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The position of determiners in Ancient Greek and Luwian: Between syntax and information flow

<https://doi.org/10.1515/flin-2017-0023>

Submitted December 16, 2015; Revision invited April 14, 2016;

Revision received August 22, 2016; accepted August 24, 2016

Abstract: The present paper explores the positional (and syntactic) behavior of determiners in Luwian, a very archaic article-free Indo-European Anatolian language which relied on a limited set of demonstratives, as well as in some specific constructions of Ancient Greek, an Indo-European language with definite articles and with a relatively “free” word order. Its aim is to highlight the structural differences and analogies between these languages. The present contribution will employ a framework-independent approach in investigating aspects of the combinatory constraints of determiners and determiner phrases. It will interpret these constraints as syntactic filters that regulate the interaction between syntax and information flow. The results will highlight how this model of interpretation can be applied even to languages that resort to different strategies to encode definiteness.

Keywords: syntax, Luwian, Ancient Greek, information structure, determiners

1 Determination and definiteness

1.1 “Determination” and the Indo-European languages

“Determination” is the general name of a complex and rather ill-defined set of properties that can be defined within (deictic or anaphoric) determiner phrases (DP).¹ DPs usually contain at least one nominal element (unless omitted) and a

¹ The label DP is employed here for sake of clarity; however, the micro-relationships of dependency within such phrases and the subsequent question whether to consider them determiner-headed DPs or rather noun-headed NPs containing determiners is largely irrelevant for the purpose of the present study.

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determiner (unless unexpressed). Following the most important contributions in different frameworks of formal syntax (for instance, Abney 1987; Longobardi 1994; Longobardi 2001; Lyons 1999; Alexiadou et al. 2007; Alexiadou 2014), the distinctive element of DPs can be considered to be the feature of “definiteness”. From these studies, as well as from the analysis of the behavior of determiner-less (henceforth, bare) nouns, it appears that this feature appears to be regularly associated with the way syntactic arguments are encoded.²

In this paper, I will assume the results of the research on the DP theory and concentrate on those phrases that contain overt determiners in two ancient Indo-European languages, Luwian and Ancient Greek; in particular, I will explore selected features of their positional behavior. The comparison between a language with articles (and therefore overt marking of definiteness) (i.e., Ancient Greek) and a language in which the definite and referential status of noun phrases is not signaled by an article (i.e., Luwian) will enable me to explore the organization of deictic information in two different languages on the linear level of syntax. The choice of Ancient Greek (see below, Section 3, for a more precise definition) is dictated by its isolate position within the ancient Indo-European group as far as the presence of overt articles is concerned. Luwian, on the other hand, shares its article-less structure with a large number of ancient Indo-European languages, including, for instance, the Indo-Iranian, the old Germanic, the Balto-Slavic, and the Italic ones, and, in all likelihood, with Proto-Indo-European itself. It has been selected because of the relatively small size of its corpus (ca. 600 texts of variable length, corresponding to ca. 28 000 words, including cuneiform and hieroglyphic documents and excluding asyntactic seal-impressions); it is, however, large enough to allow syntactic analysis but not too large as to prevent a systematic inquiry for the present case study. Luwian has also been chosen because of its archaic nature within the Indo-European (or Indo-Anatolian) language family. Even within the Anatolian sub-group, Luwian presents features that position it very close to the Proto-Anatolian phase (e.g., simpler verbal conjugation, preservation of the *-mh₁no*-participles), and, as far as “determiners” are concerned, there is a consistent distribution of its occurrences over time, and certainly no sign of the grammaticalization of demonstratives into articles or other word classes.³ The

² For a summary on the generative analysis of DPs, see Longobardi (2001).

³ On the other hand, while Hittite is a very ancient language, too, the strong prevalence of Hittite proximal demonstrative *ka-* over distal *asi-* and medial/third person *apa-* is at least indicative that some change may have been under way. On the diachronic distribution of Hittite demonstratives, see the figures in Goedegebuure (2014: in particular 513–566), who, however, provides an interpretation according to which the evolution of the deictic system is better

comparison between Luwian and Greek will highlight how the structural strategies that govern the constraints and positions of the determiner phrases appear to be construction-specific, with the functional informational goals being rather similar in both languages. Regarding the current debate on the syntactic configuration of the Ancient Indo-European languages (see for instance Keydana 2008; specifically for Greek: Dik 1995; Matic 2003; Lühr 2007), I will also try to show how the interaction between syntax and information flow is better analyzed by assuming an interplay of phrasal configuration and informational markedness. In the next sections, a critical definition of the class of “determiners” will be offered, which will be followed by the discussion of their distribution and function in the two languages under investigation.

1.2 Determiners

In descriptive approaches to languages or groups of languages, the label “determiner” refers to a relatively large (and variable) class of elements including *articles*, *demonstratives*, *possessives*, *quantifiers*, and *numerals*.⁴ However, since determinerless definiteness exists, it is debatable whether, cross-linguistically, these elements, in fact, assign definiteness, or whether definiteness is, in some cases, a feature of the very noun even when a determiner is present. For the purpose of the present study, the investigation will be limited to articles and demonstratives, while possessives will be employed in a sample-like fashion as elements that do not cross-linguistically assign definiteness. For the sake of clarity, I will now provide a tentative description of these classes of words:

1. *Articles*: THE/A-words (i.e., definite and indefinite articles), when present in a specific language, generally assign a [+/-definite] (definiteness) feature. Definiteness can thus be described in terms of (anaphoric or deictic) recognizability or unicity, and it is the feature that any element is expected to assign in order to be analyzed as a determiner. Note that in those cases in which an article can be employed as a predicative element (as in the double form *la femme la plus belle* in French superlatives, or in slightly similar iterations in Modern Greek, cf. *infra*), only one of the two instances

explained by the Hittite demonstrative *apa-* specializing as an informationally marked pronoun in the late phases of the language.

⁴ Interrogative pronouns can also be categorized as determiners. However, they seem to have a behavior rather similar to demonstratives, in that languages that do not allow the *the my book* construction do not allow the sequence **what my book* either. The implications of the relationship between determiners and *wh*-elements are beyond the scope of the present paper.

of the article should be analyzed as a definiteness-assigning element (but see Alexiadou 2014 for a generative approach).

2. *Demonstratives*: THIS/THAT-words generally assign a [+definite] feature (see Alexiadou et al. 2007: 96–105), unless it is already assigned by a different element (unless, in other words, THIS/THAT take up a position in which they serve as mere attributes or as other predicative elements. All in all, they convey the information also conveyed by a definite article, but they add information about positional referentiality. Positional referentiality can be located in time, space, or discourse (e.g., Luvian *za-*, proximal deictic, vs. *apa-*, distal deictic), or with respect to a person (Italian *questo*, first person deictic, *codesto*, second person deictic, *quello*, third person deictic). An economic way of representing the positional feature of THIS/THAT-words is [+/- proximal] (or, conversely, [-/+distal]).
3. *Possessives*: cross-linguistically, possessives simply assign the feature “possession”. They may or may not imply the assignment of [+definite] depending on the specific features of a language (or, more frequently, on the specific constructions in languages that feature both determiner-like possession and adjective-like possession). Their potential to combine with other determiners depends on the intrinsic or non-intrinsic assignment of possessive definiteness. In other words, if a possessive co-occurs with another determiner, it should not be analyzed as a determiner itself; if, on the contrary, it is the only modifier in a nominal phrase, it may assign definiteness, but definiteness may also be a feature of the modified “bare” inflected noun, instead.

In general, demonstrative phrases like *this book* necessarily assign the feature [+definite]. Articles, when present in a given language, assign [+/-definite] (*the book*, *a book*), but not every language contains a full set of definite and indefinite articles).⁵ Then again, possessives may or may not assign the feature [+definite] depending on the different languages or situations/contexts (see Lyons 1999: 22–26, 124–125). The “positional” feature added by a demonstrative (e.g., proximal vs. distal deixis), on the other hand, is not necessarily conveyed by the other determiners – unless the information is derived from the pragmatic or discourse context.

⁵ Ancient Greek, for instance, did not have an indefinite article, and resorted to the use of indefinite pronoun τις, ‘someone, anyone’ (neuter τι ‘something, anything’). Note that a similar, rarely attested, indefinite pronoun also existed in Luvian: *kwisha* ‘some, any’. Both elements instantiate the definiteness assignment [–definite], like an English indefinite article, and they do not carry positional information.

Since *definiteness* appears to be the feature that all elements share when used as determiners, in the present paper I will define “determiner” (or D-element) as the element that assigns [+/-definite] to a noun (phrase). The label DP will be used to indicate a phrase containing a determiner.⁶

1.3 Features: definiteness and proximity

Table 1 summarizes the two features [+/-definite] and [+/-proximal] that are generally assigned by the different types of determiners.

Table 1: The features [+/-definite] and [+/-proximal], as assigned by the different types of determiners.

	Definite	Proximal
Article	[+/-]	/(context-dependent)
Demonstrative	[+]	[+/-]
Possessive	[+*] (not universally)	/(context-dependent)

A formal description of the structure and function of definiteness and deixis (with respect to proximity in space, time, or with respect to an assigned person) has been discussed by Lyons (1999: 107–121). A recent study on the structure and functions of deictics (or, more precisely, demonstratives) in Hittite, the main language of the Anatolian branch of Indo-European by the number of attested documents, has been published by Goedegebuure (2014), albeit more from a referential, pragmatic, and semantic perspective than from a syntactic one.⁷

1.4 The combination of “determiners”

As far as the combination of determiners (or rather of words that can be determiners) is concerned, the literature has shown that different languages may employ different strategies. The co-existence of articles and demonstrative, for instance, is not grammatical in English, Italian, or French (see (1)), a phenomenon studied by Lyons (1999) that produced a rich follow-up discussion (summarized in Alexiadou et al. 2007: 105–120; Alexiadou 2014):

⁶ For a generative-oriented discussion on the presence and position of a definiteness assigning node in determinerless phrases, see the summary by Alexiadou et al. (2007: 159–226).

⁷ See Goedegebuure (2014: 1–7) for a methodological overview.

- (1) a. **the this book*
 b. **il questo libro*
 c. **le ce livre*

However, it is perfectly grammatical in other languages, including Ancient and Modern Greek – although some constraints exist, see below (Section 3) on the position the single elements occupy:

- (2) Ancient Greek
 τούτο τὸ βιβλίον (Modern Greek: αυτό το βιβλίο)
 this the book

One of the main points in the discussion on the iterable (or uniterable) nature of the feature of definiteness – mostly within the framework of generative grammar – can be summarized as follows from a theory-neutral perspective: languages that do not accept the combination of determiners seem to perceive a redundancy in the apparent double assignment of a [+/-definite] feature. Ancient Greek, on the other hand, did not, at least under specific conditions (the order of the elements mattered: see Section 3, sentences (8)–(10d)). The fact that some languages allow the co-existence of determiners has led several generativists, and most notably Alexiadou et al. (2007: 127–130, with reference to previous literature), to the suggestion of “splitting the DP node” in a complex set of nodes.

A classic example of language-specific differences is represented by the treatment of possessives. Lyons (1986, 1999: 22–26, 124–133); has shown that in some languages possessives act as determiners, while in other languages they do not.⁸ This can of course be translated in syntactic terms by observing what positions the elements are assigned to, for instance with respect to functional nodes within a transformational approach (see Alexiadou et al. 2007: 566–570). Maintaining a framework-free approach, the forms I collected in Table 2 show the possible and *impossible combinations of demonstratives, articles, and possessive elements in six languages, and it is immediately evident that different strategies are accepted and employed:

The explanation given by Lyons (1999) for the fact that English and French systematically disallow constructions like “*the my book” can be summarized as follows: in those languages, the possessive adjective is a determiner (assigns [+/-definite]), while its counterpart in Italian (or Ancient Greek) is merely an attribute (or rather, it is not necessarily a determiner). Note that languages that

⁸ This constraint has been intensively discussed following Lyons’s (1986, 1999) studies. To mention only a few important works, see Giorgi and Longobardi (1991); Schoorlemmer (2006); Alexiadou et al. (2007: 566–570).

Table 2: Combinations of determiners and possessives.¹

	No article	Definite article	Demonstrative	Demonstrative + article
English	<i>My book</i> [+Def]	* <i>The my book</i> (The book of mine) ²	* <i>This my book</i> (This book of mine)	* <i>This the my book</i>
German	<i>Mein Buch</i> [+Def]	* <i>Das mein Buch</i> (Das Buch von mir)	(*) <i>Dieses mein Buch</i> [+Def]	* <i>Dieses das mein Buch</i>
French	<i>Mon livre</i> [+Def]	* <i>Le mon livre</i> (Le livre à moi)	* <i>Ce mon livre</i> (Ce livre à moi)	* <i>Ce le mon livre</i>
Italian	* <i>Mio libro</i>	<i>Il mio libro</i> [+Def]	<i>Questo mio libro</i> [+Def]	* <i>Questo il mio libro</i>
Ancient Greek	βιβλίον ἐμόν ³	τὸ βιβλίον τὸ ἐμόν ⁴ τὸ ἐμόν βιβλίον ⁵ [+Def]	*τοῦτο ἐμόν βιβλίον ⁶	τοῦτο τὸ βιβλίον ⁷ τὸ βιβλίον τοῦτο ⁸ *τὸ τοῦτο βιβλίον ⁹ [+Def]
Luwian	<i>amanza tarusa</i> 'my statue' <i>tarusa amanza</i>	N/A	<i>za amanza tarusa</i> 'This my statue' [+Def]	N/A

¹The Ancient Greek patterns in this table have been checked in the full-access online corpus of the *Thesaurus Linguae Graecae* (stephanus.tlg.uci.edu/). ²Note that the phrase *The book of mine* is grammatical, but it is only used when a further semantic contrastive element is included, e.g., a restrictive relative clause, as in *The book of mine that you have in the bag*. ³'My book' [book.N/A.SG my.N/A.SG]. ⁴'My book' [the.N/A.SG book.N/A.SG the.N/A.SG my.N/A.SG]. ⁵'My book' [the.N/A.SG my.N/A.SG book.N/A.SG]. ⁶This.N/A.SG my.N/A.SG book.N/A.SG. ⁷'This book' [this.N/A.SG the.N/A.SG book.N/A.SG]. ⁸'This book' [the.N/A.SG book.N/A.SG this.N/A.SG]. ⁹The.N/A.SG this.N/A.SG book.N/A.SG.

do not accept the sequence *article + possessive + noun* will generally tend to disallow any sequence D–POSS–N, where D can also be a demonstrative (English **this my book*, French **ce mon livre*). In some cases, such languages will replace the possessive with a genitival phrase to the right of the noun (English *this book of mine*). Still, this strategy must not be thought of as a case of syntactic movement. Even when maintaining a theory-neutral terminology, these patterns suggest that the different position (to the right of the noun) somehow prevents the redundancy from occurring, certainly because the phrase *of mine* (a PP in a theory-neutral Phrase Structure) does not assign a redundant [+definite] feature, very much like the Italian “attributive” possessive element *mio*, which, however, does not require to be rephrased and can occupy the position between D and N like any other Italian modifier (e.g., *il mio libro* ‘my book’, *questo mio libro* ‘this book of mine’).

In other words, what seems to be impossible in English – the direct sequence of two left-aligned determiners – may reflect a positional strategy whereby the apparent and redundant repetition of the information about definiteness is prevented.

Two observations are now in order. First of all, as shown in the previous section, some languages (that are generally unable to process determinerless singular nouns) are characterized by possessive elements that *must* be determiners (such as the English possessive adjectives), but in several other languages the constraint appears to be rather construction-specific. This problem is especially important in the case of languages that feature definite and generic plural and singular “bare” nouns because of the absence of articles: the ancient Anatolian languages, for instance, allow both POSS–N and D–POSS–N constructions, where D is a demonstrative, and either pattern can be more or less definite, regardless of the presence of an overt determiner. Furthermore, definiteness can also be present in unmodified, simple inflected nouns as well, making it virtually impossible to state whether the feature is marked on the POSS or on the N.

Second, a strategy such as the one used in the English example *this book of mine* is grammatical due to the reorganization (or different organization) of the syntactic flow, but it is triggered by a different level of encoding, namely information flow. The construction *this book of mine* is either contrastive or used in cases in which some sort of post-nominal specification takes place, for instance a relative clause: *this book of mine, which the publisher didn't want to publish*. While the position of the possessive changes, an interplay of informational status, semantic content, and syntactic patterning is at work: syntactic constraints that are originally connected with the structural features of words and phrases define the options available for the management of information flow. Where the filter is less restrictive (as in Ancient Greek), more positional strategies are allowed, and we can have τὸ ἐμὸν βιβλίον [the.N/A.SG my.N/A.SG book.N/A.SG] ‘(the) my book’ but also τὸ βιβλίον μου [the.N/A.SG book.N/A.SG me.GEN] ‘the book of mine’ (apparently similar to English in its structure, but one must remember that the position of μου, being the genitive of a *clitic* personal pronoun, is certainly also determined by the prosodic flow). Where the filter is more restrictive, fewer strategies can be employed to organize information.

1.5 The syntax of demonstratives

From the foregoing, it can be seen that the syntax of demonstratives is a rather complex issue: it involves specific differences between the single languages and even differences between specific constructions, such as the ones exemplified in

the previous section. But the syntax of demonstratives also undergoes complex interactions with information flow: topicalization and focus, for instance, may alter the relative or absolute word order within the sentence, or even within a single phrase. In order to review some important features of the syntax of determiners, with particular reference to the Luwian demonstrative phrases as partly analyzed by Bauer (2014: Chapter 2), I will now try to compare the situation of the syntactic treatment of demonstratives in Luwian with the strategies in Ancient Greek for determination, anaphora, and deixis (recently discussed by Bakker 2009).

2 The syntax of determiners: Luwian

2.1 Word order

Luwian (the distinction between Cuneiform Luwian – in its different varieties – and Hieroglyphic Luwian is irrelevant for the problems discussed in the present paper)⁹ was an Anatolian language, and, just like Hittite, it featured a relatively strict SOV word order. More specifically, written Luwian is characterized by the very frequent use of an introductory particle *a-* that hosted the Wackernagel particles (clitic sentence particles affecting the VP or the inflected phrase; clitic pronouns acting as subject, verbal arguments, or other nominal elements; and a direct-speech particle, whose syntactic status still needs to be investigated). The element *a-* could be a (weak or strong)¹⁰ connective (when no other connector or subordinator was present), but, in all likelihood, it could also be merely a marker that indicated the beginning of a new sentence without any specific “coordinating” function.¹¹ Therefore, it is more accurate to state that the standard unmarked word order in Anatolian (at least in the later phases of the language, which Hittitologists may call “post-Middle-Hittite”, starting from the XIV century BCE) was rather Connective–Clitics–(S–)O–V in the cases in which no element was fronted.

9 On the internal filiation of Luwian, see Yakubovich (2010). Most of the differences between Cuneiform and Hieroglyphic Luwian belong to the levels of lexicon and morphology, and the few syntactically relevant ones regard the class of nominal genitives, which are of no relevance for the problem under investigation.

10 For the distinction between weak and strong conjunctions, see Luraghi (1990).

11 On the problem of co-occurring subordinating conjunctions and *a*-connectives in Luwian, see Coticelli-Kurras and Giusfredi (2015).

When expressed, non-clitic subjects occupied the first argument position, usually following the connective and the clitic node. However, Anatolian languages were pro-drop, and the explicit encoding of an NP-subject was obligatory only for unaccusative verbs; furthermore, clitic-subjects were necessarily omitted in both Hittite and Luwian when the verb was transitive or unergative (Garrett 1997; Melchert 2011). Non-clitic adjuncts and secondary verbal arguments seem to have been placed before or after the non-clitic direct object (a preferential order of the arguments is still to be identified). Finally, in quite a few cases, Cuneiform Luwian texts that were probably songs or poems could contain rather long sequences of arguments or adjuncts that followed the verb.¹²

With respect to information flow, marked (focused or topicalized) elements were generally attracted to the left periphery (see Watkins 2004; Rizza 2009; Vai 2011). Building on previous works on Hittite, the left periphery of Anatolian can be represented as in (3),

(3) (Top2) Intr/Top1(Clitics) (Top1) (Complementizer)

where “Intr” is the introductory “connective”, “Top2” is the position of hanging topics (topicalized nominal dislocated in an extra-clausal position), and “Top1” is the position of inflected topics or other elements receiving focus (I have not made an attempt to draw a detailed cartography distinguishing between the putative positions of left-peripheral Topic-Phrases and Focus-Phrases, as most of the criteria on which this distinction is based derive from a limited number of modern languages). The leftmost slot of the clause is usually filled by the Top1 fronted element, followed by the clitics; if no such element occurs initially, the leftmost slot is occupied by a connective (e.g., Hittite *nu*, Luwian *a-*), and the clitics will follow the connective and precede any other topical element.¹³

¹² For instance, in the cuneiform text KUB 35, 24 Vs. 19ff.: *papra*[(*ddu = tta*) ... (*m*)]*annakunati d* [(*auwassanzati tititati* ^{UZU}ŠĀ-*ti* ^{UZU}NÍG.GIG-*ti*)] *12-tati happis*[(*ati*)] ‘May (he) drive them away with the short [...], with the pupils of the eyes, with the heart, with the liver and with the 12 body parts’. Non-final verbs occur quite frequently in the Hieroglyphic Luvo-Phoenician bilingual texts from Iron Age Cilicia, due to the influence of Semitic word order (Yakubovich 2015). The very rare cases from non-bilingual Hieroglyphic texts should be explained in terms of focus (Cotticelli and Giusfredi 2015). On the lists of nominals dislocated in the right periphery of Hittite (and Anatolian) clauses, see McCone (1979); Rizza (2009); Sideltsev (2011).

¹³ See Vai (2011); note, however, that a discussion about the positional differences between “topicalized” and “focused” elements would go beyond the scope of the present work. For a transformational theory of the position of topical and focused elements within the working program of the Cartography of Syntax, see Cinque and Rizzi (2008).

This sketch of the representation of the Anatolian left-periphery is important in order to explain the examples in Sections 2.3 and 2.4. (cf. *infra*) in terms of informational fronting.

2.2 Luwian determiners

A description of determination in Hieroglyphic Luwian has been offered by Bauer (2014: in particular 42–62); the main findings are the following:

1. Hieroglyphic Luwian had two demonstratives that can be defined in terms of proximal (*za-*) vs. distal (*apa-*) deixis.¹⁴
2. Luwian had no articles.
3. The standard position of overt demonstratives in the Luwian phrase is: D–N.
4. Alterations of the word order may depend on:
 - i. Semitic influence in the case of bilingual texts from pre-classical Cilicia¹⁵
 - ii. the assignment of contrastive focus in the case of post-nominal alignment in non-bilingual texts
5. It is impossible to determine whether the markers of possession in Luwian did or did not regularly imply determination.

Given that word order in Luwian tends to be regular, any alteration of the standard patterns must be explained either as a mistake (a situation that is very difficult to recognize) or, in the perspective of information flow, as a “marked” construction (e.g., constructions in which foci or topics undergo syntactic movement). However, in order to recognize marked constructions, it seems crucial to systematically distinguish between the different types of order alterations, including those that go beyond the phrase-internal ones identified and discussed by Bauer (2014: 55–61). Furthermore, the analysis of word order can also be useful in order to understand the syntactic nature of the sequences featuring a demonstrative and a possessive, especially with regard to the language- and construction-specific peculiarities as introduced in Section 1.4.

¹⁴ See also Melchert (2009: 152–153) on other unattested or scantily attested forms in Cuneiform Luwian.

¹⁵ On this phenomenon, see Yakubovich (2015).

2.3 Fronting of the whole DP

First of all, let us consider a typical case of positional alteration (or “movement”) in Luwian involving a demonstrative: the fronting of the whole DP. Obviously, every DP is assigned a position within a sentence that depends on its argument role (determined by the inflectional node and by the syntactic roles assigned by the verb). For instance, the direct object (O) of a transitive verb would typically occupy the position between the S and the V. If the entire DP is fronted, as in example (4) taken from the inscription KULULU 4, §3a,¹⁶ it is safe to assume that we are dealing with a topicalization of the whole phrase.¹⁷

- (4) *za* =*wa* STELE *Huli-s* *tuwa-ta*
 this QUOT stele Huli-NOM put-PST.3SG
 [DP-OBJ *za* ... STELE] [SBJ *Hulis*] [V *tuwata*]
 ‘Hulis erected this stele (lit. This stele Hulis put).’

Obviously, this kind of construction does not involve or alter the [+proximal] and [+definite] features, as it simply involves the “movement” (or non-canonical position) of the whole DP. Even though “fronting” may produce a situation in which the clitic particles occupy Wackernagel’s position *between* the D and the N elements of the phrase, this does not mean that the DP was syntactically split: Luwian clitics are very strongly bound to P2 (the syntactic second position), and any fronted sequence simply “absorbs” them within the boundaries of the phrase. Consider for instance example (5) from the KARKEMIŠ A6 inscription, §25, which is absolutely regular (and represents a subject in P1 that underwent “soft” fronting as it occupies the leftmost position in the sentence at the expense of an omitted “connective”):

- (5) *za-s* =*pa=wa* *asa-s*
 this-NOM CLITICS seat-NOM
 ‘this seat’

¹⁶ The Luwian texts quoted in SMALL CAPITALS are taken from the Hieroglyphic Luwian corpus, and the editions of reference are Hawkins (2000) and Yakubovich’s online annotated corpus (<http://web-corpora.net/LuwianCorpus/search/>). The Cuneiform Luwian documents, on the other hand, are published in the main series of hand-copies, quoted here with the bibliographic abbreviation KBo and KUB (see the bibliography at the end of this paper).

¹⁷ On a possible interpretation of topicalization as A’-movement within a transformational framework, see Koebler (2010).

The frequency of D + N sequences in the Luwian corpus is over 150, and the frequency of clause-initial *za-* with clitics embedded in the DP is higher than 80 (sources: Hawkins 2000; online morphologically annotated Luwian Corpus by I. Yakubovich, <http://web-corpora.net/LuwianCorpus/search/>).

2.4 Fronting of D

In addition to the cases of DP fronting, there are also more unusual cases of positional alteration. The D element could be extracted from the DP and fronted. This kind of construction is very rare and, apart from a few uncertain fragmentary contexts, can be exemplified only by the sentence in (6) from the text KBo 29, 6, ro. 22:

- (6) *za-s* =*pa=ttā kuwatin* *zammitati-s* *harr-ati* [*awi-mmi*]
 this-NOM CLITICS as flour-NOM grindstone-ABL come-PTCP
 [D *zas*] [clitics] [CP *kuwatin*] [N *zammitatis*] [_N *harrati*] [V *awimmi*]
 ‘as this flour (has) come from the grindstone’

If focus is assigned to the fronted element,¹⁸ which is the only viable explanation in terms of information flow, then in this case it evidently involves the proximal demonstrative (*za-*) rather than the whole phrase (*zas zammitatis*). It may look like a strategy to place heavy focus on the fronted element, as it may create a stronger focusing effect than by fronting the whole phrase (as in Section 2.3). However, it must be noted that we do not know whether ritual texts like KBo 29, 6 were written in some kind of meter, which may explain the higher degree of freedom in word order.

2.5 Alteration of the relative position of D and N

Finally, the D element and the N element can be switched inside the DP. These rare cases are explored by Bauer (2014: Chapter 2), who, as already mentioned, attributes some of them to possible Semitic influence (in the Cilician bilingual texts, which also present cases of non-canonical verb position; cf. Yakubovich

¹⁸ Note that the subordinating “complementizer” *kuwatin* occurs in an acceptable sentence-medial position (on the general “map” of Anatolian peripheries, see again Watkins 2004; Rizza 2009; Vai 2011; with references to previous literature). Still, there is no syntactic constraint preventing *zammitatis* from being fronted and moved to “Phrase 1”-position along with *zas*; see the scheme in example (7), where the whole DP precedes the *kwari* “complementizer”.

2015), and cautiously compares other cases to some contrastively focused constructions identified in the Ancient Greek DPs. Consider the following phrase meaning ‘those dogs’, occurring sentence-initially in an Iron age epistolary text (ASSUR Letters B, §8):

- (7) *zwani-nzi =ha =wa apa-nzi kwari as-anti*
 dog-NOM.PL CLITICS this-NOM.PL if be-PRS.3PL
 [N zwaninzi] [clitics] [D apanzi] [_{CP} kwari] [_V asanti]
 ‘and if those dogs are (there)’

Obviously, from a phrase-structural point of view this type of construction is “locally” marked, and in transformational terms it might appear similar to the so-called “N-to-D movements”. However, the limited number of examples prevent a theoretical syntactic account. What pleads against a theoretical syntactic investigation as well is the fact that these Luwian constructions seem to depend on the flow of information rather than on the semantic properties of the nouns and on the structures that these select.¹⁹ For the purpose of a comprehensive analysis, it is important to notice that this alteration occurs in a DP occupying the first position of the sentence (it is the subject of a pre-posed conditional subordinate clause). Thus, the N element ends up filling the leftmost slot of the clause (at the expense of a possible “connective”, for which such position is usually reserved), right before the clitic node. Markedness depends both on the local fronting of the N element within the DP and on the left position of the whole phrase, making it legitimate to assume that the consequences on the information flow must be somehow different from the case discussed in Section 2.3, in which the informational structure inside the phrase remains unaltered. Even though Bauer (2014: 59) convincingly suggests that in this example the construction may depend on the fact that the most salient element within the DP is represented by the word for “dogs”, and not by the demonstrative (as no previous mention of the dogs was made earlier in the text), she does not discuss the position of the whole phrase on the clause and sentence level.

It may therefore be useful to investigate whether the N–D positional alteration (or movement) is consistently conditioned by the position occupied by the whole DP; in other words, whether the two phenomena regularly co-occur. The examples in the Luwian corpus are not many, and (7) is the only one in which the N–D sequence occupies the leftmost clausal position. For instance, the

¹⁹ See Longobardi (2001) and Alexiadou et al. (2007: 253–255) on “N-to-D movements”. On the semantic properties of “genericity” in plural bare nouns and their connection to the epiphenomenon of syntactic determination and DPs, see Delfitto (2002: in particular Chapter 3).

sentence in (8), taken from the VIII century text ASSUR Letter F +G, §21 (Bauer 2014: 59), seems different from the previous example, because the argument (again, a subject) does not occupy the leftmost slot. This might suggest that the attribution of saliency is a phenomenon that can take place locally, only within the boundaries of the phrase, and is not necessarily triggered by a marked order on the sentence level:

- (8) *api* =*ha* =*wa* =*nz* *targasna-nzi* *apa-nzi*
 further(more) CONJ QUOT we.DAT donkey-NOM.PL this-NOM.PL
 [_{ADV} *api*] [clitics] [_N *targasnanzi*] [_D *apanzi*]
arha *wala-nta*
 away die-PST.3PL.
 [_V *arha* *walanta*]
 ‘Furthermore, those donkeys have died on us.’

But, upon closer examination, the construction turns out to be marked even in this case. The leftmost position is occupied by an adverb, followed by a clitic node including an indirect-object pronoun that semantically maps a beneficiary. The adverb *api* ‘furthermore’ is left-located and it is strictly bound to the clitic sentence-level conjunction *-ha*: both regulate the connection of the sentence with the flow of information on discourse level. Such apparent “fronting” is frequent in the Luwian letters found in the Ancient Mesopotamian city of Assur, and it probably represented the standard position *api* occupied when used as an adverb scoping over the whole clause (and not just the verb, as in *api hatura* ‘write back’). Consequently, this positional constraint takes precedence over the fronting of the demonstrative phrase. The situation in the other example mentioned by Bauer (2014: 56), KARKEMIŠ A6 §30, is very similar, because the N–D sequence occupies the first available topical position after the clause’s initial conjunction *nipa* ‘or’:²⁰

- (9) *nipa* =*wa* *niwaranna-ti* *zina*
 or QUOT child-ABL(PL) this.ABL(PL)
 [_C *nipa*] [_{QUOT} *wa*] [_N *niwarannati*] [_D *zina*]
nipa =*wa* *wasinasa-ti* *zina*
 or QUOT eunuch-ABL(PL) this-ABL(PL)
 [_C *nipa*] [_{QUOT} *wa*] [_N *wasinasati*] [_D *zina*]

²⁰ Note, however, the discussion by Goedegebuure (2008) on the possible adverbial use of the sequence *zin ... zin*.

<i>kwi-s</i>	CUM- <i>ni arha</i>	<i>lai</i>
who-NOM by(?)	away	take.PRS.3SG
[REL-SBJ kwis]	[_v CUM- <i>ni arha</i>	<i>lai</i>]

‘Who shall take away (one child) from these children or (one eunuch) from these eunuchs...’

As a final remark, it must be stressed that the theorization about syntactic constraints and semantic implications on the basis of Luwian texts – especially letters – must in some cases be taken with some caution. Even for the texts that do not belong to the bilingual Luvo-Phoenician environment of late Iron Age Cilicia, it must be kept in mind that a large part of the population of most of the so called Neo-Hittite states was probably Semitic (Aramaean, Phoenician, Assyrian), at least in Syria. Thus, the influence of Semitic may have played a role in the presence of word order alterations even in the non-bilingual texts composed in areas different from Cilicia (see Giusfredi 2015).

On the other hand, even if such substantial influence were to be postulated, this would not prevent Luwian from employing the syntactic patterns resulting from contact in order to map marked constructions on the level of information flow. Indeed, the examples that have been discussed, while not numerous, have shown in a consistent manner that the internal alteration of the relative word order of noun and demonstrative within the phrase appears to be consistently correlated with a more general alteration of unmarked phrase order at clause- and sentence-level.

2.6 Combinations of demonstratives and possessives

A final problem regarding the syntactic treatment of demonstratives in Luwian is that they can combine with possessive elements.²¹ While rare, the D–POSS–N word order appears to have been perfectly grammatical, as in example (10) (KARKEMIŠ A 18e §4):

- (10) *za amanza tarusa*
 this my statue
 ‘this statue of mine’

²¹ In order to examine combinatory syntactic constraints, I have limited my analysis to the possessive adjectives of Luwian. For a generative approach to general “possession” in Ancient Indo-European and Anatolian, see Lühr (2002).

From this perspective, Luwian seems to behave differently from English and French (see Section 1.3) – where the possessive is rather consistently treated as a determiner – and to be similar to Italian or Greek – where the possessive can be treated as an attribute. This might be regarded as indirect evidence that Luwian also accepted attributive possession.

However, since Luwian did not have articles, the match is imperfect. *Pace* Bauer (2014: 53–55), Luwian is simply much more comparable to the numerous ancient Indo-European languages that did *not* need an article in order to assign definiteness to a noun phrase (see Section 1.2 above). These languages – Luwian, Hittite, but also, for instance, Latin, which indeed accepts the stacking of demonstratives and possessives (see Spevak 2010: 254–256) – necessarily had an ambiguous treatment of “bare” inflected NPs. Thus, the phrases containing possessives in languages in which simple nouns carried a [+/-definite] feature did not need to receive this feature by a definiteness-assigning element, and there is no reason to assume that the possessive, when present, was anything more than a modifier marking the characteristic of possession. Unmodified bare inflected nouns, both singular and plural, were capable of bearing positive or negative definiteness, which was marked on the syntagmatic distribution of inflectional endings assigning the NP to its own syntactic role. This fact makes it impossible – and probably superfluous – to try and establish whether such definiteness, in specific constructions, was assigned by a modifier, or if instead it was always marked on the inflected noun itself.

3. The syntax of determiners: Ancient Greek

3.1 Word order

When considering the mechanics that regulate standard and non-standard determiner constructions in a language like Ancient Greek, the range of possible word orders is much wider. Word order in Ancient Greek was rather free (at least if one compares with the many syntactic constraints that emerge in other languages), and the larger the number of possible patterns, the more difficult it is to identify systematic anomalies.²² An analysis of determiner phrases in Herodotean Greek was published by Bakker (2009) (noun phrases

²² On the architecture of information-structure in Ancient Greek, see Dik (1995); Devine and Stephens (2000); Lühr (2007, with reference to previous literature).

in her terminology); her study also includes a discussion of deictic modifiers. Based on Bakker's corpus and theoretical analysis, as well as on the material available on the online database of the *Thesaurus Linguae Graecae* (<http://stephanus.tlg.uci.edu/>), I will now illustrate the structure of the demonstrative phrases considered in Table 1 (Section 1.3), matching them against the theoretical hypothesis of the so-called “split DP” (in Modern Greek), as presented by Alexiadou et al. (2007).

Basically, the structure of an atomic Ancient Greek DP containing both an article and a demonstrative can be represented in terms of the following schemes (each representing what is generally referred to as “predicative position” in the common grammatical tradition):²³ in (11), two putative D elements are followed by N, while in (12), one D element precedes the N, and the other one follows it.

(11) τοῦτο τὸ βιβλίον
 this the book
 [DP [D2 τοῦτο] [D1 τὸ] [N βιβλίον]]

(12) τὸ βιβλίον τοῦτο
 the book this
 [DP [D1 τὸ] [N βιβλίον] [D2 τοῦτο]]

Constructions (11) and (12) are both standard patterns; therefore, both are highly frequent in the Ancient Greek corpus.²⁴ Bakker's analysis of their informational profile is based on examples from the Herodotean corpus (fifth century BCE). Going back to the earlier corpus Homeric Greek (source: *Thesaurus Linguae Graecae*), we find that these patterns are not attested, the reason being that the Attic Greek articles were not yet grammaticalized as such in Homer; they still behaved almost exclusively as demonstrative pronouns.

In the literature of the fifth- and fourth-century Ionic-Attic Greek, however, the discourse-informational patterns found by Bakker (2009) in Herodotus seem to be confirmed: the data I investigated show that, in general, the hypothesis of

²³ See, however, the general presentation by Bakker (2009: in particular 261–269).

²⁴ The *Thesaurus Linguae Graecae* (data retrieved in April 2016) contains several hundred occurrences of both sequences, according to queries run on an arbitrarily selected corpus that includes the historical works by Herodotus and Thucydides. As both constructions are highly regular in Ancient Greek, I will, in this case, not provide precise frequency information.

an informational predominance of the leftmost element holds water.²⁵ Examples of the informationally prominent discourse-anaphoric function of the demonstrative are in (13) and (14). The former draws from a linear narrative, while the latter relies on a dialogic textual environment:

- (13) καὶ ἀφικομένης Ἀττικῆς τε νεῶς καὶ Κορινθίας πρέσβεις ἀγουσῶν καὶ ἐς λόγους καταστάντων ἐψηφίσαντο **Κερκυραῖοι** Ἀθηναίοις μὲν ξύμμαχοι εἶναι κατὰ τὰ ξυγκείμενα, Πελοποννησίοις δὲ φίλοι ὥσπερ ἔκαὶ πρότερον. καὶ (ἦν γὰρ Πειθίας ἐθελοπρόξενός τε τῶν Ἀθηναίων καὶ τοῦ δήμου προειστήκει) ὑπάγουσιν αὐτὸν **οὗτοι οἱ ἄνδρες** [this.NOM.PL the.NOM.PL man.NOM.PL] ἐς δίκην.

And on the arrival of an Attic and Corinthian ship bringing envoys, and after the envoys had held conferences with them, **the Corcyraeans** voted to continue to be allies to the Athenians according to their agreement, but on the other hand to renew their former friendship with the Peloponnesians. Thereupon **these men** brought Peithias – he was a volunteer proxenus of the Athenians and leader of the popular party – to trial. (Thucydides, Histories III.70.2; translation by Smith 1919: 127)

- (14) ἐπιστήμη ἄρα αἰτήσεως καὶ δόσεως θεοῖς ὁσιότης ἂν εἴη ἐκ **τούτου τοῦ λόγου** [this.GEN.SG the.GEN.SG definition.GEN.SG].

Thus, according to **this definition**, holiness would be a discipline of giving and asking. (Plato, Eutyphro14d; translation by Fowler 1914: 55)

On the other hand, examples (15–16) do not feature an anaphoric function, but a deictic one; in both sentences, the deictic element refers to the very occasion and location in which the sentence was uttered (in (15) by Pericles at the funeral oration at the beginning of the Peloponnesian War; in (16) by Socrates at his own trial).

- (15) “Ἀρξομαι δὲ ἀπὸ τῶν προγόνων πρώτων· δίκαιον γὰρ αὐτοῖς καὶ πρέπον δὲ ἅμα ἐν τῷ τοιῷδε **τὴν τιμὴν ταύτην** [the.ACC.SG honor.ACC.SG this.ACC.SG] τῆς μνήμης δίδοσθαι.

I shall speak first of the ancestors, for it is right and at the same time fitting, on an occasion like this, to give them **this** (place of) **honor** in recalling what they did. (Thucydides, Histories II.36.1; translation based on Smith 1919: 321)

²⁵ This data is based on queries run in the full-access *Thesaurus Linguae Graecae* (retrieved in April 2016); in particular, the data is based on an arbitrarily selected corpus consisting of Thucydides's Histories and Plato's works.

- (16) Ἀναλάβωμεν οὖν ἐξ ἀρχῆς τις ἡ κατηγορία ἐστὶν ἐξ ἧς ἡ ἐμὴ διαβολὴ γέγονεν, ἧ δὲ καὶ πιστεύων Μέλητός με ἐγράψατο **τὴν γραφὴν ταύτην** [the.ACC.SG suit.ACC.SG this.ACC.SG].

Now let us assess from the beginning the question, what is the accusation from which the false prejudice against me has arisen, in which Meletus trusted when he brought **this suit** against me. (Plato, Apology 19b; translation by Fowler 1914: 75)

Regarding the structural features of these phrases, it is immediately evident that all contain a positive [+definite] feature, conveyed by the definite article. In Ancient Greek, this article could also be omitted in combination with a demonstrative, but in other Indo-European languages, they cannot be combined (irrespective of their linear order), as seen in (17a–c).

- (17) a. English: **the this book/this the book*
 b. Italian: **il questo libro/questo il libro*
 c. French: **le ce livre/ce le livre*

What Ancient Greek does not allow is the insertion of the demonstrative element (in our examples, the proximal οὗτος/αὕτη/τοῦτο ‘this’) between the article and the noun it refers to, which traditional grammar describes as the “attributive” position. That this represented a true grammaticality issue is proven by the fact that the Ancient Greek Grammarians recognized the problem synchronically (see Merlin 2015):

- (18) *τὸ τοῦτο βιβλίον
 ‘*the this book’

Note, however, the partial exception of the sequences in which the article was followed by αὐτός (-ή, -ό): its nature, however, was different from Modern Greek αὐτός/αυτή/αυτό (simply ‘this’), and closer to that of an intensive modifier (similar to Latin *ipse*).

Explaining the pattern of Ancient Greek constraints in terms of the inseparability of the [+definite]-assigning element from the noun it refers to is probably a reasonable approach, but it requires some caution: true hierarchic NP-embedding obviously produces grammatical strings, regardless of the linear contiguity of the elements involved: e.g., τῶν ἐν τῇ κεφαλῇ τριχῶν [the.GEN.PL in the.DAT.SG head.DAT.SG hair.GEN.PL] ‘of the hair of the head’; 5th-century Ancient Greek, Thucydides, *Historiae* 1, 6). A more interesting approach is to investigate whether it is possible to iterate a proper determiner within a phrase. In order to do

so, it must be stressed once again that, in line with the results of the work by Lyons (1999), the present paper considers a determiner to be a definiteness-assigning element. If the feature of definiteness were iterable, and therefore assigned by all the apparent determiners in a nested sequence, the asymmetrical pattern of possible and impossible sequences would remain unexplained, at least in Greek (if not across languages): why can apparent determiners be stacked in one order, but not in another one? Evidently, the position of the elements in the DP dictates the conditions for the grammaticality of the presence or absence of articles, demonstratives, and, in some cases, possessives. Generally, the situation in (12) appears to be similar to the one of the English “*the/this-my-construction” (see (19)):

- (19) *The/this my book The/this book of mine...
 *τὸ τοῦτο βιβλίον τὸ βιβλίον τοῦτο ‘this book’

A commonsensical explanation of the English pattern would be to assume that, in general, the determiner occupies the position of a non-recursive element.²⁶ From this perspective, the English possessive would have to be replaced by another element that takes a lower hierarchical position in the rightmost area of the phrase. The phenomenon that occurs in Ancient Greek may look similar; however, it must be pointed out that (11) (τοῦτο τὸ βιβλίον) is perfectly acceptable, which means that the situation is characterized by a form of asymmetry: the demonstrative does not follow the article, but the article can follow the demonstrative. This would lead to the following conclusion: it is the article (D1), if present, that assigns [+definiteness], while the demonstrative (D2) does it only when the article is not there (in the presence of an article, it simply assigns a [+/-proximal] feature). Consequently, in Ancient Greek it is the definite article that, assigning [+definite], does not accept the presence of a demonstrative element between itself and the noun, as this would produce ambiguity due to the double nature of the demonstrative. Since the distribution of demonstratives in Ancient Greek matches that of predicative attributes,²⁷ it is worth returning to Giorgi and Longobardi’s definition of “predicative” modifier:

²⁶ See, however, Alexiadou et al.’s (2007: 127–130) discussion of Greek demonstratives in highly analytical generative terms.

²⁷ The attributive position is traditionally the one located inside the article+noun definite phrase, or with a repetition of the article in the sequence article+noun + article+adjective (cf. Smyth 1920: 293). On the predicative *position* of demonstratives, see the pioneering work by Brugmann (1900: 426–428). In Modern Greek, the articulated adjective can also occur prenominal in the sequence article + adjective + article + noun; for a detailed discussion of

By the term ‘predicative adjective’, we refer to all those adjectival modifiers which predicate a quality of the head N, without denoting an object in the world and functioning as an argument of the head. (Giorgi and Longobardi 1991: 122)

It will be immediately clear that this definition is hardly applicable to demonstratives, which, by definition, either deictically refer to a real-world or to a shared-knowledge referent, as in (15–16), or anaphorically recall a specified element mentioned in the preceding discourse (13). This further indicates that the syntactic position of the demonstrative in Ancient Greek, when it occurred with another definiteness-assigning element (the article), was not that of a determiner, but rather that of an adjunct modifier: a situation similar to the one that emerges in Luwian, but for different reasons – Luwian had no articles, and syntactic definiteness could be marked directly on the article-less inflected noun phrase.

3.2 Focus and information flow

According to Alexiadou et al. (2007: 127–130), two positions remain available to determiners after the application of syntactic constraints in Modern Greek: a prenominal “deictic” one and a post-nominal “anaphoric” one.

In Ancient Greek, the prenominal position was not limited to the cases in which an article occurred: as previously mentioned, the [+definite] feature could also be assigned by a single demonstrative, as in (11):

- (20) τοῦτο βιβλίον
‘this book’

All in all, the combination of different syntactic strategies to work around constraints allowed for a rather free relative order of the D and the N. As I have already mentioned, in her work on the noun phrases in Herodotus, Bakker (2009: 76–79) suggested analyzing the relative positions of the D and the N elements as indicators of a focusing strategy. This view is part of a larger picture, in which modifiers can be said to occur pre-nominally when they are more “salient” than the nouns they modify, and post-nominally when “saliency” is attributed to the semantics of the noun. While this hypothesis may present a few

adjectival articles in Modern Greek, presented within a generative framework, and for previous literature, see Alexiadou (2014: 15–52). On the articulation of adjectives in Ancient Greek depending on the way they affect the meaning of the referent, see Bakker (2009: 215–286).

problems when the “salient” modifier is a clitic element, such as a possessive pronoun (see Goldstein 2012), it does explain rather convincingly the several possible collocations of modifiers, within the boundaries of the phrases to which they belong, in terms of information flow. It must be stressed once again, however, that this informationally oriented behavior is typical of modifiers that, to a given extent, can move without breaking syntactic constraints dictated by hierarchic logical boundaries (e.g., the scope of a determiner over the determined noun), and therefore I have argued that the Ancient Greek demonstrative, when accompanied by an article, behaved syntactically as an adjunct modifier.

It is also very interesting to observe that Bakker’s explanation of leftmost saliency of modifiers and the split-DP interpretation by Alexiadou et al. (2007) and Alexiadou (2014) – in spite of their different theoretical frameworks – are consistent with a cross-linguistic account of the informational structure of Luwian, as well. A demonstrative referring to a prominent, “salient” noun is usually not anaphoric (as the noun usually carries new information); it is thus more likely that the demonstrative will occupy the position reserved for the “deictic” feature, rather than the anaphoric one. From this perspective, the absence of an article in Luwian represents a mere alteration of the parameter of syntactic filter. Thus, if the above-discussed alteration of the relative positions of N and D (Section 2.5) was a genuine phenomenon of Luwian, then deictic demonstratives being right-aligned would not contradict the cross-linguistic picture.

4 Conclusion

“Determiners” follow different rules that depend on the specific features of the different languages and, in several cases, on their specific constructions. More precisely, “determiner” and “deictic” are labels that commonly refer to quite a few classes of words, which in different frameworks may include articles, demonstratives, possessives, and quantifiers. As a general rule, determiners consistently assign the feature of *definiteness* [+/-definite], and, quite independently from the descriptive frameworks, it is this feature that characterizes a DP. Definiteness is the main information conveyed by articles – in languages in which articles occur – but it can also be assigned by other determiners, or be implied by bare inflected nouns according to language-specific rules. In general, when articles are not present, bare inflected nouns can be definite both in singular and in plural, with their syntactic role assigned and marked by the syntagmatic distribution of inflectional endings.

Cross-linguistically, demonstratives are generally assigned the positive definiteness feature [+definite], along with a more specific feature, labeled [+/-proximal], that is related to positional deixis. Possessives, on the other hand, can be determiners in some cases and mere attributes in others. Their status may vary across individual languages and across specific constructions. In languages that have no articles, such as Luwian, phrases containing possessives could be both definite and indefinite depending on the semantic context and on their syntactic role, thus matching the ambiguity of definite and indefinite determinerless DPs. When there are constraints on the combination of different elements that have definiteness-assigning potential, syntactic strategies come in play. These strategies vary in the different languages according to language-specific constraints. Syntactic constraints filter the available word orders as far as the management of information flow is concerned.

In Luwian (and Anatolian in general), in spite of its lack of complex combinatory filters, syntax interacted with information flow in order to produce a number of patterns that are not limited to the alteration of word order within the boundaries of the determiner phrase. DPs could be fronted, or even deconstructed (by the fronting of a single element of the phrase), producing different marked patterns that can be interpreted in terms of topicalization or (contrastive or non-contrastive) focus. In Ancient Greek, demonstratives could co-occur with an article – a feature rather uncommon for an Indo-European language. In phrases that contained an article as well as a demonstrative, I have argued that the informational mobility of the phrase-internal organization of words depends on the fact that, on the level of syntactic structure, the demonstrative does not operate as a determiner assigning definiteness, but rather as an adjunct modifier. In order to adequately weigh the levels of structural syntax and informational configuration at phrase and sentence level, cross-linguistic accounts and comparisons generally require taking into consideration that the language-specific filter of syntactic constraints may alter the scheme of the possible outcomes for both unmarked and marked word orders.

Acknowledgments: The present paper is part of the project SLUW “A computer-aided study of the Luwian (morpho-)syntax”, which has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 655954. I thank Paola Cotticelli-Kurras and Alfredo Rizza for their precious advice; however, the responsibility for the contents of the present paper is entirely mine.

Abbreviations

3 = third person; ABL = ablative; ADJ = adjective; ADV = adverb; c(P) = complementizer (phrase); CONJ = conjunction; D(P) = determiner (phrase); DAT = dative; GEN = genitive; N(P) = noun (phrase); N/A = nominative/accusative; NOM = nominative; POSS = possessive; PRS = present; PST = past; PL = plural; PTCP = participle; QUOT = quotative.

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