-Franzens-Universität Graz. Graz: Leykam, pp. 411–419.
- Rieken, Elisabeth (2001). Der hethitisch šar-tamhari-Text: archaisch oder archaisierend? In: G. Wilhelm, ed, Akten des IV. Internationalen Kongresses für Hethitologie, Würzburg, 4.–8. Oktober 1999 (Studien zu den Böğazköy-Texten 45). Wiesbaden: Harrassowitz, pp. 576–585.
- Rieken, Elisabeth (2006). Zum hethitisch-luwischen Sprachkontakt in historischer Zeit. *Altorientalische Forschungen* 33, pp. 271–285.

- Rieken, Elisabeth (2009). Die Tontafelfunde aus Kayalıpınar. In: F. Pecchioli Daddi, G. Torri, and C. Corti, eds, *Central-North Anatolia in the Hittite Period—New Perspectives in Light of Recent Research. Acts of the International Conference Held at the University of Florence* (7–9 *February* 2007) (Studia Asiana 5). Roma: Herder, pp. 119–1143.
- Rieken, Elisabeth (2011). Verberststellung in hethitischen Übersetzungstexten. In: T. Krisch and T. Lindner, eds, *Indogermanistik und Linguistik im Dialog. Akten der XIII.* Fachtagung der Indogermanischen Gesellschaft vom 21. bis 27. September 2008 in Salzburg. Wiesbaden: Reichert, pp. 498–507.
- Rieken, Elisabeth (2014). Übersetzungsstrategien im Hethitischen: Die Relativsatz-Konstruktion. In: J.L. García Ramón and D. Kölligan, eds, *Strategies of Translation: language contact and poetic language, Akten des Workshops Köln, 17.–18. Dezember* 2010, vol. 2 (Fascicoli Monografici di «Linguarum Varietas» 4). Pisa: Fabrizio Serra, pp. 273–282.
- Rieken, Elisabeth (2016a). Horizontal and vertical translation in Hittite cuneiform script texts. In A. Harlos and N. Müller, eds, *Adapting Texts and Styles in Celtic Context. Interdisciplinary Perspectives on Processes of Literary Transfer in the Middle Ages. Studies in Honor of Erich Poppe.* Münster: Nodus, pp. 215–228.
- Rieken, Elisabeth (2016b). Zum luwischen Ursprung von heth. <sup>LÚ</sup>ta/uh(uk)kanti- 'Kronprinz'. In: H. Marquardt, S. Reichmuth, and J.V. García Trabazo, ed, Anatolica et indogermanica. Studia linguistica in honorem Johannis Tischler septuagenarii dedicata (Innsbrucker Beiträge zur Sprachwissenschaft 155). Innsbruck: Institut für Sprachwissenschaft, pp. 267–277.
- Rieken, Elisabeth (2017a). The dialectology of Anatolian. In: M. Fritz, B. Joseph, and J. Klein (eds), *Comparative Indo-European Linguistics. An International Handbook of Language Comparison and the Reconstruction of Indo-European*, vol. 1. Berlin: de Gruyter, pp. 298–308.
- Rieken, Elisabeth (2017b). Word-internal plene spelling with  $\langle i \rangle$  and  $\langle e \rangle$  in Cuneiform Luwian texts. *Journal of Language Relationship* 15 (1), pp. 19–30.
- Rieken, Elisabeth, ed (2019a), *Keilschrifttafeln aus Kayalıpınar l. Textfunde aus den Jahren 1999–2017* (Documenta Antiqua Asiae Minoris 1). Wiesbaden: Harrassowitz.
- Rieken, Elisabeth (2019b). Zurück in die Zukunft: Eine neue luwische Etymologie. In: A.A. Catt, R.I. Kim, and B. Vine, ed, QAZZU warrai: Anatolian and Indo-European Studies in Honor of Kazuhiko Yoshida. Ann Arbor/New York: Beech Stave Press, pp. 309–318.
- Riemschneider Kaspar K. (1958). Die hethitischen Landschenkungsurkunden. *Mitteilungen des Instituts für Orientforschung* 6, pp. 321–381.
- Riemschneider, Kaspar K. (1970). *Babylonische Geburtsomina in hethitischer Übersetzung* (Studien zu den Boğazköy-Texten 9). Wiesbaden: Harrassowitz.
- Riemschneider, Kaspar K. (2004). *Die akkadischen und hethitischen Omentexte aus Boğazköy* (Dresdner Beiträge zur Hethitologie 12). Dresden: Verlag der TU Dresden.

- Rizza, Alfredo (2002). Linguistic and cultural layers in the Anatolian myth of Illuijanka. In: D. Ambaglio, ed, *Syggraphé* (4). Como: New Press, pp. 9–23.
- Rizza, Alfredo (2008). Interferenza linguistica e culturale nelle traduzioni del Vicino Oriente: il caso dell'Anatolia preclassica. In: L. Busetto and M. Morani, eds, *La traduzione come strumento di interazione culturale e linguistica. Atti del seminario svoltosi a Genova nei giorni 6–7 novembre 2008*. Milano: Qu.A.S.A.R, pp. 235–260.
- Rizza, Alfredo (2009). Left and Right Periphery in Hittite. The case of the translations from Hattic. In: E. Rieken and P. Widmer, eds, *Pragmatische Kategorien. Form, Funktion und Diachronie. Akten der Arbeitstagung der Indogermanischen Gesellschaft vom* 24. bis 26. September 2007 in Marburg. Wiesbaden: Reichert, pp. 275–286.
- Rizza, Alfredo (2012). Polveri di parole—polveri di spezie. Sulle tracce dello zafferano nell'area indo-mediterranea antica. In: P. Cotticelli-Kurras, M. Giorgieri, C. Mora, and A. Rizza, eds, *Interferenze linguistiche e contatti culturali in Anatolia tra 11 e 1 millennio a.C. Studi in onore di Onofrio Carruba in occasione del suo* 80° *compleanno*. Genova: Italian University Press, pp. 231–266.
- Robin, Christian J. (1987). Trois inscriptions sabéennes découvertes près de Barāqish (République Arabe du Yemen). Proceedings of the Seminar for Arabian Studies 17, pp. 165–177.
- Robson, Eleanor. (2001). The Tablet House: A Scribal School. *Revue d'assyriologie et d'archéologie orientale* 95, pp. 39–66.
- Romagno, Domenica (2015). The Greek-Anatolian area in the 2nd millennium B.C.: between language contact, Indo-European inheritance and typologically natural tendencies. *Studi e Saggi Linguistici* 53 (1), pp. 429–446.
- Roosevelt, Christopher H., Luke, Christina, Ünlüsoy, Sinan, Marston, John M., O'Grady, Caitlin R., Pavúk, Peter, Pieniążek, Magda, Mokrišová, Jana, Scott, Catherine B., Shin, Nami, and Slim, Francesca N. (2018). Exploring Space, Economy, and Interregional Interaction at a Second-Millennium B.C.E. Citadel in Central Western Anatolia: 2014–2017 Research at Kaymakçı. *American Journal of Archaeology* 122, pp. 645–688.
- Rosenkranz, Bernhard (1938). Die Stellung Des Luwischen Im Hatti-Reiche. *Indogermanische Forschungen* 56, pp. 265–284.
- Rost, Paul (1897). *Untersuchungen zur altorientalischen Geschichte* (Mitteilungen der Vorderasiatischen Gesellschaft 2/2). Berlin: Peiser.
- Roth, Martha T. (1995). *Law Collections from Mesopotamia and Asia Minor (2nd edition)* (Writings from the Ancient World 6). Atlanta: Scholars Press.
- Rouse, Irving (1986). *Migrations in Prehistory: Inferring Population Movement from Cultural Remains*. New Haven: Yale University Press.
- Rubio, Gonzalo (1999). On the Alleged "Pre-Sumerian Substratum". *Journal of Cuneiform Studies* 51, pp. 1–16.
- Rubio, Gonzalo. (2000). On the Orthography of the Sumerian Literary Texts from the Ur III Period. *Acta Sumerologica* 22, pp. 203–225.

- Rubio, Gonzalo (2005). On the Linguistic Landscape of Early Mesopotamia. In: W.H. van Soldt, ed, *Ethnicity in Ancient Mesopotamia. Papers Read at the 48th Rencontre Assyriologique Internationale. Leiden, 1–4 July 2002* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 102). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 316–332.
- Rüster, Christel and Wilhelm, Gernot (2012). *Landschenkungsurkunden hethitischer Könige* (Studien zu den Boğazköy Texten Beiheft 4). Wiesbaden: Harrassowitz.
- Rutherford, Ian (2001). The Song of the Sea (ŠA A.AB.BA SÌR): Thoughts on KUB 45.63. In: G. Wilhelm, ed, *Akten des 1v. Internationalen Kongresses für Hethitologie. Würzburg, 4.–8. Oktober 1999* (Studien zu den Boğazköy-Texten 45). Wiesbaden: Harrassowitz, pp. 598–609.
- Rutherford, Ian (2011). Ea and the Beast. The Hittite Text and its relation to the Greek Poetry. In M. Hutter and S. Hutter-Braunsar, eds, *Hethitische Literatur. Überlieferungsprozesse, Textstrukturen, Ausdrucksformen und Nachwirken. Akten des Symposiums vom 18. bis 20. Februar 2010 in Bonn* (Alter Orient und Altes Testament 391). Münster: Ugarit-Verlag, pp. 217–225.
- Rutz, Matthew T. (2012). Mesopotamian Scholarship in Hattuša and the Sammeltafel KUB 4.53. Journal of the American Oriental Society 132 (2), pp. 171–188.
- Sadovski, Velizar (2009). On Horses and Chariots in Ancient Indian and Iranian Personal Names. In: B.G. Fragner, R. Kauz, R. Ptak, and A. Schottenhammer, eds, *Pferde in Asien: Geschichte, Handel und Kultur | Horses in Asia: History, Trade and Culture* (Veröffentlichungen zur Iranistik 46). Wien: Verlag der Österreichischen Akademie der Wissenschaften, pp. 113–129.
- Sadovski, Velizar (2013). Zur Morphologie und Semantik von Namen und Epitheta im Indo-Iranischen. In: V. Sadovski and A. Panaino, eds, *Disputationes Iranologicae Vindobonenses, 11* (Veröffentlichungen zur Iranistik 65). Wien: Verlag der Österreichischen Akademie der Wissenschaften, pp. 5–46.
- Sagona, Antonio and Zimansky, Paul (2009). Ancient Turkey. London: Routledge.
- Sagona, Antonio (2017). *The Archaeology of the Caucasus: From Earliest Settlements to the Iron Age*. Cambridge: Cambridge University Press.
- Şahoğlu, Vasıf (2005). The Anatolian Trade Network and the Izmir region during the Early Bronze Age. *Oxford Journal of Archaeology* 24 (4), pp. 339–360.
- Sallaberger, Walther (2007). From Urban Culture to Nomadism: A History of Upper Mesopotamia in the Late Third Millennium. In: C. Kuzucuoğlu and C. Marro, eds, Sociétés humaines et changement climatique à la fin du troisième millénaire: une crise a-t-elle eu lieu en Haute Mésopotamie? Actes du Colloque de Lyon (5–8 décembre 2005). Istanbul: Institut Français d'Études Anatoliennes-Georges Dumézil, pp. 417– 456.
- Salvini, Mirjo (1980). Ittito e hurrico nei rituali di Boğazköy. *Vicino Oriente* 3, pp. 153–167.

- Salvini, Mirjo (1993). Un documento del re ittita Ammuna. *Studi Micenei ed Egeo-Anatolici* 33, pp. 85–89.
- Salvini, Mirjo (1994). Una lettera di Hattušili I relativa alla spedizione contro Haḥḥum. *Studi Micenei ed Egeo-Anatolici* 34, pp. 61–80.
- Salvini, Mirjo (1996). *The Habiru Prism of King Tunip-Teššup of Tikunani* (Documenta Asiana 3). Roma: Istituti Editoriali e Poligrafici.
- Salvini, Mirjo (2000a). La civiltà dei Hurriti, popolo dell'Asia Anteriore antica. Introduzione alla storia degli studi e alla documentazione testuale. *La Parola del Passato* 55, pp. 7–24.
- Salvini, Mirjo (2000b). Le più antiche testimonianze dei Hurriti prima della formazione del regno di Mittanni. *La Parola del Passato* 55, pp. 25–67.
- Salvini, Mirjo (2000c). I Hurriti sulla costa del Mediterraneo. *La Parola del Passato* 55, pp. 103–113.
- Salvini, Mirjo (2015). *Les textes hourrites de Méskéné/Emar* (Analecta Orientalia 57/1–2) (2 vols.). Roma: Gregorian and Biblical Press.
- Salvini, Mirjo and Trémouille, Marie-Claude (2003). Les Textes Hittites de Meskéné/ Emar. *Studi Micenei ed Egeo-Anatolici* 45 (2), pp. 225–271.
- Salvini, Mirjo and Wegner, Ilse (2004). *Die mythologischen Texte* (Corpus der hurritischen Sprachdenkmäler 1/6). Roma: CNR.
- Sani, Saverio (2017). Questioni di dialettologia antico indiana e l'indo-ario di Mitanni. In: A. Crisanti, C. Pieruccini, C. Policardi, and P.M. Rossi, eds, Anantaratnaprabhava. *Studi in onore di Giuliano Boccali*. Milano: Ledizioni, pp. 23–29.
- Sasseville, David (2014–2015). Luwian and Lycian Agent Nouns in \*-*é-leh*<sub>2</sub>. *Die Sprache* 51, pp. 105–124.
- Sasseville, David (2017). The Lydian nominal paradigm of *i*-mutation. *Indo-European Linguistics* 5 (1), pp. 130–146.
- Sasseville, David (2019). "To show" in Hittite and Palaic Rituals. *Altorientalische For*schungen 46, pp. 22–32.
- Sasseville, David (2020a). Nouveaux joints relatifs au grand rituel louvite de Kuwattalla et Šilalluḥi. *Zeitschrift für Assyriologie* 110 (1), pp. 111–118.
- Sasseville, David (2020b). Anatolian Verbal Stem Formation: Luwian, Lycian and Lydian. (Brill's Studies in Indo-European Languages & Linguistics 21). Leiden: Brill.
- Sasseville, David and Yakubovich, Ilya (2018). Palaic Words for Domestic Animals and their Enclosures. *Historische Sprachforschung* 131, pp. 46–58.
- Saussure, Ferdinand de (1916). Cours de linguistique générale. Lausanne/Paris: Payot.
- Sayce, Archibald H. (1909). The Names of Vedic Deities on a Hittite Tablet. *Journal of the Royal Asiatic Society of Great Britain and Ireland* 41, pp. 1106–1107.
- Schachner, Andreas (2009). Das 16. Jahrhundert v.Chr.: Eine Zeitenwende im hethitischen Zentralanatolien. *Istanbuler Mitteilungen* 59, pp. 9–34.
- Schachner, Andreas (2011). *Hattuscha: Auf der Suche nach dem sagenhaften Großreich der Hethiter*. Munchen: C.H. Beck.

- Schachner, Andreas (2019). Die Ausgrabungen in Boğazköy-Hattuša 2018. Archäologischer Anzeiger 2019 (1), pp. 43–117.
- Schachner, Andreas (2020). The Power of Geography: Criteria for Selecting the Location of Hattuša, the Capital City of the Hittite Empire. In: M. Cammarosano, E. Devecchi, and M. Viano, eds, *talugaeš witteš—Ancient Near Eastern Studies Presented to Stefano de Martino on the Occasion of his 65th Birthday* (Kasion 2). Münster: Zaphon, pp. 399–420.
- Schachner, Andreas (2021). Die Ausgrabungen in Boğazköy-Hattuša 2020. Archäologischer Anzeiger 2021 (1), pp. 9–64.
- Scheftelowitz, Isidor (1902). Die Sprache der Kossäer. Zeitschrift für vergleichende Sprachforschung 38, pp. 260–277.
- Scheucher, Tobias S. (2012). *The Transmissional and Functional Context of the Lexical Lists from Hattuša and from the Contemporaneous Traditions in Late-Bronze-Age Syria*, Dissertation, Leiden University.
- Schmitt, Rüdiger (2000). *Selected Onomastic Writings* (Persian Studies Series 20). New York: Bibliotheca Persica Press.
- Schmökel, Hartmut (1938). Die ersten Arier im Alten Orient. Leipzig: Curt Rabitzsch.
- Schoop, Ulf-Dietrich (2011). The Chalcolithic on the Plateau. In: S.R. Steadman and G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia* 10,000–323 B.C.E. Oxford: Oxford University Press, pp. 150–173.
- Schoop, Ulf-Dietrich (2011b). Çamlıbel Tarlası: ein metallverarbeitender Fundplatz des vierten Jahrtausends v. Chr. im nördlichen Zentralanatolien. In: Ü. Yalçın, ed, Anatolian Metal 5. Bochum: Deutschen Bergbau-Museum, pp. 53–68.
- Schoop, Ulf-Dietrich (2014). Weaving society in Late Chalcolithic Anatolia: Textile production and social strategies in the 4th millennium BC. In: B. Horejs and M. Mehofer, eds, Western Anatolia before Troy: Proto-Urbanisation in the 4th Millennium BC? Vienna: Verlag der Österreichischen Akademie der Wissenschaften, pp. 421–446.
- Schoop, Ulf-Dietrich (2015). Çamlıbel Tarlası: Late Chalcolithic settlement and economy in the Budaközü valley (north-central Anatolia). In: S.R. Steadman and G. Mc-Mahon, eds, *The Archaeology of Anatolia 1: Recent Work (2011–2014)*. Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 46–68.
- Schrijver, Peter (2018). The Verbal Syntax of Hattian. *Altorientalische Forschungen* 45 (2), pp. 213–245.
- Schuster, Hans-Siegfried (1974). Die hattisch-hethitischen Bilingue 1. Einleitung, Texte und Kommentar. Teil 1. Leiden: Brill.
- Schuster, Hans-Siegfrid (2002). *Die hattisch-hethitischen Bilingue 11. Textbearbeitungen Teil 2 und 3.* Leiden: Brill.
- Schwemer, Daniel (1998). *Akkadische Rituale aus Hattuša. Die Sammeltafel KBo xxxv1* 29 und verwandte Fragmente. Heidelberg: Winter Verlag.
- Schwemer, Daniel (2001). Die Wettergottgestalten Mesopotamiens und Nordsyriens im

Zeitalter der Keilschriftkulturen: Materialen und Studien nach den schriftlichen Quellen. Wiesbaden: Harrassowitz.

- Schwemer, Daniel (2005). Texte aus Alalah. In: B. Janowski and G. Wilhelm, eds, Staatsverträge, Herrscherinschriften und andere Dokumente zur politischen Geschichte (Texte aus der Umwelt des Alten Testaments Neue Folge 2). Gütersloh: Gütersloher Verlagshaus, pp. 182–186.
- Schwemer Daniel (2005/2006). Lehnbeziehungen zwischen dem Hethitischen und dem Akkadischen. *Archiv für Orientforschung* 51, pp. 220–234.
- Schwemer, D. (2013). Gauging the Influence of Babylonian Magic: The Reception of Mesopotamian Traditions in Hittite Ritual Practice. In E. Cancik-Kirschbaum, J. Klinger, and G.G.W. Müller, eds, *Diversity and Standardization. Perspectives on Social and Political Norms in the Ancient Near East.* Berlin: Akademie Verlag, 145–171.
- Schwemer, Daniel (2015). Hittite Prayers to the Sun-god for Appeasing an Angry Personal God. A Critical Edition of CTH 372–374 (with a glossary by Ch. Steitler). In: M. Jacques, ed, *"Mon dieu, qu'ai-je donc fait?" Les diĝir-šà-dab(5)-ba et la piété privée en Mésopotamie* (Orbis Biblicus et Orientalis 273). Fribourg/Göttingen, 349–393, 421–457.
- Schwemer, Daniel (2016). Quality Assurance Managers at Work: The Hittite Festival Tradition. In: G.G.W. Müller, ed, Liturgie oder Literatur? Die Kultrituale der Hethiter im transkulturellen Vergleich Akten eines Werkstattgesprächs an der Akademie der Wissenschaften und der Literatur, Mainz, 2.–3. Dezember 2010. Wiesbaden: Harrassowitz, pp. 1–30.
- Schwemer, Daniel and Süel, Aygül (2021). *The Akkadian and Sumerian Texts from Ortaköy-Šapinuwa / Ortaköy-Šapinuwa'dan Akadca ve Sümerce Metinler*. Wiesbaden: Harrassowitz.
- Seeher, Jurgen (2001). Die Zerstörung der Stadt Hattuša. In: G. Wilhelm, ed, Akten des IV. Internationalen Kongresses für Hethitologie, Würzburg, 4.–8. Oktober 1999 (Studien zu den Boğazköy Texten 45). Wiesbaden: Harrassowitz, pp. 623–634.
- Seeher, Jurgen (2011). *Götter in Stein gehauen. Das hethitische Felsheiligtum von Yazılıkaya.* Istanbul: Ege Yayınları.
- Selover, Stephanie L. (2015). Excavating War: The Archaeology of Conflict in Early Chalcolithic to Early Bronze III Central and Southeastern Anatolia, Dissertation, University of Chicago.
- Şerifoğlu, Tevfik E. (2019). Kilise Tepe in Rough Cilicia before the Late Bronze Age: An Overview of the Architecture, Pottery Traditions, and Cultural Contacts. *ADALYA* 22, pp. 69–100.
- Sherratt, Andrew and Sherratt, Susan (1988). The archaeology of Indo-European: an alternative view. *Antiquity* 62, pp. 584–595.
- Sideltsev, Andrej (2012). Right dislocations with pronominal reduplication in Cunei-

form Luwian [in Russian with an English abstract]. *Indo-European Linguistics and Classical Philology* 16, pp. 772–784.

- Sarı, Deniz (2013). The Cultural Development of Western Anatolia in the Third and Second Millennia BC and its Relationship with Migration Theories. In: A. Mouton, I. Rutherford, and I. Yakubovich, eds, *Luwian Identities: Culture, Language and Religion between Anatolia and the Aegean* (Culture and History of the Ancient Near East 64). Leiden: Brill, pp. 305–327.
- Simon, Zsolt (2010a). Das Problem der phonetischen Interpretation der anlautenden scriptio plena im Keilschriftluwischen. Babel und Bibel 4 (= L. Kogan, N. Koslova, S. Loesov, and S. Tishchenko, eds, Language in the Ancient Near East. Proceedings of the 53e Rencontre Assyriologique Internationale), pp. 249–265.
- Simon, Zsolt (2010b). Hethitisch-luwische Fremdwörter im Ägyptischen. Göttinger Miszellen 227, pp. 77–92.
- Simon, Zsolt (2011). The Identification of Qode. Reconsidering the Evidence. In: J. Mynářová, ed, Egypt and the Near East—the Crossroads: Proceedings of an International Conference on the Relations of Egypt and the Near East in the Bronze Age, Prague, September 1–3, 2010. Prague: Charles University, pp. 249–269.
- Simon, Zsolt (2012). Untersuchungen zur hattischen Grammatik Phonologie, Morphologie und Syntax, Dissertation, Eötvös Loránd University Budapest.
- Simon, Zsolt (2013). Die hethitische Präsenz in der Levante während der Spätbronzezeit: Archäologische vs. schriftliche Quellen. *Altorientalische Forschungen* 40, pp. 295–313.
- Simon, Zsolt (2015). Altassyrisch išhiulum: kein Vertrag, sondern ein Gürtel? *Nouvelles Assyriologiques Brèves et Utilitaires* 2015 (1), pp. 12–13.
- Simon, Zsolt (2016). Ist die Possessivkonstruktion im Kizzuwatna-Luwischen kontaktbedingt zustande gekommen? *Aula Orientalis* 34, 325–333.
- Simon, Zsolt (2020a). Cuneiform Luwian =*ku*(*wa*): form and meaning. *Hungarian Assyriological Review* 1, pp. 39–42.
- Simon, Zsolt (2020b). Die hurritischen Lehnwörter im Keilschriftluwischen. In: R. Garnier, ed, Loanwords and Substrata in Indo-European Languages: Proceedings of the Colloquium held in Limoges, 5th–7th June, 2018 (Innsbrucker Beiträge zur Sprachwissenschaft 164). Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, pp. 411–426.
- Simon, Zsolt (2020c). On the Origins of the Hieroglyphic Luwian Writing System: The Chronological Problem. *Chatreššar* 3 (2), pp. 42–56.
- Simon, Zsolt (2020d), Das unerwartete ⟨u⟩ in der altassyrischen Nebenüberlieferung hethitischer Wörter. In: R.I. Kim, J. Mynářová, and P. Pavúk, eds, *Hrozný and Hittite. The First Hundred Years*, (Culture and History of the Ancient Near East 107). Leiden/Boston: Brill, pp. 254–264.
- Simon, Zsolt (2020e). Die luwischen Wörter für ,Dolmetscher'. Stammbildung und Ety-

mologie. In: L. Repanšek, H. Bichlmeier, and V. Sadovski, eds, *Proceedings of the international conference of the Society for Indo-European Studies and IWoBA XII, Ljubljana 4–7 June 2019. Celebrating one hundred years of Indo-European compara-tive linguistics at the University of Ljubljana* (Studien zur historisch-vergleichenden Sprachwissenschaft 17). Hamburg: Baar-Verlag, pp. 607–616.

- Simon, Zsolt (2021). Zum Verhältnis der palaischen und hurritischen Wörter für 'Dolch'. *Nouvelles Assyriologiques Brèves et Utilitaires* 2021 (3), pp. 180–183.
- Singer, Itamar (1981). Hittites and Hattians in Anatolia at the Beginning of the Second Millennium B.C. *Journal of Indo-European Studies* 9, pp. 119–134.
- Singer, Itamar (1984). The AGRIG in the Hittite Texts. Anatolian Studies 34, pp. 97-127.
- Singer, Itamar (1999). A Political History of Ugarit. In: W.G.E. Watson and N. Wyatt, eds, *Handbook of Ugaritic Studies* (Handbuch der Orientalistik I/39). Leiden/Boston: Brill, pp. 603–733.
- Singer, Itamar (2001), Review of Hoffner (1997). *Journal of Near Eastern Studies*, pp. 286–289.
- Singer, Itamar (2006). The Failed Reforms of Akhenaten and Muwatalli. *British Museum Studies in Ancient Egypt and Sudan* 6, pp. 37–58.
- Singer, Itamar (2007a). Mythological Aspects in the Hittite Colonization of Anatolia. *Electronic Antiquity* 11, pp. 13–18.
- Singer, Itamar (2007b). Who were the Kaška? Phasis 10 (1), pp. 166–181.
- Singer, Itamar (2008). Purple-Dyers in Lazpa. In: B.J. Collins, M.R. Bachvarova, and I.C. Rutherford, eds, Anatolian Interfaces. Hittites, Greeks and Their Neighbours. Proceedings of an International Conference on Cross-Cultural Interaction, September 17–19, 2004, Emory University, Atlanta, GA. Oxford: Oxbow Books, pp. 21–43.
- Sinopoli, Carla (1994). The Archaeology of Empires. *Annual Review of Anthropology* 23, pp. 159–180.
- Skourtanioti, Eirini, Erdal, Yilmaz S. Frangipane, Marcella, Balossi Restelli, Francesca, Yener, K. Aslıhan, Pinnock, Frances, Matthiae, Paolo, Özbal, Rana, Schoop, Ulf-Dietrich, Guliyev, Farhad, Akhundov, Tufan, Lyonnet, Bertille, Hammer, Emily L., Nugent, Selin E., Burri, Marta, Neumann, Gunnar U., Penske, Sandra, Ingman, Tara, Akar, Murat, Shafiq, Rula, Palumbi, Giulio, Eisenmann, Stefanie, D'Andrea, Marta, Rohrlach, Adam B., Warinner, Christina, Jeong, Choongwon, Stockhammer, Philipp W., Haak, Wolfgang, and Krause, Johannes (2020). Genomic History of Neolithic to Bronze Age Anatolia, Northern Levant, and Southern Caucasus. *Cell* 181 (5), pp. 1158– 1175.
- Smogorzewska, Anna (2004). Andirons and their Role in Early Transcaucasian Culture. Anatolica 30, pp. 151–177.
- Soden, Wolfram von (1973). Iterativa im Akkadischen und Hethitischen. In: E. Neu and Ch. Rüster, eds, *Festschrift Heinrich Otten*. Wiesbaden: Harrassowitz, pp. 311–319.
- Sommer, Ferdinand and Falkenstein, Adam (1938). Die hethitisch-akkadische Bilingue

*des Hattusili 1 (Labarna 11)* (Abhandlungen der Bayerischen Akademie der Wissenschaften N.F. 16). Munich: Bayerische Akademie der Wissenschaften.

- Sommerfeld, Walter (2021). Old Akkadian. In: J.-P. Vita, ed, *History of the Akkadian Language*, vol. 1. Leiden/Boston: Brill, pp. 513–663.
- Soysal, Oğuz (1989). *Mursili 1.—Eine historische Studie*, Dissertation, Universität Würzburg.
- Soysal, Oğuz (2004). *Hattischer Wortschatz in hethitischer Textüberlieferung* (Handbuch der Orientalistik 1/74). Leiden/Boston: Brill.
- Soysal, Oğuz (2005). On the Origin of the Royal Title *tabarna / labarna*. *Anatolica* 31, pp. 189–210.
- Soysal, Oğuz (2006), review to Y. Cohen (2002). Taboos and Prohibitions in Hittite Society. A Study of the Hittite Expression *natta āra* ('not permitted') (Texte der Hethiter 24). Heidelberg: Carl Winter. *Journal of Near Eastern Studies* 65, pp. 129–134.
- Soysal, Oğuz (2017). A new join KUB 35.159 + Bo 4790 and resolving the problem of a mysterious language from Boğazköy. *Nouvelles Assyriologiques Brèves et Utilitaires* 2017 (2), pp. 83–85.
- Soysal, Oğuz (2016). Palaic tiuna- and Middle Hittite tiuni-: a Common Ancient Anatolian Word for 'Bull'. In: H. Marquardt, S. Reichmuth, and J.V. García Trabazo, eds, Anatolica et indogermanica. Studia linguistica in honorem Johannis Tischler septuagenarii dedicata (Innsbrucker Beiträge zur Sprachwissenschaft 155). Innsbruck: Institut für Sprachwissenschaft, pp. 315–319.
- Soysal, Oğuz (2018). Zu den rezenten Studien im Hattischen: Eine Zwischenbilanz. *Archivum Anatolicum* 12 (2), pp. 157–178.
- Soysal, Oğuz and Süel, Ağul (2016). The Hattian-Hittite Foundation Rituals from Ortaköy (11). Fragments to CTH 726 "Rituel bilingue de fondation d'un temple ou d'un palais". In: Š. Velhartická, ed, Audias fabulas veteres. Anatolian Studies in Honor of Jana Součková-Siegelová. Leiden: Brill, pp. 320–364.
- Speiser, Ephraim A. (1947). A Note on the Derivation of *šumma. Journal of Cuneiform Studies* 1, pp. 321–328.
- Starke, Frank (1983). Labarna. *Reallexikon der Assyriologie und Vorderasiatischen Archä*ologie 6, pp. 404–409.
- Starke, Frank (1985). *Die keilschrift-luwischen Texte in Umschrift* (Studien zu den Boğazköy Texten 30). Wiesbaden: Harrassowitz.
- Starke, Frank (1990). Untersuchungen zur Stammbildung des keilschrift-luwischen Nomens (Studien zu den Boğazköy-Texten 31). Wiesbaden: Harrassowitz.
- Starke, Frank (1993). Zur Herkunft von akkadisch *ta/urgumannu*(*m*) "Dolmetscher". *Die Welt des Orients* 24, pp. 20–38.
- Starke, Frank (1995). Ausbildung und Training von Streitwagenpferden. Eine hippologisch orientierte Interpretation des Kikkuli-Textes (Studien zu den Boğazköy-Texten 41). Wiesbaden: Harrassowitz.

- Steadman, Sharon R. (2011). The Early Bronze Age on the Plateau. In: S.R. Steadman and G. McMahon, eds, *The Oxford Handbook of Ancient Anatolia* 10,000–323B.C.E. Oxford: Oxford University Press, pp. 229–259.
- Steadman, Sharon R. and McMahon, Gregory, eds (2011). The Oxford Handbook of Ancient Anatolia (10000–323 B.C.E.). New York: Oxford University Press.
- Steadman, Sharon R., Arbuckle, Benjamin S., and McMahon, Gregory (2018). Pivoting East: Çadır Höyük, Transcaucasia, and complex connectivity in the Late Chalcolithic. *Documenta Praehistorica* 45, pp. 64–84.
- Steadman, Sharon R., McMahon, Gregory, Arbuckle, Benjamin S., Baeyer, Madelynn von, Smith, Alexia, Yıldırım, Burcu, Hackley, Laurel D., Selover, Stephanie, and Spagni, Stefano (2019). Stability and change at Çadır Höyük in central Anatolia: A case of Late Chalcolithic globalisation? *Anatolian Studies* 69, pp. 21–57.
- Steadman, Sharon R., McMahon, Gregory, and Ross, Jennifer C. (2007). The Late Chalcolithic at Çadır Höyük in Central Anatolia. *Journal of Field Archaeology* 32, pp. 385– 406.
- Steadman, Sharon R., Şerifoğlu, Tevfik E., McMahon, Gregory, Selover, Stephanie, Hackley, Laurel D., Yıldırım, Burcu, Lauricella, Anthony J., Arbuckle, Benjamin S., Adcock, Sarah E., Tardio, Katie, Dinç, Emrah, and Cassis, Marica (2017). Recent Discoveries (2015–2016) at Çadır Höyük on the North Central Plateau. *Anatolica* 43, pp. 203– 250.
- Stefanini, Roberto (1969). Il genitivo aggettivale nelle lingue anatoliche. *Athenaeum* N.S. 47 (= Studi in onore di Piero Meriggi), pp. 290–302.
- Stein, Gil (1999). Rethinking World Systems. Arizona: Arizona University Press.
- Steiner, Gerd (1981). The Role of the Hittites in Ancient Anatolia. *Journal of Indo-European Studies* 9, pp. 150–173.
- Steiner, Gerd (1984). Struktur und Bedeutung des sog. Anitta-Textes. *Oriens Antiquus* 23, pp. 54–73.
- Steiner, Gerd (1990). The Immigration of the First Indo-Europeans into Anatolia Reconsidered. *Journal of Indo-European Studies* 18, pp. 185–214.
- Steiner, Gerd (1993). Acemhüyük = Kārum Zalpa 'Im Meer'. In: M.J. Mellink, E. Porada, and T. Özgüç, eds, Aspects of Art and Iconography. Anatolia and its Neighbors. Studies in Honor of Nimet Özgüç. Ankara: Türk Tarih Kurumu, pp. 579–599.
- Steiner, Gerd (1999). Syrien als Vermittler zwischen Babylonien und Hatti (in der erseten Hälfte des 2. Jahrtausends v.Chr.). In: Languages and Cultures in Contact. At the Crossroads of Civilizations in the Syro-Mesopotamian Realm. Proceedings of the 42th Rencontre Assyriologique Internationale (Orientalia Lovaniensia Analecta 96). Leuven: Peeters, pp. 425–441.
- Steitler, Charles W (2014). Sakralsprache gelöst vom ursprünglichen Kontext? Das Beispiel einer Tafel des hethitischen Monatsfestes. *Die Welt des Orients* 44 (2), pp. 301– 308.

- Steitler, Charles W. (2017). The Solar Deities of Bronze Age Anatolia. Studies in Texts of the Early Hittite Kingdom, (Studien zu den Boğazköy Texten 62). Wiesbaden: Harrassowitz.
- Steitler, Charles W (2018), Searching for Hattian-Hittite 'Quasi-Bilingual' Texts: New Tools for the Continued Research of Hattian. *Altorientalische Forschungen* 45, pp. 246–257.
- Stivala, Gabriella (2006). I canti corali hattici, Dissertation, Università di Firenze.
- Stivala, Gabriella (2007). L'apporto della lingua hattica alla tradizione culturale hittita: due casi di canti strofici. *KASKAL* 4, pp. 221–243.
- Stivala, Gabriella (2011). Format und Überlieferung der hattischen Strophengesänge. *Die Welt des Orients* 41, pp. 191–200.
- Stivala, Gabriella (2016). Hattische Gesänge im Kontext der hethitischen Festrituale. In: G.G.W. Müller, ed, Liturgie oder Literatur? Die Kultrituale der Hethiter im transkulturellen Vergleich Akten eines Werkstattgesprächs an der Akademie der Wissenschaften und der Literatur, Mainz, 2.–3. Dezember 2010 (Studien zu den Boğazköy-Texten 60), pp. 133–144.
- Stol, Marten (2016). Women in the Ancient Near East. Berlin/Boston: de Gruyter.
- Straus, Lawrence G. (1987). Review of Rouse 1986. *Journal of Anthropological Research* 43, pp. 381–384.
- Sturtevant, Edgar H. (1928). Indic Speech and Religion in Western Asia. *Yale Classical Studies* 1, pp. 211–228.
- Sturtevant, Edgard H. (1932). The Development of the Stops in Hittite. *Journal of the American Oriental Society* 52, pp. 1–12.
- Sturtevant, Edgar H. (1933). *A Comparative Grammar of the Hittite Language*. Philadelphia: Yale University Press.
- Sudo, Hiroshi, Yamaguchi, Yuji, and Kontani, Ryoichi (2017). An Archaeological Assessment of the Kayseri Province during the Chalcolithic Period: New Evidence from the Archaeological Survey Project in Kayseri. In: F. Kuakoğlu and G. Barjamovic, eds, *Movement, Resources, Interaction: Proceedings of the 2nd Kültepe International Meeting, Kültepe, 26–30 July 2015. Studies Dedicated to Klaas Veenhof* (SUBARTU 39/Kültepe International Meetings 2). Turnhout: Brepols, pp. 227–242.
- Süel, Aygül (1998). Ortaköy-Šapinuwa Tabletlerinin Tarihlendirilmesi. In: S. Alp and A. Süel, eds, Acts of the IIIrd International Conference of Hittitology. Ankara: Nokta Ofset, pp. 551–558.
- Süel, Aygül (2009). Another Capital City of the Hittite State: Šapinuwa. In: F. Pecchioli Daddi, G. Torri, and C. Corti, eds, *Central-North Anatolia in the Hittite Period—New Perspectives in Light of Recent Research. Acts of the International Conference Held at the University of Florence* (7–9 *February* 2007) (Studia Asiana 5). Roma: Herder, pp. 193–205.
- Süel, Aygül and Soysal, Oğuz (2003). A Practical Vocabulary from Ortaköy. In: G.M. Beck-

man, R.H. Beal, and G. McMahon, eds, *Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday*. Winona Lake: Eisenbrauns, pp. 349–365.

- Süel, Ağul and Soysal, Oğuz (2007). The Hattian-Hittite Foundation Rituals from Ortaköy (1). Fragments to CTH 725 "Rituel bilingue de consécration d'un temple". Anatolica 33, pp. 1–22.
- Symington, Dorit (2007). The Early Bronze Age pottery. In: N. Postgate and D. Thomas, eds, *Excavations at Kilise Tepe*, 1994–98: From Bronze Age to Byzantine in Western Cilicia (British Institute at Ankara Monographs 30). London: McDonald Institute for Archaeological Research, pp. 295–318.
- Szemerényi, Oswald (1979). Palaic and the Indo-European Laryngeals. In: *Florilegium anatolicum. Mélanges offerts à Emmanuel Laroche*. Paris: De Boccard, pp. 315–319.
- Taggar-Cohen, Ada (2006). *Hittite Priesthood* (Texte der Hethiter 26). Heidelberg: Winter Verlag.
- Takács, Gábor (2008). *Etymological Dictionary of Egyptian. Volume Three:* m- (Handbuch der Orientalistik 1/48.3). Leiden/Boston: Brill.
- Taracha, Piotr (2004). On the dynasty of the Hittite empire. In: D. Groddek and S. Rößle, eds, *Šarnikzel. Hethitologische Studien zum Gedenken an Emil Orgetorix Forrer* (19.02. 1894–10.01.1986) (Dresdner Beiträge zur Hethitologie 10). Dresden: Verlag der TU Dresden, pp. 631–638.
- Taracha, Piotr (2009). *Religions of Second Millennium Anatolia* (Dresdner Beiträge zur Hethitologie 27). Wiesbaden: Harrassowitz.
- Tesnière, L. (1939). Phonologie et mélange des langues. *Travaux du Cercle Linguistique de Prague* 8, pp. 83–93.
- Thieme, Paul (1960). The 'Aryan' Gods of the Mitanni Treaties. *Journal of the American Oriental Society* 80, pp. 301–317.
- Thissen, Laurens (1993). New Insights in Balkan-Anatolian Connections in the Late Chalcolithic: Old Evidence from the Turkish Black Sea Littoral. *Anatolian Studies* 43, pp. 207–237.
- Thomason, Sarah G. (2000). Linguistic areas and language history. In: D. Gilbers, J. Nerbonne, and J. Schaeken, eds, *Languages in Contact*. Amsterdam: Rodopi, pp. 311–327.
- Thomason, Sarah G. (2001). *Language contact. An Introduction*. Washington D.C.: Georgetown University Press.
- Thomason, Sarah G. and Kaufman, Terrence (1988), *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.
- Thureau-Dangin, François (1939). Tablettes Hurrites provenant de Mâri. *Revue d'Assyriologie* 1, pp. 1–28.
- Tinney, Steve (1999). On the Curricular Setting of Sumerian Literature. *Iraq* 61, pp. 159–172.
- Tinney, Steve (2011). Tablets of Schools and Scholars: a Portrait of the Old Babylonian

Corpus. In: K. Radner and E. Robson, eds, *The Oxford Handbook of Cuneiform Culture*. Oxford: Oxford University Press, pp. 577–596.

- Tischler, Johann (1979). Der indogermanische Anteil am Wortschatz des Hethitischen.
  In: E. Neu and W. Meid, eds, *Hethitisch und Indogermanisch. Vergleichende Studien zur historischen Grammatik und zur dialektgeographischen Stellung der indogermanischen Sprachgruppen Altkleinasiens*, (Innsbrucker Beiträge zur Sprachwissenschaft 25). Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, pp. 257–267.
- Topçuoğlu, Oya (2014). Behind the Scenes: Seal Carvers as Artists and Artisans in The Old Assyrian Period. In: L. Atici, F. Kulakoğlu, G. Barjamovic, A. Fairbairn, eds, *Current Research at Kültepe-Kanesh: An Interdisciplinary and Integrative Approach to Trade Networks, Internationalism, and Identity* (Journal of Cuneiform Studies Supplement 4). Atlanta: Lockwood Press, pp. 123–134.
- Torri, Giulia (2008). The scribes of the House on the Slope. Studi Micenei ed Egeo Anatolici 50 (= A. Archi and R. Francia (eds.), VI Congresso Internazionale di Ittitologia. Roma, 5–9 Settembre 2005, vol. 2), pp. 771–782.
- Torri, Giulia (2009). Sargon, Anitta, and the Hittite Kings against Purušhanda. *Altorientalische Forschungen* 36, pp. 110–118.
- Torri, Giulia (2010). The Scribal School of the Lower City of Hattuša and the Beginning of the Career of Anuwanza, Court Dignitary and Lord of Nerik. In: M.G. Biga and M. Liverani, eds, ana turri gimilli. Studi dedicati al Padre Werner R. Mayer, S. J. da amici e allievi (Quaderni di Vicino Oriente 5). Roma: Sapienza Università di Roma, pp. 383–396.
- Torri, Giulia, and Görke, Susan (2013). Hittite Building Rituals. Interaction between their Ideological Function and Find Spots. In: C. Ambos and L. Verderame, eds, *Approaching rituals in ancient cultures. Questioni di rito: Rituali come fonte di conoscenza delle religioni e delle concezioni del mondo nelle culture antiche* (Rivista degli Studi Orientali Nuova Serie 86, Supplement 2). Roma: Fabrizio Serra, pp. 287–300.
- Trameri, Andrea (2020). *The Land of Kizzuwatna. History of Cilicia in the Second Millennium BCE until the Hittite Conquest (ca. 2000–1350)*, Dissertation, Institute for the Study of the Ancient World, New York University.
- Trémouille, Marie-Claire (2000). La religione dei Hurriti. *La Parola del Passato* 55, pp. 114–170.
- Trémouille, Marie-Claire (2005). *Texte verschiedenen Inhalts* (Corpus der hurritischen Sprachdenkmäler 1/8). Roma: CNR.
- Trigger, Bruce G. (2006). *A History of Archaeological Thought (2nd ed.*). Cambridge: Cambridge University Press.
- Tsevat, Matitiahu (1983). Two Old Testament Stories and their Hittite Analogues. *Journal of the American Oriental Society* 103, pp. 321–326.
- Türkteki, Murat (2013). The First Use of Wheel-Made Pottery and its Distribution in

Western and Central Anatolia. In: L. Bombardieri, A. D'Agostino, G. Guarducci, V. Orsi, and S. Valentini, eds, *SOMA 2012: Identity and Connectivity. Proceedings of the 16th Symposium on Mediterranean Archaeology, Florence, Italy, 1–3 March 2012.* Oxford: Archaeopress, pp. 193–200.

- Türkteki, Murat (2014). Early Bronze Age Pottery-Manufacture in Western Anatolia: Identifying Hybrid Technologies through X-ray Analysis. *Anatolica* 40, pp. 93–109.
- Ünal, Ahmet (1995). Reminiszenzen an die Zeit der altassyrischen Handelskolonien in hethitischen Texten. *Altorientalische Forschungen* 22, pp. 269–276.
- Ünal, Ahmet (2003). Boğazköy kılıcının üzerindeki Akadca adak yazısı hakkında yeni gözlemler. In: M.J. Mellink, E. Porada, and T. Özgüç, eds, *Aspects of Art and Iconography: Anatolia and its Neighbors. Studies in Honor of Nimet Özgüç*. Ankara: Türk Tarih Kurumu Basımevi, pp. 727–730.
- Ünal, Ahmet (2014). Fraudulent Premises of Anatolian Istoriography and Early Hittite Involvement in and Direct Control of Cilicia-Kizzuwatna. In: N. Çınardalı-Karaaslan, A. Aykurt, N. Kolankaya-Bostancı, and Y.H. Erbil, eds, *Anadolu Kültürlerine Bir Bakış: Armağan Erkanal'a Armağan = Some Observations on Anatolian Cultures Compiled in Honor of Armağan Erkanal.* Ankara: Hacettepe Üniversitesi Yayınları, pp. 469–500.
- Ünal, Ahmet (2015). A Hittite treaty tablet from Oylum Höyük in southeastern Turkey and the location of Haššu(wa). *Anatolian Studies* 65, pp. 19–34.
- Ünal, Ahmet (2016). Eine alternative Deutung des 'Wildtierparks' im Anitta-Text. In: Š. Velhartická, ed, *Audias fabulas veteres. Anatolian Studies in Honor of Jana Součková-Siegelová* (Culture and History of the Ancient Near East 79). Leiden/Boston: Brill, pp. 389–400.
- Ünal, Ahmet, Ertekin, Ahmet, and Ediz, İsmet (1990–1991). The Hittite Sword from Boğazköy-Hattusa, found 1991 and its Akkadian Inscription. *Müze | Museum* 4, pp. 50–52.
- Valério, Miguel (2018). Linguistic awareness in the development of the Anatolian Hieroglyphic sign values. *Studi Micenei ed Egeo-Anatolici* N.S. 4, pp. 143–160.
- Van de Mieroop, Marc (1999). *Cuneiform Texts and the Writing of History*. London/New York: Routledge.
- Van de Mieroop, Marc (2000). Sargon of Agade and His Successors in Anatolia. Studi Micenei ed Egeo-Anatolici 42, pp. 133–159.
- Van den Hout, Theo (1995). Der Ulmitešub-Vertrag: Eine prosopographische Untersuchung (Studien zu den Boğazköy Texten 38). Wiesbaden: Harrassowitz.
- Van den Hout, Theo (2002). Another View of Hittite Literature. In: S. de Martino and F. Pecchioli Daddi, eds, *Anatoli Antica. Studi in memoria di Fiorella Imparati* (Eothen 11). Firenze: LoGisma, pp. 857–878.
- Van den Hout, Theo (2003). Hittite Canonical Compositions, Biography and Autobiography: Apology of Hattušili III. In: W.W. Hallo, ed, *The Context of Scripture, Vol. 1. Canonical Compositions from the Biblical World*. Leiden: Brill, pp. 199–204.

- Van den Hout, Theo (2005). On the Nature of the Tablet Collections at Hattuša. Studi Micenei ed Egeo-Anatolici 47, pp. 277–289.
- Van den Hout, Theo (2007). Institutions, Vernaculars, Publics: The Case of Second-Millenium Anatolia, In: S. Sanders, ed, *Margins of Writing, Origins of Cultures* (Oriental Institute Seminars 2). Chicago: The Oriental Institute, pp. 217–256.
- Van den Hout, Theo (2008). A Classified Past: Classification of Knowledge in the Hittite Empire. In: R.D. Biggs, J. Myers, and M.T. Roth, eds, *Proceedings of the 51st Rencontre Assyriologique Internationale, Held at the Oriental Institute of the University of Chicago, July 18–22, 2005* (Studies in Ancient Oriental Civilization 62). Chicago: The Oriental Institute, pp. 211–219.
- Van den Hout, Theo (2009a) Reflections on the Origins and Development of the Hittite Tablet Collections in Hattuša and Their Consequences for the Rise of Hittite Literacy. In: F. Pecchioli Daddi, G. Torri, and C. Corti, eds, *Central-North Anatolia in the Hittite Period—New Perspectives in Light of Recent Research. Acts of the International Conference Held at the University of Florence* (7–9 *February* 2007) (Studia Asiana 5). Roma: Herder, pp. 71–96.
- Van den Hout, Theo (2009b) A Century of Hittite Text Dating and the Origins of the Hittite Cuneiform Script. *Incontri Linguistici* 32, pp. 11–35.
- Van den Hout, Theo (2009c). The Ductus of the Alalah VII Texts and the Origin of Hittite Cuneiform. In: E. Devecchi, ed, *Palaeography and Scribal Practices in Syro-Palestine and Anatolia in the Late Bronze Age. Papers Read at a Symposium in Leiden, 17–18 December 2009* (Publications de l'Institut historique-archéologique néerlandais de Stamboul 119). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 147–170.
- Van den Hout, Theo (2011) The Written Legacy of the Hittites. In: H. Genz and D.P. Mielke, eds, *Insights into Hittite History and Archaeology* (Colloquia Antiqua 2). Leuven/ Paris/Walpole, MA: Peeters, pp. 47–84.
- Van den Hout, Theo (2012). The Ductus of the Alalah VII Texts and the Origin of Hittite Cuneiform. In: E. Devecchi, ed, *Palaeography and Scribal Practices in Syro-Palestine and Anatolia in the Late Bronze Age. Papers Read at a Symposium in Leiden,* 17–18 December 2009 (Publications de l'Institut Historique-Archéologique Néederlandais de Stamboul 119). Leiden: Peeters, pp. 147–170.
- Van den Hout, Theo (2020). A History of Hittite Literacy: Writing and Reading in Late Bronze Age Anatolia (1650–1200 BC). Cambridge: Cambridge University Press.
- Van Quickelberghe, Etienne (2015). Le pays du dieu de l'Orage dans l'inscription du Südburg. *Res Antiquae* 12, pp. 197–206.
- Van Soldt, Wilfred H. (1991). Studies in the Akkadian of Ugarit: Dating and Grammar (Alter Orient und Altes Testament 40). Kevelaer: Butzon & Bercker / Neukirchen-Vluyn: Neukirchener Verlag.
- Van Soldt, Wilfred H. (2001). *Studies in the Akkadian of Ugarit: Dating and Grammar* (Alter Orient und Altes Testament 40). Münster: Ugarit Verlag.

- Van Soldt, Wilfred H. (2011). Akkadian as a Diplomatic Language. In: S. Weninger, ed, *The Semitic Languages. An International Handbook* (Handbücher zur Sprach- und Kommunikationswissenschaft 36). Berlin/Boston: de Gruyter Mouton, pp. 396–406.
- Vanstiphout, H.L.J. (1999). 'I can put anything in its right place'. Generic and Typological Studies as Strategies for the Analysis and Evaluation of Mankind's Oldest Literature. In: B. Roest and H.L.J. Vanstiphout, eds, Aspects of Genre and Type in Pre-Modern Literary Cultures (COMERS Communications 1), Groningen: Styx Publications, pp. 79–99.
- Veenhof, Klaas (1989). Status and Offices of an Anatolian Gentleman. Two Unpublished Letters of Huharimataku from Kārum Kanish. In: K. Emre, M. Mellink, B. Hrouda and N. Özgüç, eds, Anatolia and the Ancient Near East. Studies in Honor of Tahsin Özgüç. Ankara: Türk Tarih Kurumu, pp. 515–525.
- Veenhof, Klaas (2003). *The Old Assyrian List of Year Eponyms from Karum Kanish and its Chronological Implications*. Ankara: Türk Tarih Kurumu.
- Veenhof, Klaas (2008). Across the Euphrates. In: J.G. Dercksen, ed, Anatolia and the Jazira during the Old Assyrian Period (Publications de l'Institut historique-archéologique néerlandais de Stamboul 111). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 3–29.
- Veenhof, Klaas (2017a). The Old Assyrian Period (20th–18th Century BCE). In: E. Frahm, ed, *A Companion to Assyria*. Malden, MA: Wiley Blackwell, pp. 57–79.
- Veenhof, Klaas (2017b). Acemhöyük: Seals, Chronology and History. In: F. Kulakoğlu and G. Barjamovic, eds, *Proceedings of the 2nd Kültepe International Meeting. Kültepe, 26–30 July 2015. Studies Dedicated to Klaas Veenhof* (Kültepe International Meetings 2 / SUBARTU 39). Turnhout: Brepols, pp. 243–257.
- Veenhof, Klaas, Eidem, Jesper (2008). Mesopotamia: The Old Assyrian Period (Orbis Biblicus et Orientalis 160/5). Fribourg: Academic Press / Göttingen: Vandenhoeck & Ruprecht.
- Veldhuis, Nicolaas (1997). *Elementary Education at Nippur. The Lists of Trees and Wooden Objects*, Dissertation, Rijksuniversiteit Groningen.
- Veldhuis, Niek (2014). *History of the Cuneiform Lexical Tradition* (Guides to the Mesopotamian Textual Record 6). Münster: Ugarit-Verlag.
- Vernet i Pons, Eulàlia and Vernet i Pons Mariona (2019). On the Hittite and Luwian origin of some common nouns. In: A. Süel, ed, *Acts of the 1xth International Congress of Hittitology, Çorum* 01–07 *September* 2014. Çorum: Dumat Ofset, pp. 1091–1133.
- Vertegaal, Alexander J.J. (2021). The Phoneticisation of the Luwian Hieroglyphic Writing System. *Hungarian Assyriological Review* 2, pp. 295–312.
- Viano, Maurizio (2015). Writing Sumerian in the West. In: A. Archi, ed, *Tradition and Innovation in the Ancient Near East. Proceedings of the 57th Rencontre Assyriologique Internationale at Rome 4–8 July 2011.* Winona Lake, IN: Eisenbrauns, pp. 381–392.
- Viano, Maurizio (2016). The Reception of Sumerian Literature in the Western Periphery. *Antichistica—Studi Orientali* 9 (4), Venezia.

- Viano, Maurizio (2019). The Syllabary of the Scholarly Texts from the Western Periphery. In: J. Klinger and S. Fischer, eds, *Keilschriftliche Syllabare. Zur Methodik ihrer Erstellung* (Berliner Beiträge zum Vorderen Orient 28). Gladbeck: PeWe-Verlag, pp. 113– 128.
- Von Dassow, Eva (2008). *State and Society in the Late Bronze Age: Alalah under the Mittani Empire* (Studies on the Civilization and Culture of Nuzi and the Hurrians 17). Bethesda. MD: CDL Press.
- Von Dassow, Eva (2013). Piecing together the Song of Release. *Journal of Cuneiform Studies* 65, pp. 127–162.
- Von Dassow, Eva (2014). Levantine Polities under Mittanian Hegemony. In: E. Cancik-Kirschbaum, N. Brisch, and J. Eidem, eds, *Constituent, Confederate, and Conquered Space. The Emergence of the Mittani State* (Topoi. Berlin Studies of the Ancient World 17). Berlin/Boston: de Gruyter, pp. 11–32.
- Von Dassow, Eva (2020). Alalaĥ between Mittani and Hatti. *Asia Anteriore Antica* 2, pp. 193–226.
- Von Schuler, Einar (1965). *Die Kaškäer. Ein Beitrag zur Ethnographie des alten Kleinasien* (Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie 3). Berlin/ Boston: de Gruyter.
- Von Soden, Wolfram (1957). Review of Lacheman, Ernest R. (1955). Excavations at Nuzi. Vol. VI: The Administrative Archives (Harvard Semitic Series xv). Cambridge: Harvard University Press. Zeitschrift für Assyriologie und Vorderasiatische Archäologie 52, pp. 334–337.
- Waal, Willemijn J.I. (2010). *The Source as Object. Studies in Hittite Diplomatics*, Dissertation, Universiteit Leiden.
- Waal, Willemijn J.I. (2012). Writing in Anatolia: The Origins of the Anatolian Hieroglyphs and the Introductions of the Cuneiform Script. *Altorientalische Forschungen* 39, pp. 287–315.
- Waal, Willemijn J.I. (2014). Changing Fate. Hittite Gulš-/GUL-š-, <sup>d</sup>Gulšeš/<sup>d</sup>GUL-šeš, Cuneiform Luwian gulzā(i)- / GUL-zā(i)- Hieroglyphic Luwian REL-za- and the Kuwanšeš Deities. In: P. Taracha, ed, Proceedings of the 8th International Congress of Hittitology, Warsaw, September 5–9, 2011. Warsaw: AGADE, pp. 1016–1033.
- Waal, Wilhelmin J.I. (2015). Hittite Diplomatics. Studies in Ancient Document Format and Record Management (Studien zu den Boğazköy-Texten 57). Wiesbaden: Harrassowitz.
- Wackernagel, Jacob (1924). Vorlesungen über Syntax mit besonderer Beruchsichtigüng von Griechisch, Lateinisch und Deutsch. Basel: Verlag Emil Birkhäuser.
- Watkins, Calvert (1975). Die Vertretung der Laryngale in gewissen morphologischen Kategorien in den indogermanischen Sprachen Anatoliens. In: H. Rix, ed, *Flexion und Wortbildung. Akten der v. Fachtagung der indogermanischen Gesellschaft. Regensburg, 9.–14. September 1973.* Wiesbaden: Reichert, pp. 358–378.

- Watkins, Calvert (1979). NAM.RA GUD UDU in Hittite: Indo-European poetic language and the folk taxonomy of wealth. In: E. Neu and W. Meid, eds, *Hethitisch* und Indogermanisch. Vergleichende Studien zur historischen Grammatik und zur dialektgeographischen Stellung der indogermanischen Sprachgruppe Altkleinasiens (Innsbrucker Beiträge zur Sprachwissenschaft 25). Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, pp. 269–287.
- Watkins, Calvert (1985). Indo-European \*kwe 'and' in Hittite. In: H.M. Ölberg and G. Schmidt, eds, Sprachwissenschaftliche Forschungen: Festschrift für Johann Knobloch. Innsbruck: Innsbrucker Gesellschaft zur Pflege der Geisteswissenschaften, pp. 491–498.
- Watkins, Calvert (1987a). Questions linguistiques palaïtes et louvites cuneiforms. *Hethitica* 8, pp. 423–426.
- Watkins, Calvert (1987b). Two Anatolian Forms: Palaic *aškumāuwa*-, Cuneiform Luvian *wa-a-ar-ša*. In: G. Cardona and N.H. Zide, eds, *Festschrift for Henry Hoenigswald on the Occasion of his Seventieth Birthday*. Tübingen: Narr, pp. 399–404.
- Watkins, Calvert (2001). An Indo-European linguistic area and its characteristics. In: A. Aikhenvald, ed, *Areal Diffusion and Genetic Inheritance*. Oxford/New York: Oxford University Press, pp. 44–63.
- Watkins, Calvert (2004). The Third Donkey: Origin Legends and Some Hidden Indo-European Themes. In: J.H.W. Penney, ed, *Indo-European Perspectives. Studies in Honour of Anna Morpurgo Davies*. Oxford: Oxford University Press, pp. 65–80.
- Watson, Wilfred G.E. (1995). Non-semitic Words in the Ugaritic Lexicon. Ugarit Forschungen 27, pp. 533–558.
- Watson, Wilfred G.E. (1996). Non-semitic Words in the Ugaritic Lexicon (2). Ugarit Forschungen 28, pp. 701–719.
- Watson, Wilfred G.E. (1998). Non-semitic Words in the Ugaritic Lexicon (3). Ugarit Forschungen 30, pp. 751–760.
- Watson, Wilfred G.E. (1999). Non-semitic Words in the Ugaritic Lexicon (4). Ugarit Forschungen 31, pp. 785–799.
- Watson, Wilfred G.E. (2000). Non-semitic Words in the Ugaritic Lexicon (5). *Ugarit Forschungen* 32, pp. 567–575.
- Watson, Wilfred G.E. (2006). Non-semitic Words in the Ugaritic Lexicon (6). Ugarit Forschungen 38, pp. 717–728.
- Watson, Wilfred G.E. (2009). Non-semitic Words in the Ugaritic Lexicon (7). Ugarit Forschungen 40, pp. 547–570.
- Watson, Wilfred G.E. (2010). Non-semitic Words in the Ugaritic Lexicon (8). Ugarit Forschungen 42, pp. 831–857.
- Watson, Wilfred G.E. (2015). Yet Another Hittite Loanword in Ugaritic? *Historiae* 12, pp. 25–31.
- Watson, Wilfred G.E. (2018). Anatolian Influences in Semitic Languages. In: Ł. Niesio-

łowski, L. Spanò, and M. Węcowski, eds, *Change, Continuity, and Connectivity. North-Eastern Mediterranean at the turn of the Bronze Age and in the early Iron Age* (Philippika 118). Wiesbaden: Harrassowitz, pp. 419–442.

- Weeden, Mark (2011). *Hittite Logograms and Hittite Scholarship* (Studien zu den Boğazköy-Texten 54). Wiesbaden: Harrassowitz.
- Weeden, Mark (2012a). Assyro-Mitannian or Middle Assyrian? In: E. Devecchi, ed, Palaeography and Scribal Practices in Syro-Palestine and Anatolia in the Late Bronze Age. Papers Read at a Symposium in Leiden, 17–18 December 2009 (Publications de l'Institut historique-archéologique néerlandais de Stamboul 119). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 229–251.
- Weeden, Mark (2012b). Review of Barjamovic (2011). *Bulletin of the School of Oriental and African Studies* 75 (3), pp. 559–560.
- Weeden, Mark (2013). Names on Seals, Names in Texts. Who Were These People? In: A. Mouton, I. Rutherford, and I. Yakubovich, eds, *Luwian Identities: Culture, Language and Religion between Anatolia and the Aegean* (Culture and History of the Ancient Near East 64). Leiden: Brill, pp. 73–86.
- Weeden, Mark (2016). Hittite Scribal Culture and Syria. In: H.W. Kühne, ed, *Cultures and Societies in the Middle Euphrates and Habur Areas in the Second Millennium BC. Volume I. Scribal Education and Scribal Traditions* (Studia Chaburensia 5). Wiesbaden: Harrassowitz, pp. 157–191.
- Weeden, Mark (2020a). Back to the 13th or 12th Century BC? The SÜDBURG Inscription at Boğazköy-Hattuša. In: S. de Martino and E. Devecchi, eds, *Anatolia Between the 13th and the 12th century BCE* (Eothen 23). Firenze: LoGisma, pp. 473–496.
- Weeden, Mark (2020b), "The "Influence" of Sumerian on Hittite Literature". In: R. Hasselbach-Andee, ed, A Companion to Ancient Near Eastern Languages. Hoboken: Wiley-Blackwell, pp. 505–520.
- Wegner, Ilse (1995). *Hurritische Opferlisten aus hethitischen Festbeschreibungen. Teil 1: Texte für* IŠTAR-Š*a*(*w*)*uška* (Corpus der hurritischen Sprachdenkmäler 1/3–1). Roma: Bonsignori.
- Wegner, Ilse and Salvini, Mirjo (1991). *Die hethitisch-hurritischen Ritualtafeln des* (ḫ)išuwa-*Festes* (Corpus der hurritischen Sprachdenkmäler 1/4). Roma: Multigrafica Editrice.

Weinreich, Uriel (1953). Languages in Contact. The Hague: Mouton.

- Weiss, Harvey, Courty, Marie-Agnès, Wetterstrom, Wilma, Guichard, François, Senior, Louise, Meadow, Richard, and Curnow, Anne (1993). The Genesis and Collapse of Third Millennium North Mesopotamian Civilization. *Science* 261, pp. 995– 1004.
- Welton, Megan L. (2010). Mobility and Social Organization on the Ancient Anatolian Black Sea Coast: An Archaeological, Spatial and Isotopic Investigation of the Cemetery at İkiztepe, Turkey, Dissertation, University of Toronto.

- Westenholz, Joan G. (1997). *Legends of the Kings of Akkade. The Texts* (Mesopotamian Civilizations 7). Winona Lake: Eisenbrauns.
- Whitney, William Dwight (1881). On Mixture in Language. *Transactions of the American Philological Association* 12, pp. 5–26.
- Wilhelm, Gernot (1970). Untersuchungen zum Hurro-Akkadischen von Nuzi (Alter Orient und Altes Testament 9). Kevelaer: Butzon & Bercker / Neukirchen-Vluyn: Neukirchener Verlag.
- Wilhelm, Gernot (1987). Eine hurritische Sammlung von *danānu*-Omina aus Ḥattuša. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 77, pp. 229–238.
- Wilhelm, Gernot (1989). The Hurrians. Warminster: Aris & Phillips.
- Wilhelm, Gernot (1991a). Zur hurritsichen Gebetesliteratur. In: D. Daniels, U. Gleßmer, and M. Rösel, eds, *Ernten, was man sät: Festschrift für Klaus Koch zu seinem 65. Geburtstag.* Neukirchen: Neukirchener Verlag, pp. 37–47.
- Wilhelm, Gernot (1991b). *Keilschrifttexte aus Boghazköi 36. Sumerische und akkadische literarische Texte.* Berlin: Akademie Verlag.
- Wilhelm, Gernot (1992a). Zur babylonisch-assyrischen Schultradition in Hattuša. In: S. Alp, ed, *The First Hittitology Congress—Uluslararasi 1. Hititoloji Kongresi Bildirileri* (19–21 Temmuz 1990). Ankara: Uluslararası Çorum Hitit Festivali Komitesi Başkanlığı, pp. 83–93.
- Wilhelm, Gernot (1992b). Zum hurritischen Verbalsystem. In: S.R. Anschütz, ed, *Texte, Sätze, Wörter und Moneme. Festschrift für Klaus Heger zum 65. Geburtstag.* Heidelberg: Heidelberger Orientverlag, pp. 659–671.
- Wilhelm, Gernot (1994). *Medizinische Omina aus Hattuša in akkadischer Sprache* (Studien zu den Boğazköy-Texten 36). Wiesbaden: Harrassowitz.
- Wilhelm, Gernot (1997a). *Keilschrifttexte aus Gebaude A* (Kuşaklı—Sarissa 1). Rahden: Verlag Marie Leidorf GmbH.
- Wilhelm, Gernot (1997b). Kuşaklı—Sarissa. Band 1: Keilschrifttexte. Faszikel 1: Keilschrifttexte aus Gebäude A. Rahden/Westf.: Leidorf.
- Wilhelm, Gernot (1997c). Die Könige von Ebla nach der hurritisch-hethitischen Serie "Freilassung". *Altorientalische Forschungen* 24 (2), pp. 277–293.
- Wilhelm, Gernot (1998). Zwei mittelhethitische Briefe aus dem Gebäude C in Kuşaklı. Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin 130, pp. 175–187.
- Wilhelm, Gernot (2001). Das hurritisch-hethitische "Lied der Freilassung". In O. Kaiser, ed, *Texte aus der Umwelt des Alten Testaments. Ergänzungslieferung*. Gütersloh: Gütersloher Verlagshaus, pp. 82–91.
- Wilhelm, Gernot (2002). Die Keilschriftfunde der Kampagne 2001 in Kuşaklı. *Mitteilun*gen der Deutschen Orient-Gesellschaft zu Berlin 134, pp. 342–351.
- Wilhelm, Gernot (2005). Zur Datierung der älteren hethitischen Landschenkungsurkunden. *Altorientalische Forschungen* 32, pp. 272–279.
- Wilhelm, Gernot (2006). Die hurritischsprachige Tafel Kp 05/226. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 138, pp. 233–236.

- Wilhelm, Gernot (2008). Hurrians in the Kültepe Texts. In: J.G. Dercksen, ed, Anatolia and the Jazira during the Old Assyrian Period (Publications de l'Institut historiquearchéologique néerlandais de Stamboul 111). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 181–194.
- Wilhelm, Gernot (2010). Ein Fragment mit hurritischen Gallenomina und der Beginn der hurritischen Überlieferung in Hattuša. In: J. Becker, R. Hempelmann, and E. Rehm, eds, Kulturlandschaft Syrien. Zentrum und Peripherie. Festschrift für Jan-Waalke Meyer (Alter Orient und Altes Testament 371). Münster: Ugarit-Verlag, pp. 623– 635.
- Wilhelm, Gernot (2013). Texts and Royal Seals of the Middle Hittite Period from the "House of the Chief of the Guards" at Hattuša. In: B.J. Collins and P. Michalowski, eds, *Beyond Hatti. A Tribute to Gary Beckman*. Atlanta: Lockwood Press, pp. 343–353.
- Wilhelm, Gernot (2019). Die hurritischen Texte aus Šamuha. In: E. Rieken, ed, Keilschrifttafeln aus Kayalıpınar 1. Textfunde aus den Jahren 1999–2017 (Documenta Antiqua Asiae Minoris 1). Wiesbaden: Harrassowitz, pp. 197–209.
- Wilhelm, Gernot and Süel, Aygül (2013). The Hittite Hurrian Offering Ritual for Tašmišarri Or. 97/1. KASKAL 10, pp. 149–168.
- White, Richard (1991). *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650–1815.* Cambridge: Cambridge University Press.
- Wilhelm, Gernot (2008). Hurrians in the Kültepe Texts. In: J. Dercksen, ed, Anatolia and the Jazira During the Old Assyrian Period (Publications de l'Institut historiquearchéologique néerlandais de Stamboul 111). Leiden: Nederlands Instituut voor het Nabije Oosten, pp. 181–194.
- Wilhelm, Gernot (2010). Ein Fragment mit hurritischen Gallenomina und der Beginn der hurritischen Überlieferung in Hattuša. In: J. Becker, R. Hempelmann, and E. Rehm, eds, *Kulturlandschaft Syrien: Zentrum und Peripherie. Festschrift für Jan-Waalke Meyer* (Alter Orient und Altes Testament 371). Münster: Ugarit-Verlag, pp. 623– 635.
- Wilhelm, Gernot (2011). Vertrag Tutḥaliyas 1. mit Šunaššura von Kizzuwatna (1. Akk. Fassung) (CTH 41.1.1). hethiter.net/: CTH 41.1.1.
- Wilhelm, Gernot (2014a). Vertrag Zidanzas II. (?) mit Pillija von Kizzuwatna (CTH25). hethiter.net/: CTH 25.
- Wilhelm, Gernot (2014b). Der Vertrag eines Hethiterkönigs mit Paddatiššu von Kizzuwatna (CTH 26). hethiter.net/: CTH 26.
- Wilhelm, Gernot (2018). *Kleine Beiträge zum Hurritischen* (Studien zu den Boğazköy Texten 64). Wiesbaden: Harrassowitz.
- Wilhelm, Gernot (2019). Die hurritischen Texte aus Kayalıpınar. In: E. Rieken, ed, Keilschrifttafeln aus Kayalıpınar l. Textfunde aus den Jahren 1999–2017 (Documenta Antiqua Asiae Minoris 1). Wiesbaden: Harrassowitz, pp. 197–209.
- Wilhelmi, Lisa (2011). *The Akkadian of Boğazköy*, Dissertation, School of Oriental and African Studies.

- Wilhelmi, Lisa (2016). Materiality and Presence of the Anitta Text in Original and Secondary Context. Considerations on the Original Nature of the Proclamation of Anitta (CTH 1) and Its Transmission as Part of Hittite Traditional Literature. In: T.E. Balke and C. Tsouparopoulou, eds, *Materiality of Writing in Early Mesopotamia*. Berlin/Boston: de Gruyter, pp. 223–239.
- Wilhelmi, Lisa (2022). Aneignung—Adaption—Neukontextualisierung. Zur Entwicklung des akkadischen Grapholekts hethitischsprachiger Schreiber. In: E. Cancik-Kirschbaum and I. Schrakamp, eds, *Transfer, Adaption und Neukonfiguration von Schrift- und Sprachwissen im Alten Orient* (Episteme in Bewegung. Beiträge zu einer transdisziplinären Wissensgeschichte 25). Wiesbaden: Harrassowitz, pp. 341–361.
- Wilkinson, Toby C. (2014). *Tying the Threads of Eurasia: Trans-Regional Routes and Material Flows in Transcaucasia, Eastern Anatolia and Western Central Asia, c.* 3000– *1500 BC.* Leiden: Sidestone Press.
- Winckler, Hugo (1907). Vorläufige Nachrichten über die Ausgrabungen in Boghaz-köi im Sommer 1907. 1. Die Tontafelfunde. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 35, pp. 1–59.
- Winckler, Hugo (1910). Die Arier in den Urkunden von Boghaz-köi. Orientalistische Literaturzeitung 13, pp. 289–301.
- Wiseman, Donald J. (1953). *The Alalakh Tablets* (Occasional Publications of the British Institute of Archaeology at Ankara 2). London/Ankara: The British Institute of Archaeology in Ankara.
- Wittmann, Henri (1964). Some Hittite Etymologies. Die Sprache 10, pp. 144-148.
- Witzel, Michael (2001). Autochthonous Aryans? The evidence from Old Indian and Iranian texts. *Electronic Journal of Vedic Studies* 7, pp. 1–115.
- Wossink, Arne (2009). *Challenging Climate Change: Competition and cooperation among pastoralists and agriculturalists in northern Mesopotamia* (*c.* 3000–1600 BC). Leiden: Sidestone Press.
- Yakubovich, Ilya (2005). Were Hittite Kings Divinely Anointed? A Palaic Invocation to the Sun-God and Its Significance for Hittite Religion. *Journal of Ancient Near Eastern Religion* 5, pp. 107–137.
- Yakubovich, Ilya (2006). The Free-Standing Genitive and Hypostasis in Hittite. *Journal* of Near Eastern Studies 65, pp. 39–50.
- Yakubovich, Ilya (2008). Hittite-Luvian Bilingualism and the Development of Anatolian Hieroglyphs. In: N.N. Kazansky, ed, *Acta Linguistica Petropolitana* IV. Saint Petersburg: Russian Academy of Science, pp. 9–36.
- Yakubovich, Ilya (2009). Anaptyxis in Hitt. \*spand- 'to libate': One More Case of Luvian Influence on New Hittite. In: Индоевропейское языкознаниеи классическая филология—хии. Материалы чтений, посвященных памяти профессора Иосифа Моисеевича Тронского. 22–24 июня 2009 г. Санкт-Петербург: Наука, pp. 545– 557.

- Yakubovich, Ilya (2010). *Sociolinguistics of the Luvian Language* (Brill's Studies in Indo-European Languages & Linguistics 2). Leiden: Brill.
- Yakubovich, Ilya (2013). Anatolian Names in -wiya and the Structure of Empire Luwian Onomastics. In: A. Mouton, I. Rutherford, and I. Yakubovich, eds, *Luwian Identities: Culture, Language and Religion Between Anatolia and the Aegean* (Culture and History of the Ancient Near East 64). Leiden/Boston: Brill, pp. 87–123.
- Yakubovich, Ilya (2015a). The Luwian Language. In: Oxford Handbooks Online. DOI 10.10 93/0xfordhb/9780199935345.013.18.
- Yakubovich, Ilya (2015b). Phoenician and Luwian in Early Iron Age Cilicia. *Anatolian Studies* 65, pp. 35–53.
- Yakubovich, Ilya (2020a). Hittite. In: R. Hasselbach-Andee, ed, *A Companion to Ancient Near Eastern Languages*. Hoboken: Wiley-Blackwell, pp. 221–238.
- Yakubovich, Ilya (2020b). Review of Kloekhorst (2019). Zeitschrift für Assyriologie 110 (2), pp. 278–288.
- Yakubovich, Ilya and Mouton, Alice (2023). Luwili: Hittite-Luwian Ritual Texts Attributed to Puriyanni, Kuwattalla and Šilalluhi (CTH 758–763) (Studien zu den Boğazköy-Texten 72). Volume II: Discussion and Glossary (Studien zu den Boğazköy-Texten 73). Wiesbaden: Harrassowitz.
- Yakar, Jak (1985). Later Prehistory of Anatolia (British Archaeological Reports International Series 268). Oxford: Archaeopress.
- Yalçın, Ünsal (2000). Frühchalcolitische Metallfunde von Mersin-Yumuktepe: Beginn der extraktiven Metallurgie? *TÜBA-AR* 3, pp. 109–128.
- Yalçın, Ünsal (2011). Alacahöyük İlk Tunç Çağı Kral Mezarları Üzerine. In: Ö. İpek, ed, 1. Çorum Kazı ve Araştırmalar Sempozyumu, 02 Ekim 2010, Çorum (Çorum Valiliği İl Kültür ve Turizm Müdürlüğü, yayın no. 5). Çorum: Çorum Valiliği İl Kültür ve Turizm Müdürlüğü, pp. 55–64.
- Yalçın, Ünsal, Ekmen, F. Gülden, and Ekmen, Hamza (2021). Chalcolithic Age Gold Beads from İnönü Cave, Zonguldak. *Anatolica* 47, pp. 277–298.
- Yalçın, Ünsal and Maass, Alexander (2013). Prähistorische Kupfergewinnung in Derekutuğun, Anatolien. In: Ü. Yalçın, ed, *Anatolian Metal vı*, Bochum: Bergbau Museum, pp. 153–194.
- Yalçın, Ünsal and Özbal, Hanı (2009). Ein Neues Zinnvorkommen in Kayseri-Hisarcık, Zentralanatolien: Ein Vorbericht. *TÜBA-AR* 12, pp. 117–122.
- Yasur-Landau, Assaf (2010). *The Philistines and Aegean Migration at the End of the Late Bronze Age.* Cambridge: Cambridge University Press.
- Yates, Anthony D. (2019). The phonology, phonetics, and diachrony of Sturtevant's Law. *Indo-European Linguistics* 7, pp. 241–307.
- Yener, K. Aslıhan (2000). *The Domestication of Metals: The Rise of Complex Metal Industries in Anatolia* (Culture and History of the Ancient Near East 4). Leiden: Brill.
- Yener, K. Aslıhan (2021). Göltepe Excavations. Tin Production at an Early Bronze Age Mi-

*ning Town in the Central Taurus Mountains* (Prehistory Monographs 64). Philadelphia: INSTAP Academic Press.

- Yener, K. Ashhan, Geçkinli, Emel, and Özbal, Hadı (1996). A brief survey of Anatolian metallurgy prior to 500 BC. In: S. Demirci, A.M. Özer, and G.D. Summers, eds, *Archaeometry* 94: *The proceedings of the 29th international symposium on archaeometry*. Ankara: Türkiye Bilimsel ve Teknik Araştırma Kurumu, pp. 375–391.
- Yener, K. Aslıhan and Vandiver, Pamela B. (1993a). Tin processing at Göltepe, an Early Bronze Age site in Anatolia. *American Journal of Archaeology* 97, pp. 207–238.
- Yener, K. Aslıhan and Vandiver, Pamela B. (1993b). Reply to J.D. Muhly, 'Early Bronze Age tin and the Taurus'. *American Journal of Archaeology* 97, pp. 255–264.
- Yoffee, Norman (2009). Collapse in Ancient Mesopotamia: What Happened, What Didn't. In: P.A: McAnany and N. Yoffee, eds, *Questioning Collapse: Human Resilience, Ecological Vulnerability, and the Aftermath of Empire.* Cambridge: Cambridge University Press, pp. 176–206.
- Zaccagnini, Carlo (1973). *Lo scambio dei doni nel Vicino Oriente durante i secoli XV–XIII*. Roma: Centro per le antichità e la storia dell'arte orientale.
- Zehnder, Thomas (2010). *Die hethitischen Frauennamen. Katalog und Interpretation* (Dresdner Beiträge zur Hethitologie 29). Wiesbaden: Harrassowitz.
- Ziegler, Nele (1996). Ein Bittbrief eines Händlers. *Wiener Zeitschrift für die Kunde des Morgenlandes* 86, pp. 479–488.
- Ziegler, Nele (2009). Die Westgrenze des Reichs Samsī-Addus. In: E. Cancik-Kirschbaum and N. Ziegler, eds, Entre les fleuves—I. Untersuchungen zur historischen Geographie Obermesopotamiens im 2. Jahrtausend (Berliner Beiträge zum Vorderen Orient 20). Gladbeck: PeWe-Verlag, pp. 181–209.
- Zimmermann, Thomas (2006/7). Symbols of Salvation? Function, Semantics and Social Context of Early Bronze Age Ritual Equipment from Central Anatolia. *Anodos. Studies of the Ancient World* 6–7, pp. 509–520.
- Zimmermann, Thomas (2007). Anatolia as a Bridge from North to South? Recent Research in the Hatti Heartland. *Anatolian Studies* 57, pp. 65–75.
- Zimmermann, Thomas (2009). The 'inhospitable sea' revisited. Re-evaluating Pontic human activity and interaction from the 5th to the 3rd millennium BC. In: H. Oniz, ed, SOMA 2008. Proceedings of the XII Symposium on Mediterranean Archaeology, Eastern Mediterranean University. Famagusta, North Cyprus, 5–8 March 2008 (BAR International Series 1909). Oxford: Archaeopress, pp. 158–164.
- Zomer, Elyze (2018). *Corpus of Middle Babylonian and Middle Assyrian Incantations*. Wiesbaden: Harrassowitz.
- Zomer, Elyze (2019). New Observations on the KBo 1.18 Prism. In: A. Süel, ed, *Acts of the 1xth International Congress of Hititology. Çorum, September 08–14, 2014, Çorum: Dumat Ofset, pp. 1257–1266.*
- Zorman, Marina (2017). Areal features of Hittite conditionals: Consequences for the reconstruction of Indo-European. *Diachronica* 34 (2), pp. 253–277.

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The list does not include the following voices, which occur more than 100 times in the book: Anatolian, areality, borrowing, calque, Indo-Aryan, Hurrian, Akkadian, Loanword, Luwian (but we list the different dialects), network, Old Assyrian, Semitic (language group), shifting, Sumerian, trade, translation, as well the main parts of speech (adjective, noun, verb, etc.) and the abbreviation for the main Hittite ducti, when used in reference to specific tablets.

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**E** ver since the early 2nd millennium BCE, Pre-Classical Anatolia has been a crossroads of languages and peoples. Indo-European peoples – Hittites, Luwians, Palaeans – and non-Indo-European ones – Hattians, but also Assyrians and Hurrians – coexisted with each other for extended periods of time during the Bronze Age, a cohabitation that left important traces in the languages they spoke and in the texts they wrote. By combining, in an interdisciplinary fashion, the complementary approaches of linguistics, history, and philology, this book offers a comprehensive, state-of-the-art study of linguistic and cultural contacts in a region that is often described as the bridge between the East and the West.

With contributions by Paola Cotticelli-Kurras, Alfredo Rizza, Maurizio Viano, and Ilya Yakubovich.

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