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THE ACQUISITION OF CASE MORPHOLOGY IN RUSSIAN AS A SECOND LANGUAGE

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Abstract

My study investigates the development of case amongst learners of Russian L2. The theoretical framework adopted here is Pienemann's (1998) Processability Theory - a theory of Second Language Acquisition that (a) assumes Levelt's (1989) psycholinguistic model for oral production and (b) the Lexical-Functional Grammar framework for language description. For reasons of language description, I first explain how the case theory works in general, and then assuming a revised version of King's (1995) types of case assignment for Russian, I look at how the Russian case system is viewed within the LFG framework.

Adapting a PT universal hypothesis for morphological development to Russian case, I tested it on a group of learners of Russian L2 at different levels of proficiency and with a varied L1 background.

Analysis on a corpus of semi-spontaneous oral data collected among 21 learners confirms the hypotheses that (a) all the learners at a given PT stage are able to mark case in structures requiring the activation of lower procedures, (b) the transfer of case from the L1 to Russian L2 is constrained by the processability of the structures in which case is used, (c) the learners move from one to multiple case marking and from emergence to accuracy, and (d) the different types of case assignment parallel PT developmental stages.

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0. Introduction

This study aims at investigating how Russian case morphology develops in the learners' interlanguage. The study of Russian case in Second Language Acquisition (SLA) is a topic that can be inspiring in several ways. First, case in Russian is a complex feature to acquire for a variety of reasons: lack of one-to-one relationship between forms and functions, large variety of structures in which case is used, and different types of case assignment. Secondly, case is a morphological phenomenon primarily used to establish syntactic relations among constituents. It is thus a good testing ground for developmental hypotheses at the morpho-syntax interface. Third, case is a phenomenon that is not present in all languages. It is thus possible to investigate whether and to what extent the presence or absence of case marking in the learner's L1 affects the developmental path.

A good theoretical framework to investigate the acquisition of Russian case among L2 learners is Processability Theory (PT), a cognitive-based theory of SLA that provides clear and testable hypotheses for syntactic and morphological development. Within PT, the acquisition of case has recently become a topic of interest because of its morpho-syntactic nature, and studies on case in German L2 and on Serbian as a heritage language has been conducted in the past five years. In addition, PT claims that its developmental hypotheses are universal and this study on Russian L2 widens the cross-linguistical validity of such a statement.

In my study, I have applied PT's developmental hypotheses to Russian case and tested them on a group of 21 learners of Russian L2, at different levels of proficiency and with a varied L1 background. This latter variable is of great interest and allowed to test whether the presence or absence of case in the learners' L1 influences the way case is acquired in Russian.

My work is organised as follows. In the first chapter, I will present how formal grammar deals with case in general (§ 1.1) and Russian case in particular (§ 1.2). In the second chapter, I will deal with case from an acquisitional perspective and first present PT (§ 2.1), then a review of literature on the acquisition of case (§ 2.2), and finally my own developmental hypotheses for case morphology (§ 2.3). In the third chapter, I will introduce the methodology used to test my hypotheses, that is, (§ 3.1) the data elicitation

tasks, (§ 3.2) the learners that took part in the research, (§ 3.3) their L1 background and the (§ 3.4) corpus collected. In the fourth section, I will analyse the data from several perspectives. First, I will test my PT-based developmental hypotheses (§ 4.1), then the Developmentally Moderated Transfer Hypothesis (DMTH) in order to investigate to what extent case can be transferred from the L1 into the L2 (§ 4.2). I will also test the Cognitive Load Hypotheses, that is, the role played in acquisition by the introduction of several case marked elements in the same structure (§ 4.3). Finally, I will test the Differential Case Theory Hypothesis, according to which different ways of case assignments are acquired at different stages (§ 4.4).

1. Introducing case

1.1. Case morphology

Case is a key concept in grammatical tradition, but its definition has always been somehow hard to grasp. Blake (2001: 1)'s concise definition highlights some concepts that are key aspects I assume in my study:

Case is a system of marking dependent nouns for the type of relationship they bear to their heads.

First, case is a system and therefore it presents patterns and regularities that can be analysed and classified. Secondly, case involves marking. Therefore, it is mandatorily connected to a morphological marker. This is unlike in other theories, such as Government and Binding (Chomsky 1981), that assume abstract case to be present even if not overtly marked. Thirdly, case is marked on dependents. So, no morphological element marked on heads is case. Finally, case expresses a relationship between a head and its dependent. This relationship can be of several types. As pointed out in Butt (2011), from antiquity to modern times, attempts to understand the nature of this relationship have included concepts like semantic roles (§ 1.1.1), lexical decomposition (§ 1.1.2), proto-roles (§ 1.1.3), grammatical relations (§ 1.1.4) and linking (§ 1.1.5). In §§ 1.1.1 – 1.1.5, I will briefly introduce these approaches and explain the reasons why I assume the concept of case proposed by Lexical-Functional Grammar (LFG).

1.1.1. Semantic Roles

The idea that case has a strong relationship with semantic roles dates back to Pāṇini, who noticed that Sanskrit displays semantic relations (called *kāraḥas*) between verbs and nouns. Nouns are assigned one of six *kāraḥas*, as in (1).

(1) Cases and kārakas according to Pāṇini

CASE	KĀRAKA (SEMANTIC ROLE)
nominative	agent
accusative	object (patient)
instrumental	instrument
dative	destination
ablative	source
locative	locus

However, case does not overlap with *kāraka* in that some cases bear no *kāraka* – like VOC and GEN in Sanskrit – and a *kāraka* can be shared by more than one case – as shown in passive alternation, where the role <agent> can be marked both by NOM and INST.

Today most theories assume a kind of relation between case and argument structure, but they differ highly in defining the properties of semantic roles. The acknowledged semantic roles in contemporary linguistic theories are shown in (2a). These roles were listed in a typologically validated hierarchy by Keenan & Comrie (1977) and Hopper & Thompson (1980), as shown in (2b).

- (2) a. agent, beneficiary, experiencer, goal, instrument, locative, patient and theme
b. agent > beneficiary > experiencer / goal > instrument > patient / theme > locative

The role <agent> is the highest role, and <locative> the lowest. This hierarchy is henceforth assumed in my work.

1.1.2. Semantic Decomposition

The definitions of the semantic roles identified in (2) are intuitive, but quite vague to be operationalised. Jackendoff (1972, 1976, 1987, 1990) identified semantic primitives that provide information about (a) the lexical semantics of predication, and (b) the number and (c) the type of participants involved. Lexicon is thus “decomposed” via semantic primitives, like GO, CAUSE and BE, and coded in a matrix called Lexical Conceptual

Structure (LCS), which is exemplified in (3) for the English verb *give* after Jackendoff (1990).

(3)

$$\left[\begin{array}{c} \textit{give} \\ [CAUSE ([\alpha], GOposs ([\beta]), TO [\])] \\ [AFF ([\]\alpha, [\]\beta)] \end{array} \right]$$

Here we can see that the verb *give* can be decomposed in the primitives CAUSE, GO and TO. The first line of the second matrix (called Thematic Tier) states that there is an event in which a first participant CAUSES something to GO TO a second participant. The second line (called Action Tier) expresses the AFF(ectedness) relation. The actor α and the <patient>/<beneficiary> β are coindexed with the causer and the <theme>/<patient> of the Thematic Tier. The Action Tier selects two participants, which play the main roles in the transitive relation.

Jackendoff's theory is based mainly on English, but it can be easily applied to languages with case (see Butt, 1995 on Urdu).

1.1.3. Proto-Roles

Another solution to the vagueness of the semantic roles was provided by Dowty (1991), who proposed two proto-roles, namely Proto-Agent and Proto-Patient, as elements qualified by at least one agent-like and one patient-like property respectively. These two basic elements allow analysis without the need of creating numerous vaguely defined new thematic roles because they rely on prototypical entailments of agency and patiency, which are listed in (4) (Dowty 1991: 572).

(4) Proto-Role Entailments

Proto-Agent

- a. volitional involvement in the event or state
- b. sentience and/or perception
- c. causing an event or change of state in another participant
- d. movement relative to the position of another participant
- e. it exists independently of the event named by the verb

Proto-Patient

- a. it undergoes change of state
- b. incremental theme
- c. causally affected by another participant
- d. stationary, relative to movement of another participant
- e. it does not exist independently of the event, or not at all

The entailments of the two Proto-roles allow for argument selection, in that the argument with higher number of Proto-agent entailments is the SUBJ, and the argument with higher number of Proto-patient entailments is the OBJ.

Proto-roles were also assumed by some versions of LFG while attempting to create a system that could account for the mapping between the argument structure and the functional structure. The idea of proto-roles was then abandoned after the formulation of the Lexical Mapping Theory (Bresnan, 2001), relevant here in that it was incorporated in the extension of Processability Theory in Pienemann, Di Biase & Kawaguchi (2005) (cf. § 2.1.3).

1.1.4. Grammatical Relations

Theories like GB tend to assume that the grammatical functions (henceforth GFs) SUBJ, OBJ and IND OBJ are case-marked respectively by NOM, ACC and DAT. However, a few theories overtly deal with the notion of grammatical relation and try to explain the relation between case and GFs. One of them is Relational Grammar (RG, Perlmutter & Postal, 1983), a theory conceived in order to account for the passivization rule. The authors

concluded that a generalization of passivization is possible only with respect to grammatical relations. In fact, the SUBJ and the OBJ of the active clause become the OBL/ADJ¹ and the SUBJ respectively of the passive clause, and the underlying correspondence between the two versions is kept by the relation between the grammatical functions and the thematic roles.

Later RG introduced the concept of terms, instead of labels like SUBJ, OBJ, OBL and ADJ, and hypothesised that cross-linguistic correspondences between terms, grammatical functions, thematic roles and cases are as in (5). However, cross-linguistic data do not confirm the expected correspondences and a term-based analysis allowed for an integrated account of the interaction between case marking, thematic roles and grammatical relations.

- (5) Expected correspondences between terms, grammatical functions, thematic roles and cases (after Perlmutter & Postal, 1983)

TERM	GRAMMATICAL FUNCTION	THEMATIC ROLE	CASE
1	subject	agent	nominative
2	object	patient/theme	accusative
3	indirect object	goal	dative

Relevant for the development of studies on case among these interactions was the Unaccusativity Hypothesis (Perlmutter, 1978). Perlmutter noticed that English intransitive verbs can be split into unaccusatives (like *fall* and *melt*) and unergatives (like *dance* and *sneeze*). An underlying term 2 is assumed for unaccusatives, while an underlying term 1 is assumed for unergatives. This analysis becomes relevant in languages like Urdu, which displays different case markers for SUBJs of different verbs, as shown in (6) (Butt 2011: 37). Here the SUBJ of the unergative verb is marked by ERG, while the SUBJ of the unaccusative is unmarked (and thus NOM).

¹ The OBL, unlike the ADJ, is an argument selected by the verb. Scholars like Neidle (1998) and Kibort (2005) tend to consider the demoted argument in the passive as an OBL because of its dependency of the verb. On the other hand, in Bresnan and Moshi (1990)'s view the suppression of the argument makes it unavailable for linking and thus the <agent> can be expressed only as an ADJ.

- (6) a. Nadya gir-i
 Nadya.F.NOM fall-PRF.F.SG
 [Nadya fell]
- b. Nadya=ne k^hās-a
 Nadya.F=ERG cough-PRF.M.SG
 [Nadya coughed]

The presence of an abstract level of representation, different from thematic roles and case, but in relation with them, is assumed also by LFG. However, LFG adopts the more traditional labels SUBJ, OBJ, etc. instead of terms.

1.1.5. Linking

Linking theories explore the mapping of predicate-argument structures to a syntactic representation. Therefore, they deal with the various relationships between argument structure, case, lexical semantics, grammatical functions and syntactic structures. The ultimate aim of linking theories is to find the constraints and generalisations over these mappings. The concept of linking, or mapping, can thus propose a neat account for “troublesome” structures.

LFG is one of these linking theories. In (7), as an example, I will show how LFG can account for the passive structure.

(7)	<i>pinch</i>	< agent	patient >	
	active	SUBJ	OBJ	
	passive		SUBJ	(suppression of agent argument)

The analysis of *pinch* in (7), held within the LFG framework, shows that the two participant arguments are linked to the syntax. Passive morphology triggers the

suppression of the <agent>, leaving the role <patient> as the only candidate for being linked to SUBJ. It goes without saying that, whenever a language introduces case markers, case is strongly involved in the process of mapping.

1.1.6. Case in LFG

As mentioned above, case is a central concept in LFG analysis. Here we assume that the reader is familiar with LFG basics, such as the different structures (functional structure, argument structure, constituent structure, etc.) and primitives (grammatical functions, semantic roles, constituents, etc.). For a detailed overview on LFG, see Bresnan (2001) and Dalrymple (2001). A brief introduction of LFG main concepts is provided later in this study (§ 2.1.1), with a particular focalisation on those aspects that are used by Processability Theory.

The first seminal work on case within LFG framework is by Zaenen, Maling & Thráinsson (ZMT, 1985), who explained the complex rules governing the relations between case, thematic roles and grammatical functions through a list of four association principles, based on Icelandic (8).

(8) Icelandic Association Principles

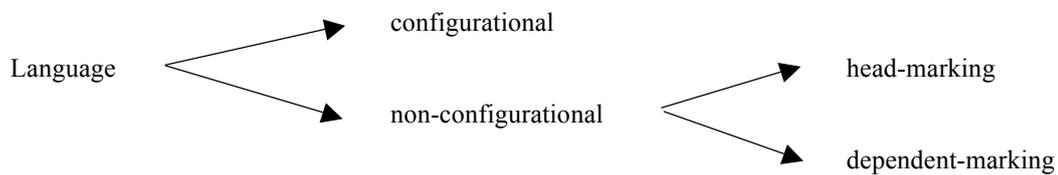
1. <agents> are linked to SUBJ. (Universal)
2. Case-marked <themes> are assigned to the lowest available GF. (Language-specific)
3. If there is only one thematic role, it is assigned to SUBJ; if there are two, they are assigned to SUBJ and OBJ; if there are three, they are assigned to SUBJ, OBJ, OBJ2 [the modern OBJ \emptyset]. This principle applies after principle 2 and after the assignment of restricted GFs. (Universal)
4. Default Case Marking: the highest available GF is assigned NOM, the next highest ACC. (Universal)

As shown in (8), some principles happen to have universal value, like the cross-linguistic link between <agent> and SUBJ; other principles are limited to the Icelandic language. However, some cases cannot be explained by these four principles and must be justified by idiosyncratic properties of some lexical items. This inherent case is often referred as

“quirky” for its apparent lack of justification, which can be found only in a diachronical perspective.

A second important LFG work on case is by Nordlinger (1998), who developed her theory of Constructive Case in order to account for the phenomenon of case stacking in Australian languages. Nordlinger noticed that different languages use different morpho-syntactic strategies to construct syntactic relations and proposed the typology of languages² shown in (9).

(9) Typological classification of languages



Configurational languages tend to express GFs through word order. GFs are thus assigned according to the structural position in the c-structure. For this reason, usually morphology is scarce and irrelevant for the assignment of core GFs, like in English and Chinese.

Non-configurational languages, on the contrary, display freer word orders and thus GFs cannot be predicted simply by considering the position of constituents. Here comes morphology, which can be marked either on the head or on the dependent elements. If a language tends to mark GFs on the head element, the agreement between the verb and GF(s) will be expressed by verb morphology, like in Italian, where SUBJPERS-NUM-GEND – and sometimes also OBJNUM-GEND – are marked on the verb. When a language tends to mark GFs on the dependent element, case marking appears on nouns. In terms of LFG formalisation, the head-marking strategy assigns GFs through the feature AGR, as in (10a), while the dependent-marking one assigns GFs through the feature CASE, as in (10b).

² Natural languages usually have more than one strategy to mark GFs.

- (10) a. head-marking
 $(\downarrow \text{AGR}) = (\uparrow \text{GF AGR}) \rightarrow (\uparrow \text{GF}) = \downarrow$
- b. dependent-marking
 $(\downarrow \text{CASE}) = k \rightarrow (\uparrow \text{GF}) = \downarrow$

The languages considered by Nordlinger (1998) are of this latter type and display a high degree of non-configurationality and a very productive use of case markers, including the phenomenon of case stacking. This phenomenon of case stacking on the same noun is a strategy largely exploited in some Australian languages and exemplified in (11), a sentence in Martuthunira (Dench, 1995: 60). Here the word 'pouch' displays three case markers: LOC for location, PROP to mark a possessive relation with the other PROP-marked noun (here 'joey'), and ACC to show that it is part of the other ACC-marked noun (here 'euro'). Nordlinger noticed that all these markers establish complex syntactic relations amongst different constituents and thus case is the most important means by which syntax is built, hence the idea of a 'constructive case'.

- (11) Ngayu nhawu-lha ngurnut harntha-a mirtily-marta-a thara-ngka-marta-a
 I saw-PAST that.ACC euro-ACC joey-PROP-ACC pouch-LOC-PROP-ACC
 [I saw the euro (a hill kangaroo) with a joey in (its) pouch]

Nordlinger sees also that case itself bears syntactic information. For instance, an ERG marker provides the grammatical information that its constituent has to be SUBJ. Therefore, she proposes to encode this piece of grammatical information in the lexical entry of ERG, as shown in (12), stating that whenever ERG is assigned to a given constituent, it will be the SUBJ of the clause.

- (12) ergative: $(\uparrow \text{CASE}) = \text{ERG}$
 $(\text{SUBJ } \uparrow)$

Nordlinger's Constructive Case provides a satisfying description of the interplay between case and GFs. A limit however is that it ignores the connections between case and a-structure.

This gap is filled by the Differential Case Theory (DCT) by Butt & King (1991),

which can account for those case alternations where the only difference is in semantic interpretation. Let us consider the following examples from Urdu (Butt 2006: 198).

- (13) a. Nadya=ne zu ja-na hε
 Nadya=ERG zoo.OBL go-INF be.PRES
 [Nadya wants to go to the zoo]
- b. Nadya=ko zu ja-na hε
 Nadya=DAT zoo.OBL go-INF be.PRES
 [Nadya has to go to the zoo]

The two sentences in (13) involve Differential Subject Marking, that is, both sentences exhibit the same SUBJ, which is case-marked in a different way according to the semantics of the clause. In (13a) the ERG entails volition in the <agent>, whereas in (13b) DAT implies that the participant is obliged to perform the action.

It is relevant to notice here that case is considered a phenomenon at the semantic and morpho-syntactic interface. In addition, DCT can account for cases that are linked only to structural and idiosyncratic factors. All these phenomena related to case are assumed in DCT and explained through the notions of (a) default case, (b) structural case and (c) quirky case, together with the already mentioned (d) semantic case.

(a) Default case is introduced in languages that require their NPs to be obligatorily case-marked. If a NP is not already given a case associated to some specification, it is assigned the default case. A cross-linguistic default case is NOM.

(b) Structural case is an instance of default case, in that it is assigned to a NP purely for positional reasons. An example of structural case is the English Saxon Genitive, where GEN is assigned to a NP dependent of a NP.

(c) Quirky case is the label given to all those occurrences of case that are coincidentally and historically motivated in a given language and not generalisable. Quirky case can thus account for idiosyncratic requirements.

(d) Semantic case is linked to the semantics of the clause.

The analysis of case provided by LFG is a good framework for my research on the acquisition of in several ways. First, LFG is the theoretical basis for grammar description that is adopted both in Levelt's Model (1989) and in Processability Theory (Pienemann,

1998; Pienemann, Di Biase & Kawaguchi, 2005; Bettoni & Di Biase, in press), the theoretical framework in which I conduct in my study. Secondly, in LFG the concept of case is distinct both from semantic roles and from grammatical relations. Case is an element *per se*, with its own morphology and thus clearly recognizable in the learners' production. Thirdly, LFG allows to investigate the acquisition of case in relation to a-structure, c-structure and f-structure.

1.2. Russian Case

In this section, I will present the Russian case system, that is, its forms and functions (§ 1.2.1), and the structures in which case is introduced (§ 1.2.2). Then I will present three seminal theoretical works about Russian case: Jakobson's (1936, 1958) model of case decomposition in § 1.2.3 and, within the LFG framework, Neidle (1988) in § 1.2.4 and King (1995) in § 1.2.5.

1.2.1. Forms and Functions

The Russian case system consists of six³ cases: nominative, genitive, dative, accusative, instrumental and prepositional (also called locative). Case is marked on nouns, pronouns and adjectives.

Russian case is fusionally enmeshed with other nominal features, such as number, gender, animacy and class. Therefore, unlike agglutinative languages, there is no one-to-one relationship between form and function, that is, one case can be expressed by numerous endings and one ending can mark more than one case.

In this section, I will show the different case-markers on nouns, pronouns and adjectives for each case; then I will present data on the complex relation between case forms and their

³ Some scholars (cf. Jakobson, 1936) split genitive and locative into genitive 1 / genitive 2 and locative 1 / locative 2.

functions.

The following tables show the case-marking paradigms in (14) nouns, (15) pronouns and (16) adjectives. The description of pronouns here is limited to the most common personal and interrogative pronouns. However, a declension pattern is introduced also for reflexive, demonstrative, determiner, possessive and numeral pronouns. For further discussion, see Timberlake (2004: 116-123). The symbol $-\emptyset$ denotes null morpheme and a slash separates allomorphes, where the first is the more prototypical and the second is influenced by phonological requirements (e.g., $-y$ cannot follow $-g/-k/-ch/-č/-š/-šč$ and soft consonants).

(14) Russian case-marking paradigm: Nouns (after Kempe & MacWhinney 1998)

S I N G U L A R					
	MASCULINE		NEUTER	FEMININE	
	ANIMATE	INANIMATE		1 ST CLASS	2 ND CLASS
NOM	$-\emptyset$	$-\emptyset$	$-o/-e$	$-a/-ja$	$-\text{'}\emptyset$
GEN	$-a/-ja$	$-a/-ja$	$-a/-ja$	$-y/-i$	$-i$
DAT	$-u/-ju$	$-u/-ju$	$-u/-ju$	$-e$	$-i$
ACC	$-a/-ja$	$-\emptyset$	$-o/-e$	$-u/-ju$	$-\text{'}\emptyset$
INST	$-om/-em$	$-om/-em$	$-om/-em$	$-oj/-ej$	$-\text{'}ju$
PREP	$-e$	$-e$	$-e$	$-e$	$-i$
P L U R A L					
	MASCULINE		NEUTER	FEMININE	
	ANIMATE	INANIMATE		ANIMATE	INANIMATE
NOM	$-y/-i$	$-y/-i$	$-a/-ja$	$-y/-i$	$-y/-i$
GEN	$-ov/-ev/-ej$	$-ov/-ev/-ej$	$-\emptyset /-ej$	$-\emptyset /-ej$	$-\emptyset /-ej$
DAT	$-am/-jam$	$-am/-jam$	$-am/-jam$	$-am/-jam$	$-am/-jam$
ACC	$-ov/-ev/-ej$	$-y/-i$	$-a/-ja$	$-\emptyset /-ej$	$-y/-i$
INST	$-ami/-jami$	$-ami/-jami$	$-ami/-jami$	$-ami/-jami$	$-ami/-jami$
PREP	$-ach/-jach$	$-ach/-jach$	$-ach/-jach$	$-ach/-jach$	$-ach/-jach$

When the stress does not fall on the last syllable, $-o$ and $-a$ are both pronounced $/\emptyset/$

(15) Russian case-marking paradigm – Personal and interrogative pronouns (after Timberlake 2004:117)

	S I N G U L A R					P L U R A L			I N T E R R		
	PERS	1 st	2 nd	3 rd			1 st	2 nd	3 rd	ANIM	INANIM
				MASC	NEU	FEM					
NOM		ja	ty	on	ono	ona	my	vy	oni	kto	čto
GEN		menja	tebja	ego	ego	eě	nas	vas	ich	kogo	čego
DAT		mne	tebe	emu	emu	ej	nam	vam	im	komu	čemu
ACC		menja	tebja	ego	ego	eě	nas	vas	ich	kogo	čto
INST		mnoj	toboj	im	im	ej	nami	vami	imi	kom	čem
PREP		mne	tebe	něm	něm	nej	nas	vas	nich	kěm	čem

Non-NOM pronouns beginning with a vowel may be preceded by an epenthetic *-n*

(16) Russian case-marking paradigm – Adjectives (after Kempe & MacWhinney 1998)

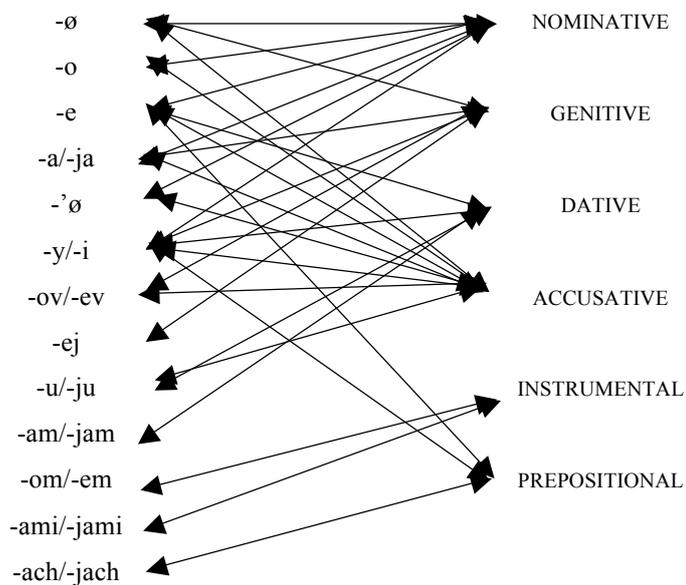
	S I N G U L A R				P L U R A L	
	M A S C U L I N E		N E U T E R	F E M I N I N E	A N I M A T E	I N A N I M A T E
	ANIMATE	INANIMATE				
	NOM	-yj/-ij	-yj/-ij	-oe/-ee	-aja/-jaja	-ye/-ie
GEN	-ogo/-ego	-ogo/-ego	-ogo/-ego	-oj/-ej	-ych/-ich	-ych/-ich
DAT	-omu/-emu	-omu/-emu	-omu/-emu	-oj/-ej	-ym/-im	-ym/-im
ACC	-ogo/-ego	-yj/-ij	-oe/-ee	-uju/-juju	-ych/-ich	-ye/-ie
INST	-ym/-im	-ym/-im	-ym/-im	-oj/-ej	-ymi/-imi	-ymi/-imi
PREP	-om/-em	-om/-em	-om/-em	-oj/-ej	-ych/-ich	-ych/-ich

When *-a/-o* are not stressed, they are pronounced /ə/; *-ogo/-ego* are pronounced /əvə/ / /evə/

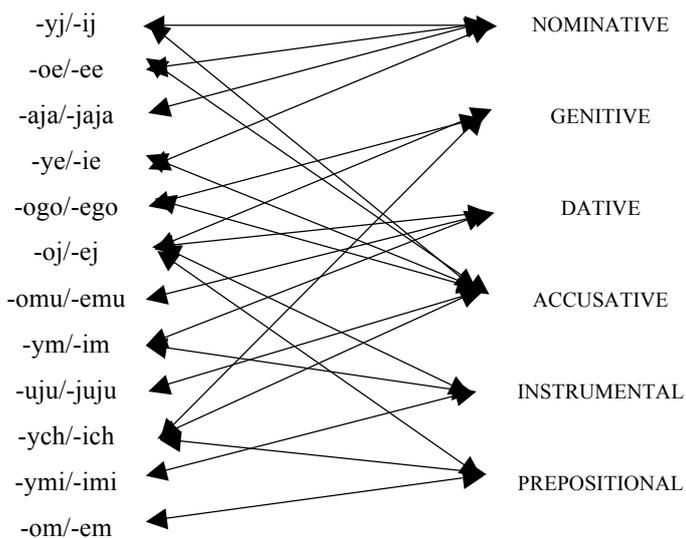
As the previous tables show, the Russian case system has numerous endings, and as already noted above, each case can be expressed by different markers, and conversely, some endings can mark more than one case. In order to capture this complex many-to-

many relationship, the following charts relate cases and their endings in nouns (17) and adjectives (18). In the tables below, a slash separates allophones.

(17) Form-function relations of Russian noun markers for case



(18) Form-function relations of Russian adjective markers for case



First, it is noticeable that case markers are more numerous than cases, due to the syncretic nature of case endings. In particular, the six cases are marked by 12 endings in adjectives and 13 endings in nouns. The number of endings can be even higher if we consider as distinct endings those displaying soft/hard consonant alternations in allophones. Secondly, only a few endings can mark only one case: four noun markers (*-am/-jam* for DAT, *-om/-em* and *-ami/-jami* for INST, *-ach/-jach* for PREP) and five adjective markers (*aja/-jaja* for NOM, *-omu/-emu* for DAT, *-uju/-juju* for ACC, *-ymi/-imi* for INST, *-om/-em* for PREP). Only 9 out of 25 markers are thus unequivocally associated to one case. Amongst the others, nine endings can mark two cases, four endings can mark three cases, and two endings can mark four cases. The noun marker *-y/-i* can be used in five cases (NOM, GEN, DAT, ACC, PREP). On the other hand, there is no case that can be marked by less than three different endings.

From an acquisitional perspective, such a variety of forms and ambiguity between forms and functions contribute in making the acquisition of case a challenging task. Not only has the learner to master the mapping between case and function, but also s/he has to select the right case marked ending according to a variety of other features.

1.2.2. Cases and their Usage

In this section, I will introduce, case by case, all the structures in which cases are used. The taxonomy for the structures here introduced and the order in which cases are presented mirror those in traditional textbooks, and might thus differ from labels used in formal linguistics. The table in (19) summarises the correspondences between cases and how single cases can be used for.

(19) Russian cases and their usage

CASE	USAGE
NOMINATIVE	subject copular noun external topic
GENITIVE	possession specification quality negation partitive required after some verbs (<i>bojat'sja</i> 'fear', <i>dobivat'sja</i> 'reach', etc.) required after some prepositions (<i>iz, ot, u</i> , etc.) required after quantifiers and numerals >1 required after some adjectives (<i>pol'nyj</i> 'full', etc.) comparison
DATIVE	indirect object experiencer in impersonal structures required after some verbs (<i>pomogat'</i> 'help', <i>izmenjat'</i> 'betray', etc.) required after some prepositions (<i>k, po, blagodarja</i> , etc.) required after some adjectives (<i>rad</i> 'happy', <i>blagodarny</i> 'grateful', etc.)
ACCUSATIVE	direct object frequency and duration of events required after some prepositions (<i>v, na, za</i> , etc.)
INSTRUMENTAL	instrument quality of the event copular noun in non-present tenses agent in passive required after some verbs (<i>stanovit'sja</i> 'become', <i>upravljat'</i> 'lead', etc.) required after some prepositions (<i>s, pered, nad</i> , etc.) required after some adjectives (<i>bednyj</i> 'poor', <i>bogatyj</i> 'rich', etc.)
PREPOSITIONAL	required after some prepositions (<i>o, na, v</i> , etc.)

(a) Nominative

It is considered the default case and is sometimes referred to as the unmarked case. However, here I assume Jakobson (1936)'s, Neidle (1988)'s and King (1995)'s view that NOM is always overtly marked, and I will use the unmarked label for the null morpheme. Because Russian displays a NOM-ACC system (and not an ERG-ABS one), NOM marks the SUBJ both in transitive and intransitive clauses, as in (20a-b) respectively.

- (20) a. Mari-ja guljaet
Marija-NOM walks

- b. Marij-a čitaet knigu
 Marija-NOM reads book

The default NOM is used also in copular constructions⁴ in the present tense, as in (21). For copula in non present tenses, see the following section on INST.

- (21) ona krasiv-aja devušk-a
 she pretty-NOM girl-NOM
 [she is a pretty girl]

Finally, NOM can mark the external topic, as shown in (22).

- (22) milicioner-y na stole ležalo dve furažki
 policemen-NOM on table lie two service caps
 [policemen, on the table there lie two service caps] (Franks & House 1982:161)

(b) Genitive

It is used in several structures. A relation of possession or specification is marked by GEN on the possessor or specified item, as in (23a-b) respectively.

- (23) a. kniga Ivan-a
 book Ivan-GEN
 [Ivan's book]
- b. vopros student-a
 question student-GEN
 [the student's question]

GEN can be also used to specify the quality property, as exemplified in (24) where the GEN marks the quality “colour”.

⁴ For a more complete description about the different relations between NOM-marked elements in copulas, see Janda & Clancy (2002), who classify the use of NOM as (a) naming and calling, (b) SUBJ of a sentence, (c) the y in an x = y sentence, (d) fixed x = y expression, (e) x = y reduced to x, y.

- (24) rubaška krasn-ogo cvet-a
 shirt red-GEN colour-GEN
 [a red shirt]

Another structure in which GEN is used is negation, although there are some restrictions. First, GEN of negation can appear in OBJ, SUBJ of passives and SUBJ of unaccusatives, but never as SUBJ of transitives and unergatives, as in (25a-e) respectively.

- (25) a. mal'čik ne vidit knig-i
 boy not see book-GEN
 [the boy does not see a/the book]
- b. ni odn-ogo gorod-a ne bylo vzjato
 not one-GEN city-GEN not was taken
 [not one city was taken] (Chvany 1975: 184)
- c. ne pojavilos' student-ov
 not showed up students-GEN
 [no students showed up] (Pesetsky 1982: 66).
- d. *mal'čik-a ne vidit knigu
 boy-GEN not see book
 [the/a boy does not see the book]
- e. *v pivbarach kul'turn-yh ljud-ej ne p'jet
 in beerhalls cultured-GEN people-GEN not drink
 [cultured people do not drink in beerhalls] (Pesetsky 1982: 43)

Secondly, GEN of negation in OBJ is rarely ungrammatical, and often alternates with ACC (Neidle 1988). From a historical point of view, GEN of negation in OBJ is used less and less. GEN is preferred if OBJ is not “particularised” (commonly with abstract nouns) or used figuratively, as shown in (26), where in (26a) the OBJ is well known, while in (26b) it is not (Borras and Christian 1971).

- (26) a. on ždět podrug-u
 he waits for friend-ACC
 [he is waiting for a (specific) friend]
- b. on ždět otvet-a na vopros
 he waits for answer-GEN on question
 [he is waiting for an answer to the question] (Neidle 1988: 31)

GEN is used as partitive with nouns that express the part of a whole. In Jakobson (1936, 1958) this use of GEN is considered a different case, called GEN II. Morphology seems to support Jakobson, because some nouns display a different ending when GEN has a partitive meaning, as shown in (27), where instead of the usual GEN ending *-a*, the word *sachar* ‘sugar’ is marked by *-u*.

- (27) choču sachar-u
 (I) want sugar-GEN
 [I would like some sugar]

The GEN case is also used when nouns are preceded by quantifiers and numerals. Nouns preceded by numbers ending with *-2/-3/-4* are marked by GEN.SG, as in (28a), whereas numbers ending with *-5/-6/-7/-8/-9/-0* are followed by GEN.PL marked nouns. Note that this requirement holds only if the numeral is SUBJ, as in (28a), or the OBJ is inanimate, as in (28b); in all the other occurrences, the numeral agrees in case with its dependent noun, as exemplified in (28c).

- (28) a. tri student-a čitajut
 three student-GEN.SG read
 [three students are reading]
- b. Miša pročitaj devjat’ roman-ov
 Miša read nine novel-GEN.PL
 [Miša has read nine novels]
- c. Olja guljaet s tremja podrug-ami
 Olja walks with three.INST friends-INST

A similar pattern occurs with quantifiers, like *mnogo* ‘much’, *malo* ‘few’, *stol’ko* ‘so much’, etc., that need to be followed by GEN (29a) if they are in a SUBJ or OBJ-inanimate context, unlike in (29b).

- (29) a. u menja segodnja malo vremen-i
to me today few time-GEN
[today I have a little time]
- b. tam ona poznamilas’ s mnog-imi ljud’-mi
there she met with many-INST people-INST
[there she met a lot of people]

Another use of GEN occurs in comparative structures. When the comparative adjective is simple (marked by the suffix *-ee*) the second member of comparison is marked by GEN, as exemplified in (30a). When the comparative adjective is compound (*bole* ‘more’ followed by adjective), the second member is default NOM, as in (30b).

- (30) a. sestra krasivee brat-a
sister prettier brother-GEN
[the sister is prettier than the brother]
- b. sestra bole

Furthermore, GEN can be lexically required by some verbs, adjectives and prepositions. Verbs requiring their OBJ to be GEN-marked can be of two types: intransitives, as in (31), and transitives, as in (32a). In this latter example, the OBJ marked by GEN, instead of the default ACC as in (32b), adds an overtone of abstractness

- (31) Ivan boitsja sobak-ø
Ivan fears dogs.GEN
[Ivan is afraid of dogs]

- (32) a. Marija iščet podderžk-i
 Marija looks for support-GEN
 [Marija is looking for support]
- b. Marija iščet knjig-u
 Marija looks for book-ACC
 [Marija is searching a book]

Some adjectives can also lexically require GEN, as shown in (33).

- (33) derevo pol'noe frukt-ov
 tree full fruits-GEN
 [a tree full of fruits]

Preposition is the third lexical category that can select GEN. The prepositions that select GEN are: *bez* 'without', *bliz* 'near to', *vvidu* 'in view of', *vdol'* 'along', *vmesto* 'instead of', *vo vremja* 'during', *vokrug* 'around', *v tečenie* 'during the course of', *dlja* 'for', *do* 'as far as', *iz* 'out of', *iz-za* 'from behind', *iz-pod* 'from under', *krome* 'except for', *mimo* 'past', *nakanune* 'on the eve of', *okolo* 'close to', *ot* 'from', *posle* 'after', *protiv* 'opposite', *sredi* 'among', *u* 'at' and *s* 'down from' (Wade 2002).

With its 22 prepositions, GEN is the case with the highest number of prepositions that can select it. Among them, 21 govern only GEN, as in (34a), whereas the preposition *s* 'down from' in (34b) can select also ACC and INST.

- (34) a. skazka dlja det-ej
 tale for kids-GEN
 [a tale for kids]
- b. veter dul s jug-a
 wind blew from south-GEN
 [the wind was blowing from the south]

(c) Dative

It is the case used to mark the IND OBJ. Within the LFG framework, there is no agreement

whether DAT marks an OBJ θ or an OBL θ . On the one hand, Neidle (1988) labels IND OBJ as OBJ θ , a second OBJ with a semantic restriction. On the other hand, King (1995) lists the DAT as the case default assigned to OBL_{GOAL}, as in the example (35a), followed by its well formedness rule in (35b).

(35) a. on dal Inn-e knigu
 he gave Inna-DAT book
 (he gave Inna a book)

b. (↑ OBL_{GOAL} CASE) = DAT

Another controversial use of DAT is the marking of the <experiencer>, the so-called logical SUBJ, in impersonal clauses, as in (36). Several authors – among whom Comrie (1977) and Neidle (1988) for Russian and Kibort (2001) for Polish – provide different readings of the phenomenon. Here I only mention the use of DAT to mark the logical SUBJ of any person-less verb, without siding for any specific explanation.

(36) Ivan-u nado pojti k vraču
 Ivan-DAT need.IMP go to doctor
 [Ivan needs to visit the doctor]

Furthermore, DAT can be lexically required by some verbs, adjectives and prepositions. Among the verbs that require their OBJs to be marked by DAT, (37) provides an example with the verb *izmenjat* ‘betray’.

(37) Pavel izmenjaet molod-oj žen-e
 Pavel betrays young-DAT wife-DAT
 [Pavel betrays his young wife]

An example of adjective governing DAT is given in (38), where *rad* ‘happy’ requires its OBJ to be DAT marked.

(38) mama rada svo-emu syn-u
 mum happy own-DAT son-DAT
 [mum is happy about her son]

The prepositions that select DAT are *blagodarja* ‘thanks to’, *k* ‘towards’, *soglasno* ‘according to’ and *po* ‘along’. Whereas the first three prepositions select only DAT, *po* ‘along’ can select also ACC and PREP.

(d) *Accusative*

It is primarily used to mark the OBJ, as exemplified in (39). It is however noticeable that ACC is not the only case that can mark OBJ, but it is the default solution. When an OBJ is marked by a case other than ACC, it is due to semantic or lexical requirements.

- (39) mama čitaet knig-u
 mum reads book-ACC

Another use of ACC regards expressions of time. When time is involved, ACC marks the duration of the action and the frequency of the event, as in (40a-b) respectively.

- (40) a. ja ostanovilsja v Tomske cel-uju nedel-ju
 I stopped in Tomsk whole-ACC week-ACC
 [I stayed in Tomsk the whole week]
- b. začem my každ-uju nedel-ju rasstaëmsja?
 why we every-ACC week-ACC break up
 [why do we break up every week?] (Janda & Clancy 2002:71)

The prepositions that require ACC are listed in (41) into two different columns: prepositions selecting only ACC are listed on the left, whereas those prepositions selecting more than one case are listed on the right.

(41) Prepositions that govern accusative case (after Wade 2002)

PREPOSITION + ACC ONLY	PREPOSITION + ACC AND OTHER CASES
<i>skvoz</i> 'through'	<i>v</i> 'into'
<i>spustja</i> 'after'	<i>na</i> 'onto'
<i>čerez</i> 'through'	<i>o</i> 'against'
	<i>za</i> 'behind'
	<i>pod</i> 'under'
	<i>po</i> 'up to'
	<i>s</i> 'approximately'

(e) *Instrumental*

It marks the instrument by which the action is realised, as in (42).

(42) Marija risovala kartinu karandaš-om
 Marija drew painting pencil-INST
 [Marija drew a/the painting with a pencil]

Also the manner of an action can be expressed by INST, as exemplified in (43).

(43) Kasparov četk-imi manevr-ami otbil ataku
 Kasparov precise-INST move-INST repelled attack
 [Kasparov repelled the attack with precise movements] (Timberlake 2004:337)

INST is also introduced in tensed copular constructions, where the predicate noun is INST marked. In contrast to the example in (21), where the clause is set in the present and the predicate noun is marked by NOM, the example in (44a) is in the past and the example in (44b) is in the future.

(44) a. Rimskij-Korsakov byl izvestn-ym kompozitor-om
 Rimskij-Korsakov be.PAST famous-INST composer-INST
 [Rimskij-Korsakov was a famous composer]

b. on navernoje budet prezident-om
 he maybe be.FUT president-INST
 [maybe he will be a/the president]

In passive constructions, INST is used to mark the optional suppressed <agent>, as in (45).

- (45) dvorec byl postroen ital'jansk-im architektor-om
 palace be.PAST built Italian-INST architect-INST
 [the palace was built by an Italian architect]

Furthermore, INST can be governed by verbs, adjectives and prepositions.

The example in (46) shows an instance of the verb *upravljat* 'manage' that requires its OBJ to be INST-marked.

- (46) ona upravljaet biznes-om
 she manages business-INST
 [she manages a/the business]

Amongst the adjectives that governs INST, the example in (47) introduces the adjective *dovolen* 'happy'.

- (47) ego syn dovolen rezultat-om
 his son happy result-INST
 [his son is happy about the result]

The prepositions that select INST are listed in the table in (48).

- (48) Prepositions that govern instrumental case (after Wade 2002)

PREPOSITION + INST ONLY	PREPOSITION + INST AND OTHER CASES
<i>meždu</i> 'between'	<i>za</i> 'behind'
<i>nad</i> 'above'	<i>pod</i> 'under'
<i>pered</i> 'in front of'	<i>s</i> 'with'

(f) *Prepositional*

As the name itself suggests, this case can appear only in a PP context. The following table in (49) shows the prepositions that governs PREP.

(49) Prepositions that govern prepositional case (after Wade 2002)

PREPOSITION + PREP ONLY	PREPOSITION + PREP AND OTHER CASES
<i>pri</i> 'in the presence of'	<i>v</i> 'in' <i>na</i> 'on' <i>o</i> 'about' <i>po</i> 'after'

To conclude this section on the usage of Russian cases, I wish to stress how complex it is to acquire the use of different cases in different contexts for the learner. In the previous section, complexity was undisclosed by the lack of one-to-one relations between forms and functions. In this latter section, complexity refers to the numerous usages of different cases and the multiple nature of case requirements. In fact, case can be required by some lexical items, can be linked to a specific GF, linked to a particular semantic connotation, etc. In sum, case marking is complex not only for its forms but also for its use in a large variety of structures.

1.2.3. Jakobson (1936, 1958)'s Case Decomposition

A seminal work for the analysis of case in general, and Russian case in specific, is Jakobson's (1936, 1958). Following Hjelmslev (1935)'s distinction between the invariant meaning of case and its syntactical conditions, he created an elegant system for the description of Russian case.

This system, born within the framework of Structuralism, is based on a series of claims that allow for a neat classification of case. First, every case has an invariant meaning (*Gesamtbedeutung*) that is present regardless of the context in which case is introduced. Secondly, this meaning is composed by a set of binary features (marked and unmarked), whose marked option is the more narrowly defined and restricted in usage. Finally, the system is balanced if two secondary cases (i.e., second locative and second genitive) are included in the list of Russian cases. The analysis of Russian cases in terms of feature can be summed up as in the table in (50), where marked (+) or unmarked (-)

features are distributed among cases. [+MARGINAL] indicates that the case is used in non-core arguments. Therefore, [-MARGINAL] will be NOM, ACC and the two GENS, which appear in core arguments (SUBJ and OBJ). The feature [±QUANTIFYING] refers to a partial involvement in the event that characterises the two GENS and LOCS. The feature [±DIRECTION] (called also [±ASCRPTIVE]) suggests that ACC, GEN I, LOC I, and DAT evoke motion to a given direction.

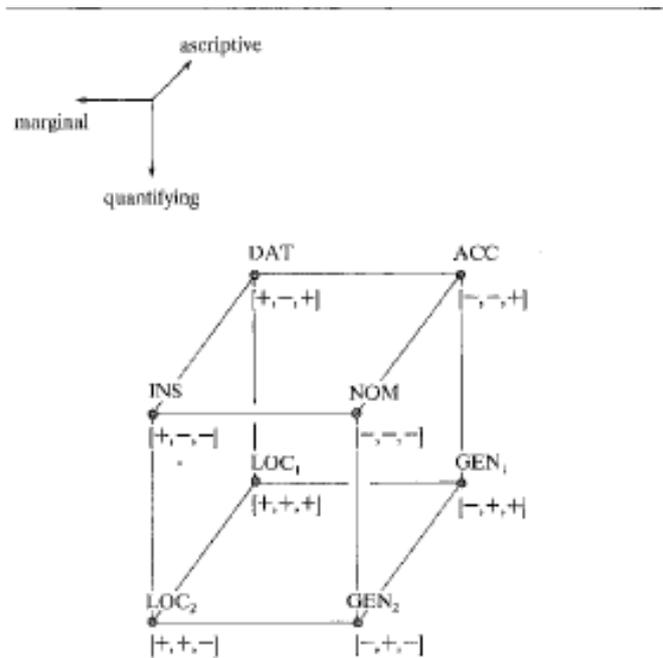
(50) Russian case system in terms of features (after Jakobson 1958)

	MARGINAL	QUANTIFYING	DIRECTION
NOMINATIVE	—	—	—
ACCUSATIVE	—	—	+
GENITIVE I	—	+	+
GENITIVE II	—	+	—
LOCATIVE II	+	+	—
LOCATIVE I	+	+	+
DATIVE	+	—	+
INSTRUMENTAL	+	—	—

Blake (2001) criticised the features [±QUANTIFYING] and [±DIRECTION]. The former introduces the concept of ‘partial involvement’, which does not match with the uses of GEN and LOC, whereas the latter is too arbitrary.

However, Jakobson’s system can predict occurrences of syncretism in that it can occur only between cases that share similar features. Let us have a look to the cube of cases (51), in which the three axes represent the three case features. Note that each case is defined by three polar values, which correspond to the related features.

(51) Jakobsonian case cube (Neidle 1988: 6)



The cube in (51) links cases that share similar features. Actually, instances of case syncretism can be explained by proximity within the cube. For instance, syncretism in animates occurs between two adjacent cases, namely ACC and GEN, whose case feature strings can be defined as in (52), where () indicates an unspecified feature.

(52) ACC = GEN = (-, (), +)

Jacobson's idea of case decomposition was an inspiring intuition that influenced the early works on Russian within the LFG framework, before being replaced by an analysis more centered on the concept of case assignment, rather than semantic case composition.

1.2.4. Neidle (1988)'s analysis of the Russian Case System

The first work about Russian case within the LFG framework is by Neidle (1988). However, her analysis is relevant also for other theories in that it is able to operationalise

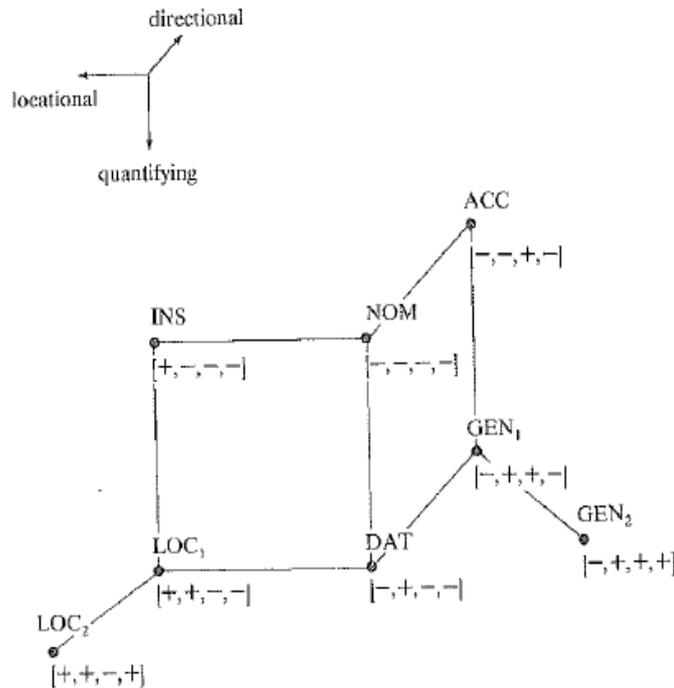
and enhance Jakobson's case decomposition.

Neidle noticed that the eight cases considered by Jakobson are not equally comparable, since GEN II and LOC II are rare, differentially marked only on a few lexical items and apparently disappearing. For this reason, she proposed to split the Jakobsonian feature [\pm ASCRIPTIVE] into [\pm LOCATIONAL] and [\pm DIRECTIONAL], as shown in the table (53) and in the half cube (54), where the GEN II and LOC II are detached from the main cases. While [\pm LOCATIONAL] refers to spatial location and time intervals, [\pm DIRECTIONAL] specifically refers to spatial motion and is thus incompatible with [\pm LOCATIONAL].

(53) Revised Russian case system in terms of features (Neidle 1988: 3)

	LOCATIONAL	QUANTIFYING	DIRECTIONAL	PARTIAL
NOMINATIVE	—	—	—	—
ACCUSATIVE	—	—	+	—
GENITIVE I	—	+	+	—
GENITIVE II	—	+	+	+
LOCATIVE II	+	+	—	+
LOCATIVE I	+	+	—	—
DATIVE	—	+	—	—
INSTRUMENTAL	+	—	—	—

(54) Revised Jakobsonian case cube (Neidle 1988: 5)



However, the system proposed by Neidle differs from Jakobson’s also in terms of values given to feature. For instance, the values given to DAT are different, as well as those assigned to LOC I – that correspond to Jakobson’s LOC II, indeed.

According to Neidle, her system can account for case syncretism by showing the values of case features without mixing the most common six cases with the two rarer ones. An example of case syncretism explained through the case features can be found in (55), where the same endings of the 2nd class feminine singular nouns (cf. (14)) are correlated to the same case feature values. Note that henceforth the fourth feature will be assumed to have negative value, unless otherwise stated. The letter *c* preceding the square brackets indicate a compulsory structure.

- (55) -ø: (↑ CASE) = *c* [-, -,]
 -i: (↑ CASE) = *c* [,+,]
 -u: (↑ CASE) = *c* [+ , -, -]

Russian is a configurational language and its unmarked word order is VSO. Russian allows different word orders that are discourse-pragmatically motivated, in that TOP and FOC are marked in pre-verbal position. In a section about the role of case marking, King applies Differential Case Theory to Russian and thus provides a classification of four different types of case assignment in Russian from a LFG perspective. It is though important to notice that her work precedes the 2001's LFG milestone books by Dalrymple, by Falk and by Bresnan. Therefore, some concepts and formalisation need to be rearranged according to a more updated fashion.

King (1995) proposes four types of case assignment: (a) configurational, (b) grammatical, (c) lexical and (d) semantic.

Configurational case assignment is assigned to any noun appearing in a certain phrase structure position, that is, case is determined by a slot in the c-structure. In King's view, Russian introduces two instances of cases assigned by position: GEN in NP daughter of NP \rightarrow N (NP) and NOM in external topic position.

The rule of GEN configurationally assigned is expressed in (57a), an example of which is given in (57b). Because this GEN is not related to a specific semantic function, it can mark possession, quality, agency, etc.

(57) a. NP \rightarrow N (NP)
 ((\downarrow CASE) = GEN)

b. otvet učeník-a
 answer pupil-GEN

The second instance of configurational case assignment is NOM assigned to external topic, that is, an XP that is TOP and does not occur in the CP, as already exemplified in (22). The formula in (58) shows the NOM case assignment in this c-structure position.

(58) E \rightarrow XP CP
 (\uparrow E-TOP) = \downarrow \uparrow = \downarrow
 (\downarrow CASE) = NOM

<instrument>, as already exemplified in (42).

- (42) Marija risovala kartinu karandaš-om
Marija drew painting pencil-INST
[Marija drew a/the painting with a pencil]

From an acquisitional point of view, the system of case assignments proposed by King (1995) provides a clear classification of the different strategies learners face when acquiring case. However, before moving to the development of case – the core of my study – a few remarks on King’s approach need to be added.

First, I claim that DAT to OBL_{GOAL} is not assigned by GF. In fact, OBL_{GOAL} introduces a semantic restriction and there is no other case that marks <goal>. Therefore, I propose to consider DAT to OBL_{GOAL} as an instance of semantic case assignment.

Secondly, King claims that only prepositions and verbs are heads that can lexically require a case. However, as shown in (§ 1.2.2), also adjectives can lexically govern case. For example, the adjective *blagodarnyj* ‘grateful’ requires its OBJ to be DAT marked, as formalised in (61a) and shown in (61b).

- (61) a. *blagodarnyj* ‘grateful’ A <OBJ>
(↑OBJ CASE) = DAT
- b. on blagodaren svo-ej podrug-e
he grateful own-DAT friend-DAT
[he is grateful to his (girl)friend]

Thirdly, King (1995) makes no distinction between prepositions governing one case and those selecting more than one case. For instance, the preposition *v* ‘in/into’ can select either PREP or ACC, as in (62a-b), depending on the semantics of the sentence. In (62a) PREP indicates state, while in (62b) ACC indicates motion.

- (62) a. tarelka nachoditsja v korobk-e
plate stays in box-PREP
[the plate is in the box]

- b. kladi tarelku v korobk-u
 put plate into box-ACC
 [put the plate into the box!]

How can King (1995)'s system account for this alternation? Here are introduced two proposals. On the one hand, we can assume that different cases selected by the same preposition are determined by semantic motivations broader than lexical case assignment. Therefore, semantic information should be already present and required in the a-structure of the verb. On the other hand, we can assume an instance of homonymy, with the number of lexical entries corresponding to the number of cases selected, as shown in (63) for the preposition *v*.

- (63) *v* 'in' P <OBJ>
 (↑OBJ CASE) = PREP
- v* 'into' P <OBJ>
 (↑OBJ CASE) = ACC

If we side for this latter option, we must postulate that a verb lexically requires a certain preposition, and this preposition selects a certain case. This option fits well with my developmental hypothesis and will be assumed in my study.

Finally, the table in (64) sums up the types of case assignment in Russian following King's proposal and my interpretations.

(64) King (1995)'s revised system of case assignment in Russian

CASE ASSIGNMENT	STRUCTURE
configurational	GEN to NP daughter in NP → N NP NOM to E-TOP
grammatical	NOM to SUBJ ACC to OBJ
semantic	INST to <instrumental> DAT to <goal>
lexical	CASE by preposition CASE by adjective CASE by verb preposition by verb

2. Acquiring Case

This section is dedicated to the theory and hypotheses of my study. As already mentioned, the theoretical framework in which I conduct my study is Processability Theory. I will first present PT (§ 2.1), a cognitive-based theory of L2 grammatical development that provides universal developmental hypotheses. In this section, I will also mention the two theoretical bases of PT, that is Lexical-Functional Grammar (§ 2.1.1) for language description and Levelt's Model (§ 2.1.2) for language production. I will then present PT universal hypothesis for morphological development and the interface with syntax required by case (§ 2.1.3). At the end of this section, I will present the Developmentally Moderated Transfer Hypothesis (§ 2.1.4), a PT based theory that can account for L1 transfer into the L2. In a second section (§ 2.2), I will introduce previous studies on the acquisition of case within the PT framework which include case marked languages like German, Serbian and Hindi. Finally, I will present and motivate my developmental hypotheses of the acquisition of Russian case morphology (§ 2.3). The first hypothesis is based on the PT developmental schedule for morphology (§ 2.3.1), the second hypothesis regards the DMTH for Russian case (§ 2.3.2), the third hypothesis investigates the role of cognitive load (§ 2.3.3), and the fourth hypothesis is based on the Differential Case Theory (§ 2.3.4).

2.1. Processability Theory

PT is a psycholinguistic theory of second language acquisition (henceforth SLA) which uses a cognitive processing approach. It proposes a transitional paradigm of grammatical development based on a universal and implicational hierarchy of processing procedures. It claims that all the L2 learners, irrespectively of their L1s, age, gender, etc., take the same stages of acquisition. Furthermore, no stage of acquisition can be skipped along the developmental path, because the cognitive resources of a given procedure are essential to trigger the activation of the procedure immediately above in the hierarchy. In order to present PT, I will first introduce how LFG contributes to PT for interlanguage description

(§ 2.1.1), and how Levelt's Model can be taken as psycholinguistic basis for interlanguage production (§ 2.1.2). Then I will present the developmental schedules proposed by PT (§ 2.1.3) and how transfer is constrained by this developmental path (§ 2.1.4).

2.1.1 Lexical-Functional Grammar

So far, I have used LFG in order to show how case in general and Russian case in particular is described in formal grammar. However, LFG is important not only as a framework for language description, but also because it is one of the main theoretical bases on which PT is founded. In fact, LFG's architecture is compatible with Levelt's psycholinguistic model for language production (cf. § 2.1.2). First, it is committed to the interface between linguistic knowledge and language processing, and is designed to account for linguistic knowledge in a way that is compatible with the architecture of the language processor (Kaplan & Bresnan, 1982: 177). Secondly, LFG is a lexicalist theory of syntax, that is, lexical entries are not only associations of meanings and forms, but they also bear syntactic information.

The architecture of LFG is organised in distinct layers of language representation that account for different types of linguistic information. The structures that are involved with syntax are argument structure, functional structure, constituent structure, semantic structure, information structure and phonological structure. The first three structures are those mainly exploited by PT.

A(rgument)-structure accounts for the argument selected by a predicate. Because arguments are linked to semantics, it is not always straightforward to state exactly which arguments are selected by a given predicate. As far as kinds of arguments, LFG follows Jackendoff (1972), and assumes the cross-linguistically validated Keenan & Comrie (1977)'s and Hopper & Thompson (1980)'s hierarchy of thematic roles, as in (65).

(65) agent > beneficiary > experiencer/goal > instrument > patient/theme > locative

Because of its typological validity, the a-structure of a given predicate is universal.

F(unctional)-structure accounts for the encoding of all grammatical information of a

sentence. In the f-structure a set of GFs with their features are encoded in a matrix. The f-structure captures those abstract relations that are common cross-linguistically.

The GFs considered in LFG are listed as in (66) and described in Dalrymple (2001: 9). Note that the label θ indicates that the GF has a semantic restriction.

(66) SUBJect, OBJect, OBJ θ , COMP, XCOMP, OBLique θ , ADJunct, XADJunct

The classification of GFs can be done in several ways according to different criteria, as follows.

- (a) SUBJ, OBJ, OBJ θ , COMP, XCOMP and OBJ θ are required by a predicate – and thus subcategorised – while ADJ and XADJ are not subcategorizable.
- (b) SUBJ, OBJ and OBJ θ are core arguments or terms, while OBL θ is a nonterm argument.
- (c) SUBJ and OBJ are semantically unrestricted, while OBJ θ and OBL θ are restricted to particular semantic roles.
- (d) XCOMP and XADJ are open GFs, in that their SUBJ is controlled by an argument external to the function, while in closed ones it is not.

In addition, GFs can also be linked to discourse, in that a syntactic element can also relate to a secondary function, called discourse function (DF). They are TOPic and FOCus, which express respectively the old or shared information and the new information. They are called secondary functions, because they must be co-referential with another GF. TOP and FOC may be expressed in different ways cross-linguistically, by prosodic, syntactic and/or morphological means. For example, Russian marks TOP both positionally – in first position (King 1995) – and by a specific prosodic pattern (Kallestinova 2007). On the other hand, languages like Korean and Japanese introduce specific morphological markers for TOP and FOC.

As already mentioned, f-structure not only encodes GFs, but also information about grammatical features, such as number, person, gender, case, tense, etc. Such information is represented by a set of attribute-value pairs, which are listed in the table (67).

(67) List of commonly assumed f-structural features with their values (after Dalrymple 2001: 28)

	Feature	Value
Person	PERS	1, 2, 3, ...
Gender	GEND	MASC, FEM, NEUT, ...
Number	NUM	SG, DUAL, PL, ...
Case	CASE	NOM, ACC, DAT, ...
Prepositional case	PCASE	the family of OBL θ
Surface form	FORM	semantic word form
Verb form	VFORM	PASTPART, PRESPART, ...

The representation of f-structure is thus a matrix of feature-value pairs that can contain embedded matrices, as exemplified in (68).

(68) f-structure for *Ivan uvidel knihu Borisa na stole* [Ivan saw Boris's book on the table] (King 1995: 183)

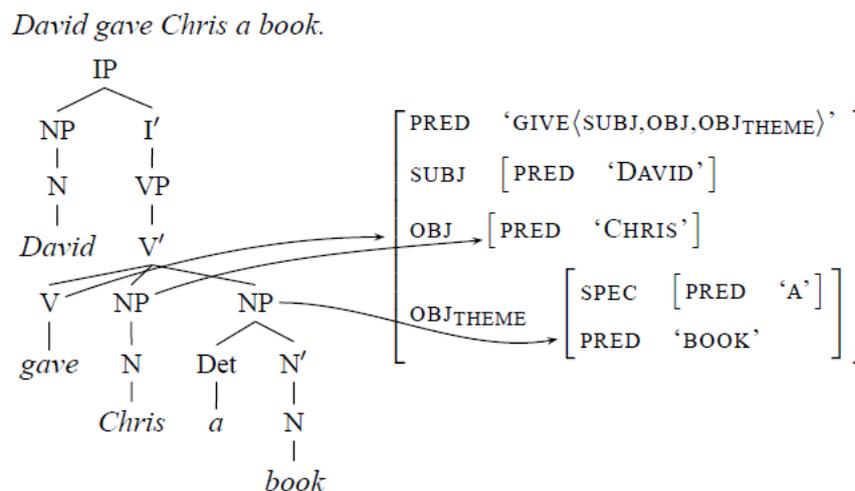
PRED	'see<SUBJ,OBJ>'										
TNS	PAST										
SUBJ	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'Ivan'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">NOM</td> </tr> </table>	PRED	'Ivan'	CASE	NOM						
PRED	'Ivan'										
CASE	NOM										
OBJ	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'book'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">ACC</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">POSS</td> <td style="padding: 2px 5px;"> <table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'Boris'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">GEN</td> </tr> </table> </td> </tr> </table>	PRED	'book'	CASE	ACC	POSS	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'Boris'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">GEN</td> </tr> </table>	PRED	'Boris'	CASE	GEN
PRED	'book'										
CASE	ACC										
POSS	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'Boris'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">GEN</td> </tr> </table>	PRED	'Boris'	CASE	GEN						
PRED	'Boris'										
CASE	GEN										
LOC	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'on<OBJ>'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">OBJ</td> <td style="padding: 2px 5px;"> <table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'table'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">PREP</td> </tr> </table> </td> </tr> </table>	PRED	'on<OBJ>'	OBJ	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'table'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">PREP</td> </tr> </table>	PRED	'table'	CASE	PREP		
PRED	'on<OBJ>'										
OBJ	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'table'</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">PREP</td> </tr> </table>	PRED	'table'	CASE	PREP						
PRED	'table'										
CASE	PREP										

The f-structure in (68) reads that the predicate *see* selects a SUBJ and an OBJ and its value for the feature TENSE is PAST. Its SUBJ is a PRED *Ivan*, which is case marked by NOM. Its OBJ is the PRED *book*, which is case marked by ACC and has an embedded possessor, the GEN-marked PRED *Boris*. In addition, the matrix displays a LOC (in more updated notation an OBL_{LOC}), whose PRED *on* selects an OBJ, which is a PREP case marked PRED *table*.

The third structure introduced by LFG and included in the PT framework is the c-structure. It accounts for the classification and position of constituents. Constituents can be of several categories, according to their heads. Lexical categories, like N(oun) P(hrase), P(repositional) P(hrase), V(erb) P(hrase) and A(djectival) P(hrase), are constituents whose heads correspond to lexical categories, namely noun, preposition, verb and adjective. Functional phrase structure categories are C(omplementiser) and I(nflection) and account for functional positions that can be filled by the verb and are heads of CP and IP.

Unlike the previous ones, the c-structure encodes properties that vary significantly across languages. In order to show this, English and Warlpiri are compared, being two languages poles apart in the configurational continuum. In English, a highly configurational language, c-structure is strictly organised in a hierarchical way. Its c-structure obeys the basic principles of X-bar theory (Jackendoff, 1977; Chomsky, 1986). Thus, constituents in English are easily identifiable in XPs (phrases like NP, VP, PP, etc.) and have precise positions in the c-structure. For instance, NP_{SUBJ} is always outside the VP and NP_{OBJ} is always inside the VP. An example of it is provided in (69), where the f-structure on the right specifies that the NP external to the VP is the SUBJ, while the two NPs internal to the VP are OBJs.

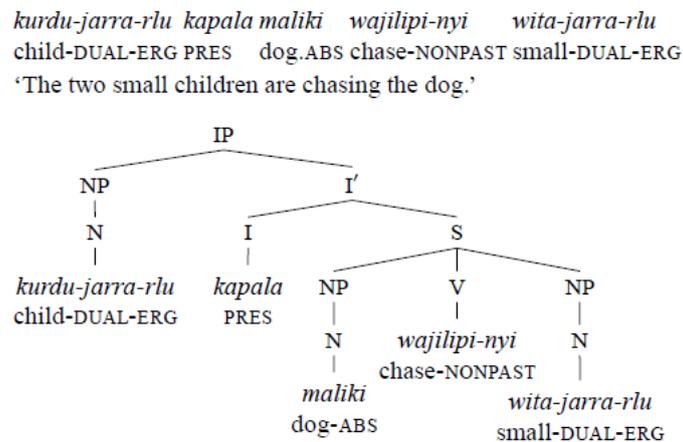
(69) c- and f-structures of the English sentence *David gave Chris a book* (Dalrymple 2001: 76)



On the other hand, in Warlpiri word order is freer (apart from AUX, which is a projection of

I and has to be in second position). This means that Warlpiri allows an exocentric constituent structure category, called S, which contains a predicate together with any or all of its arguments, including the SUBJ. For this reason, the c-structure of a language like Warlpiri is flatter in general, and completely flat – and thus with no hierarchy – from its node S downwards, as shown in (70).

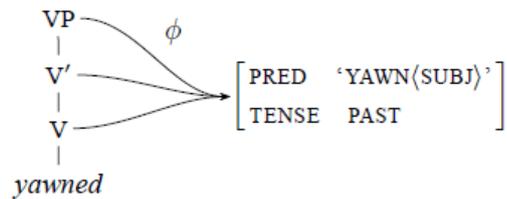
(70) c-structure of the Warlpiri sentence *kurdu-jarra-rlu kapala maliki wajilipi-nyi wita-jarra-rlu* [The two small children are chasing the dog] (Dalrymple 2001: 65)



So far, a-, f- and c-structures have been introduced separately. However, LFG is concerned with the problem of mapping, that is, to “characterise the mapping between semantic predicate-argument relationships and surface word- and phrase-configurations by which they are expressed” (Kaplan & Bresnan 1982: 174). I will then first introduce the c-to-f-structure mapping and then the a-to-f-structure mapping, called Lexical Mapping. I will then present how the different mappings acquire values like canonicity, defaultness and prominence in a PT perspective.

The mapping of the c-structure onto the f-structure is indicated by a function ϕ that relates a certain number of nodes to a particular f-structure, as exemplified in (71).

(71) c- to f-mapping of the word *yawned* (Dalrymple 2001: 70)



Many nodes can relate to the same f-structure and a f-structure does not necessarily requires to be associated with a node in the c-structure. For example, a prodropped SUBJ has its own matrix in the f-structure with no correspondence in the c-structure.

Dalrymple (2001) points out that several regularities in such mapping can be found crosslinguistically.

- (a) A head and its projection are mapped onto the same f-structure
- (b) Specifier of IP is filled by SUBJ, as in English, or by FOC/TOP, as in Bulgarian and Russian
- (c) Specifier of CP is filled either by FOC, as in Russian, or by TOP, as in Bulgarian
- (d) Complements of functional categories are f-structure co-heads
- (e) Complements of lexical categories are GFs except SUBJ

In order to represent the correspondences between c- and f-structures in one tree, LFG has developed the so-called annotated c-structure, in which relations are written below the node labels. The symbols \uparrow and \downarrow point to the mother's f-structure and to the node self's f-structure respectively. Let us read the annotated c-structure in the example (72). The PRED *Davis* is a projection of N and they are mapped on the same f-structure. The mother NP, specifier of IP, is SUBJ and this GF is mapped also onto the lower nodes, as indicated by \downarrow . The word *yawned* consists of two attributes, namely, the attribute PRED *yawn* that requires a SUBJ and the attribute TENSE which is assigned PAST. This word is a projection of V, projection of VP, projection of V', projection of IP. The equation $\uparrow=\downarrow$ below all these nodes indicates that all map onto the same f-structure.

is possible through a couple of shared binary features, namely, [\pm RESTRICTED] and [\pm OBJECTIVE]. The feature [\pm RESTRICTED] indicates whether semantic restriction is active in a given thematic role or GF. The feature [\pm OBJECTIVE] indicates whether thematic roles are likely to map onto object-like GFs. These binary features can define both GFs and thematic roles.

The GFs SUBJ and OBJ are [$-r$], whereas OBJ θ and OBL θ are [$+r$]. SUBJ and OBL θ are [$-o$] and OBJ and OBJ θ are [$+o$], as visualised in (74).

(74) Distribution of features among GFs and thematic roles

	$-$ RESTRICTED	$+$ RESTRICTED
$-$ OBJECTIVE	SUBJ	OBL θ
$+$ OBJECTIVE	OBJ	OBJ θ

The same features apply to thematic roles, but in a less systematic way. Patient-like roles are [$-r$], secondary patient-like roles are [$+o$] and all other roles are [$-o$].

It goes without saying that some correspondence between thematic roles and GFs are preferred. Bresnan & Zaenen (1990) propose two mapping principles, shown in (75), and two wellformedness conditions, shown in (76).

(75) Mapping Principles

- a. Subject roles:
 - (i) the highest argument [$-o$] is mapped onto SUBJ; otherwise
 - (ii) the argument [$-r$] is mapped onto SUBJ
- b. Other roles are mapped onto the lowest compatible function on the markedness hierarchy, where the SUBJ is the least marked.
SUBJ < OBJ, OBL θ < OBJ θ

(76) Wellformedness Conditions

a. *Subject Condition:*

Every (verbal) lexical form must have a SUBJ

b. *Function-argument biuniqueness:*

Each a-structure role must be associated with a unique GF, and conversely.

These rules can account for argument alternations, like dative and locative alternations, and for exceptional structures, such as passive.

Coming back to the acquisitional process, PT hypothesises that some mappings between a-, c- and f-structures are easier to acquire than others (Pienemann, Di Biase & Kawaguchi 2005: 232).

As far as c- to f-structures mapping concerns, canonical word order is the first to appear in interlanguage. Canonical word order occurs when SUBJ, the highest GF, is mapped onto the most prominent position, that is, the first position. Canonicity entails that the language specific phrase structure rules are never contradicted.

As far as a- to f-structures, unmarked mapping is the default solution. Unmarked mapping occurs when the Subject rule is applied in its first comma, that is, when the highest argument [-o] is mapped onto SUBJ.

In sum, LFG provides a neat and cognitive based formalism for language description that can be used to describe the learners' interlanguage. It identifies syntactic levels within or across which feature unification is required. LFG architecture is based on mappings between structures that can be easily put into a hierarchy for interlanguage development. In addition, LFG's psychological plausibility is compatible with Levelt's psycholinguistic model for language production and with PT's claim for universality in describing the stages any learner has to go through.

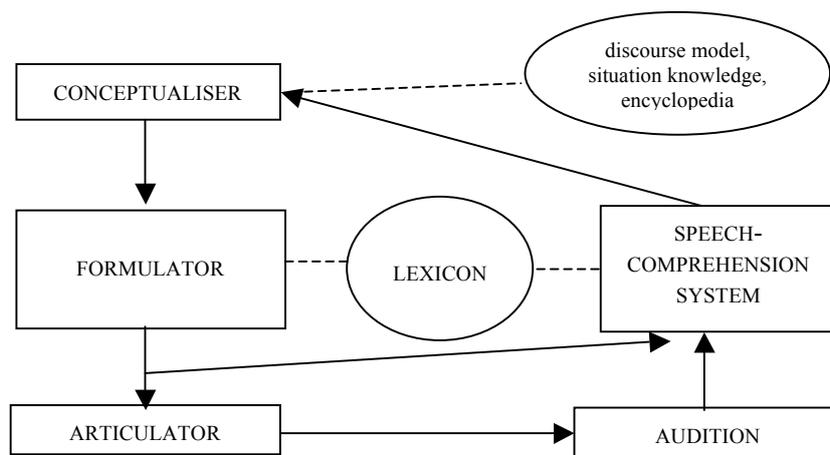
2.1.2 Levelt's Model

The psychological plausibility of PT has its fundament in Levelt (1989)'s psycholinguistic model for language production. It is a dynamic psycholinguistic model that can account for online language processing. Although based on oral production in a L1, it can be easily

adapted to describe how the learners build up the processing procedures when they acquire any L2. The claim for universality is based on the fact that Levelt's Model describes procedures that are constrained within human psychology. In addition, the compatibility of the model with LFG is spelled out in Levelt (1989: 161-5), where he states that Bresnan's (1982) LFG is assumed because (a) it is an explicit theory and allows to formulate explicit procedures of surface-structure generation, (b) it is lexically based, (c) it combines well with the psycholinguistic theory of grammatical encoding by Kempen & Hoenkamp (1987).

In Levelt (1989), the blue printer for the speaker is presented as in (77). This structure exemplifies the complex relations between components involved in the activity of speaking. The boxes include the processing components, the ellipses represent knowledge stores.

(77) Simplified blueprint for the speaker (after Levelt 1989: 9)

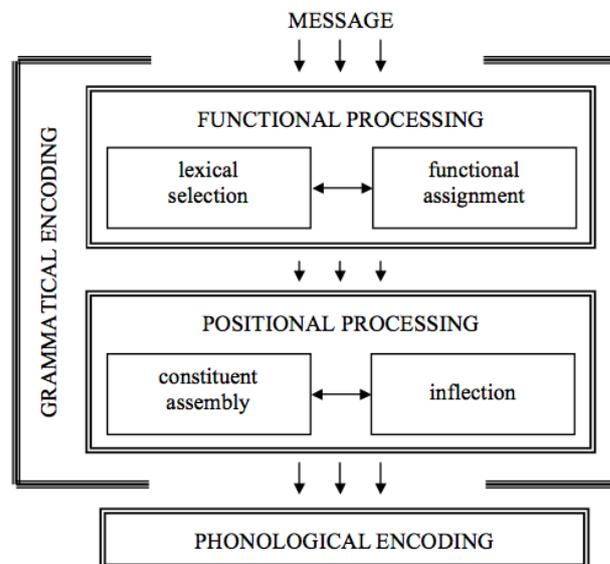


The conceptualiser produces a preverbal message. Even at this very early stage, the speaker selects a message with defined features, like language, register, the appropriate speech acts, topic and focus, etc. The content of the message is retrieved by the speaker's encyclopedic knowledge. The output of this process, that is, the preverbal message, is received by the formulator, the following processor. What happens in the formulator will be discussed in detail in the following paragraph. The output of the formulator is a

phonetic plan that will be executed by the musculature in the articulator processor. In addition, while speaking, the speaker is a listener of him/herself. Thus, both the internal speech and the overt speech are parsed by a speech-comprehension system that may eventually return a parsed message to the conceptualiser in order to monitor the preverbal message before it is delivered to the formulator once again.

Coming back to the structure of the formulator, first, whereas the conceptualiser is not affected by the language the speaker has chosen to encode the message, the formulator is language-specific, and thus needs to be built up by the learner. The complex task of the formulator is to receive the preverbal message and transform it into the appropriate linguistic form. In order to complete this task, the formulator requires two steps to be done, namely, the grammatical encoding and the phonological encoding. The structure of the formulator is represented in (78).

(78) Components of grammatical processing in the formulator (after Bock & Levelt 1994: 946)



The grammatical encoding is divided into two further components, the functional processing and the positional processing. The functional processing involves the

assignment of “underling” roles, whereas the positional processing assigns “surface” roles. In terms of LFG, the underling roles are features in the f-structure and arguments in the a-structure, whereas surface roles are GFs.

The functional processing consists of (a) lexical selection and (b) function assignment. Lexical selection involves the retrieving of the proper lexical concepts and lemmas, which carry grammatical information, such as gender, arguments, etc. Function assignment involves the assignment of syntactic relations, that is, the previously selected lemmas are assigned specific arguments and features. For example, if the speaker intends to produce the sentence in (79), upon selecting the verb *presledovat* ‘chase’ and the nouns *sobaka* ‘dog’ and *kot* ‘cat’ for expressing this eventuality in the present involving *sobaka* as <agent> and *kot* as <patient>, functional assignment will determine not only the grammatical relations between the lemmas but also the values of the diacritic features. Thus, *sobaka* has a feature NUMBER assigned the value SG, a feature GENDER assigned FEM and a feature CASE assigned NOM. The PRED *kot* has a feature NUMBER assigned the value PL, a feature GENDER assigned MASC and a feature CASE assigned ACC. The PRED *presledovat* has a feature TENSE assigned PRES, a feature ASPECT assigned PF, a feature NUMBER assigned the value SG, and a feature PERSON assigned 3.

(79) *sobak-a* *presled-u-et* *kot-ov*
 dog-SG.NOM chase-IPF-3.SG.PRES cat-PL.ACC
 [a/the dog is chasing (the) cats]

The positional processing consists of (a) constituent assembly and (b) inflection. Constituent assembly involves the creation of hierarchies among the constituents by establishing head-dependent relations. Inflection is the creation of morphological slots at the lowest level of the structure, in which the hierarchical constituents are given details about grammatical information bound to other words. It is important to stress here that inflection does not consist of the choice of any specific morphological marker, which will be assigned in the phonological encoding. In Bock & Levelt (1994), inflection is explained as the generation of additional branches, attached to constituents that carry specific grammatical information. In LFG terms, inflection is the assignment of values to features in the f-structure and the creation of a morphological slot that will be filled by the proper

marker in the phonological encoding. In sum, the grammatical encoding provides the message with all the syntactic features that will be realised phonologically in the next component, the phonological encoding. For example, in an utterance like the one in (79), positional assignment provides information about the assignment of SUBJ to the NOM singular noun *sobaka* and OBJ to the ACC plural noun *kotov*. Constituent assembly fixes the word order, and its output can be the one in (79) or, given that in Russian GFs are not positionally determined, case marking allows also for different word orders, like in (80).

- (80) kot-ov presled-u-et sobak-a
 cat-PL.ACC chase-IPF-3.SG.PRES dog-SG.NOM
 [a/the dog is chasing (the) cats]

From the learners' perspective, the formulator is a complex set of processors to build. Because LFG is a lexically driven theory, another relevant structure, parallel to the formulator, is the lexical store. In fact, before knowing how to deal with the complex processes in the formulator, the learners need to know the lexicon and its features. According to Levelt (1989) and Levelt, Roelofs & Meyer (1999), words are stored in the lexical store with the full bundle of information, distributed in a three-level system: (a) the conceptual level, (b) the lemma level and (c) the lexeme level.

The conceptual level accounts for the meaning of the word. At this level, the learners know that a particular word is linked to a particular concept. For example, knowing the concept of *goat* entails that we know that this word is used to refer to an animal of a particular size, which can be milked and has horns. By knowing its meaning we also expect the word *goat* to be linked to other concepts, such as *milk* and *bleat*, and not to others, such as *gost* or *fly*.

The lemma level accounts for the syntactic properties the lexical entry bears. For instance, the English word *goat* is a noun. Its Russian equivalent *koza* is also a noun, but in addition it has feminine syntactic gender.

The third level, the lexeme one, regards the formal properties of the words, namely the morphological and phonological shape. The word *goat* is monomorphemic and consists of three phonological segments: /g/, /ou/, and /t/, whereas the Russian word *koza* consists of two morphemes, a stem (*koz-*) and a suffix (*-a*), and four phonological segments: /k/, /o/,

/z/ and /a/.

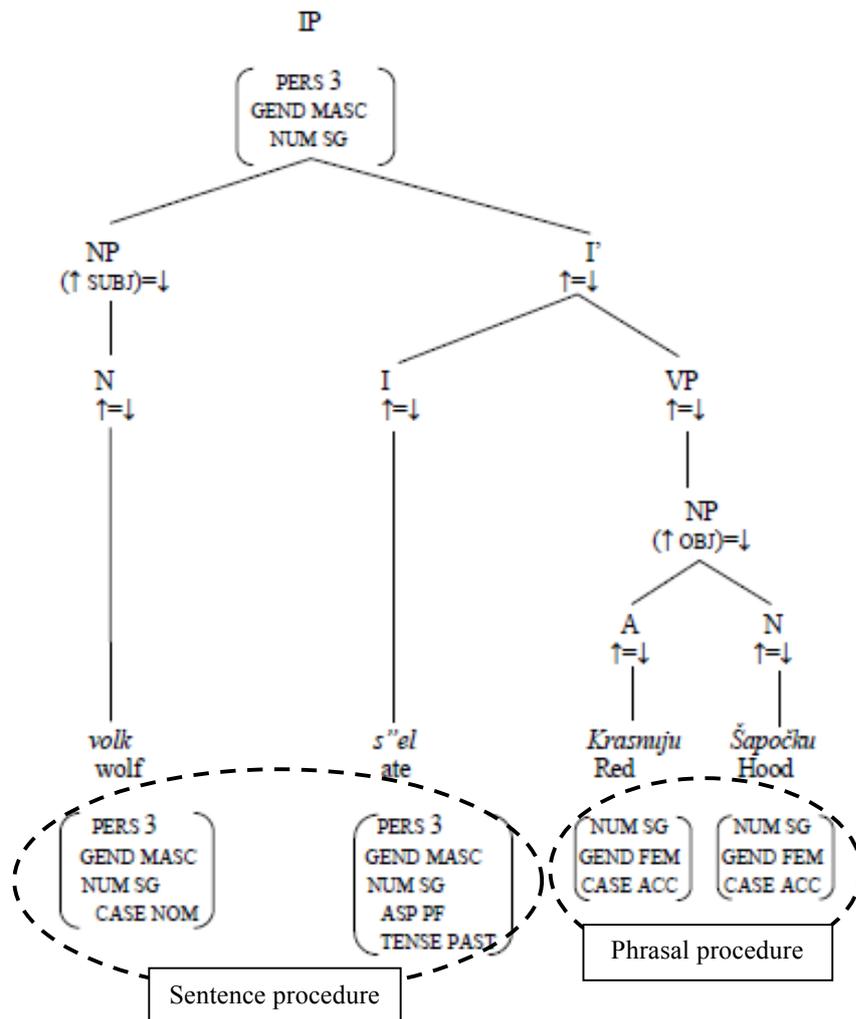
In terms of acquisition, as learners know new words, they cannot be stored in the lexicon with all the set of properties in the three levels. Actually, a quick connection can be established between the conceptual and the lexeme levels by associating a meaning with its phonological shape. However, at the lemma level, features and their values may take a long time to emerge and even longer to master.

Another difference between native speakers and learners can be found in the processing of grammatical information. In Levelt's Model, the processing of grammatical information is explained through a system of procedures, which are fully available in the native speaker, while they need to be built in the learners. Grammatical information activated by one procedure is temporarily stored in a memory buffer and then used by another procedure. In his blueprint for the speaker, Levelt (1989) suggests that grammatical encoding in adult speakers unfolds as in the sequence in (81), which was previously proposed by Kempen & Hoencamp (1987).

- (81) a. the Lemma
b. the Category procedure
c. the Phrasal procedure
d. the Sentence procedure

The selection of the lemma triggers the Category procedure, by assigning a lexical category to the lemma. Then Category of a head triggers the Phrasal procedure, producing a phrase. When phrases are assigned their GFs, the Sentence procedure has activated. An example of how different procedures are activated is shown in (82), where the sentence *volk s"el Krasnuju Šapočku* 'the wolf ate Red Riding Hood' is considered.

(82) An illustration of processing hierarchy for *volk s''el Krasnuju Šapočku* [the wolf ate Red Riding Hood]: Phrasal and Sentence procedures



First, the lemma *volk* is assigned the category noun, together with values of its diacritic features (singular number, third person, masculine gender and nominative case); also the lemma *s''el* is assigned a lexical category, the verb, with its set of features and values (third person, singular number, masculine gender, past tense, perfective aspect). Then, information between the NP and the I' must be exchanged by activating the Sentence procedure. This means that the values of the common features must be shared, as in (82), where the features person, gender and number of the NP *volk* and the I *s''el* match. Similarly, the feature unification within the NP in *Krasnuju Šapočku* consists of a

matching between the features number, gender and case in the adjective and in the noun. This latter requires the phrasal procedure to be activated.

Furthermore, Kempen & Hoencamp (1987) claim that each procedure in the sequence activates incrementally, that is, in order to activate a given procedure, all the previous procedures must be activated and no hierarchically higher ones need be active. In addition, the whole process of language generation is incremental, in that the processors can operate simultaneously in parallel, but independently on different language chunks of the utterance under construction.

The complex task of working with parallel procedures becomes easier for the learners once they reach automaticity. When the processes are automatic they are executed without conscious awareness, and are thus quick and can run in parallel without mutual interference. Therefore, learners will move gradually from slow retrieval of lexical items towards a more automatic processing.

In sum, Levelt's Model provides PT with a solid psycholinguistic background, in that the learners' tasks are (a) build the lexicon with its grammatical features, (b) encode the lemmas functionally and positionally, and (c) automatise the processes.

2.1.3 Developmental Schedules

In this section, I will present how PT uses LFG and Levelt's Model in order to create universal and cognitively based hypothesis for learners' interlanguage development. Because the scope of my research is the acquisition of case morphology, I will first introduce the schedule for morphological development, and then the syntactic development needed at the interface between morphology and syntax required by case.

Before introducing the developmental schedule, it is important to clarify what PT considers as acquisition. The threshold of acquisition is defined by the emergence criterion, that is "the first systematic use of a structure, so that the point in time can be located when a learner has – in principle – grasped the learning task" (Pienemann 1984: 191). This definition is operationalized by Pallotti (2007), who states that a productive use of a structure requires at least two morphological minimal pairs, or a creative construction or

three pairs of correct lexemes (Pallotti 2007: 375). The emergence criterion is thus the criterion used to collocate learners at different PT stages. However, in order to look at intra-stage development and transfer, I will use also the notion of accuracy, opposed to emergence. Accuracy is the rate between the number of target-like structures on the number of total contexts of the structure. It goes without saying that the emergence of a structure and its full accuracy are processes that follow different paths.

The schedule for the development of morphology is based on the processing procedures proposed by Kempen & Hoencamp (1987) and assumed in Levelt's Model. PT claims that the learners have to go through hierarchical stages of acquisition that consist of the activation of procedures between elements set at increasingly greater syntactic distance. This sequence is shown in (85), where the stages are listed hierarchically bottom-up and the times of acquisition are displayed in columns.

(85) Hierarchy of processing procedures – Morphological development (after Pienemann *et al.* 2005a: 14)

STAGE	T1	T2	T3	T4	T5
S-BAR PROCEDURE	–	–	–	–	interclausal information exchange
SENTENCE PROCEDURE	–	–	–	interphrasal information exchange	+
PHRASAL PROCEDURE	–	–	phrasal information exchange	+	+
CATEGORY PROCEDURE	–	lexical form variation	+	+	+
LEMMA ACCESS	words & formulas	+	+	+	+

At the very begin of interlanguage development, learners have only access to the Lemma. Learners are not able to activate any grammatical procedure, and thus produce single words juxtaposed with no form variation and formulaic expressions, which may contain

non-analysed chunks of morphological markers (Pienemann 1998: 83). In Bock & Levelt's (1994) and Levelt, Roelofs & Meyer's (1999) terms, the lexicon is reduced to the two levels of meaning (concept) and sound (lexeme).

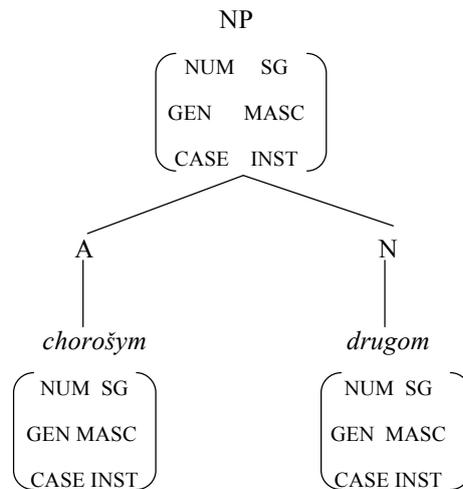
At the next stage up, the learners begin to annotate their lexicon, and thus start distinguishing lexical categories. The Category procedure can then be activated and learners introduce the first distinctions, usually between nouns and verbs, and usually involving the most transparent diacritic features, such as numbers for nouns and aspect/tense for verbs (Bettoni & Di Biase, in press: § 1). Learners thus begin to mark these features on single words. At this level the morphological markers that begin to emerge are may not be actual markers of tense, aspect, etc. and serve more as categorial markers.

In addition, the piece of information provided by the marker does not go beyond the boundary of the single word.

Case markers can emerge at this stage, but the information they bear may not be functional (Baten 2013: 118). In fact, the morpho-syntactic nature of case entails that the mark on a single noun is evidence of syntactic relations between more elements and is thus unlikely to happen at this stage of development.

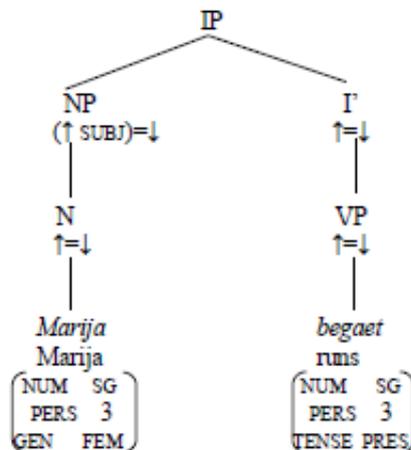
At the next stage, learners can activate the Phrasal procedure stage. As the annotations in the lexicon increase, learners begin to distinguish the phrasal heads from their modifiers. In fact, when a head is introduced together with its modifier, grammatical information of the head can be unified with its modifier, when a language requires it. For instance, this kind of feature unification within a phrase occurs in the Russian NP, as in (86), where the head N requires its modifier A to share the same gender, number and case. Note that the English equivalent *good friend* does not require any feature unification between the *head* friend and its modifier *good*.

(86) Phrasal feature unification of the Russian NP *chorošym drugom* [good-INST friend-INST]



At the next stage up, learners reach the Sentence procedure stage. This procedure is activated when different phrases are attached at the sentence node, and thus different phrases are assigned different GFs, like NP_{SUBJ} and NP_{OBJ} (Pienemann 1998: 85). The Sentence procedure checks the compatibility of the information coming from different phrases, like the agreement in number and person between NP_{SUBJ} and VP in a Russian sentence like *Marija begaet* ‘Marija runs’, as exemplified in (87). Here feature unification is activated across phrases in that both the NP and the VP share the features 3rd person and singular number.

(87) Inter-phrasal feature unification of the Russian sentence *Marija begaet* [Marija runs]

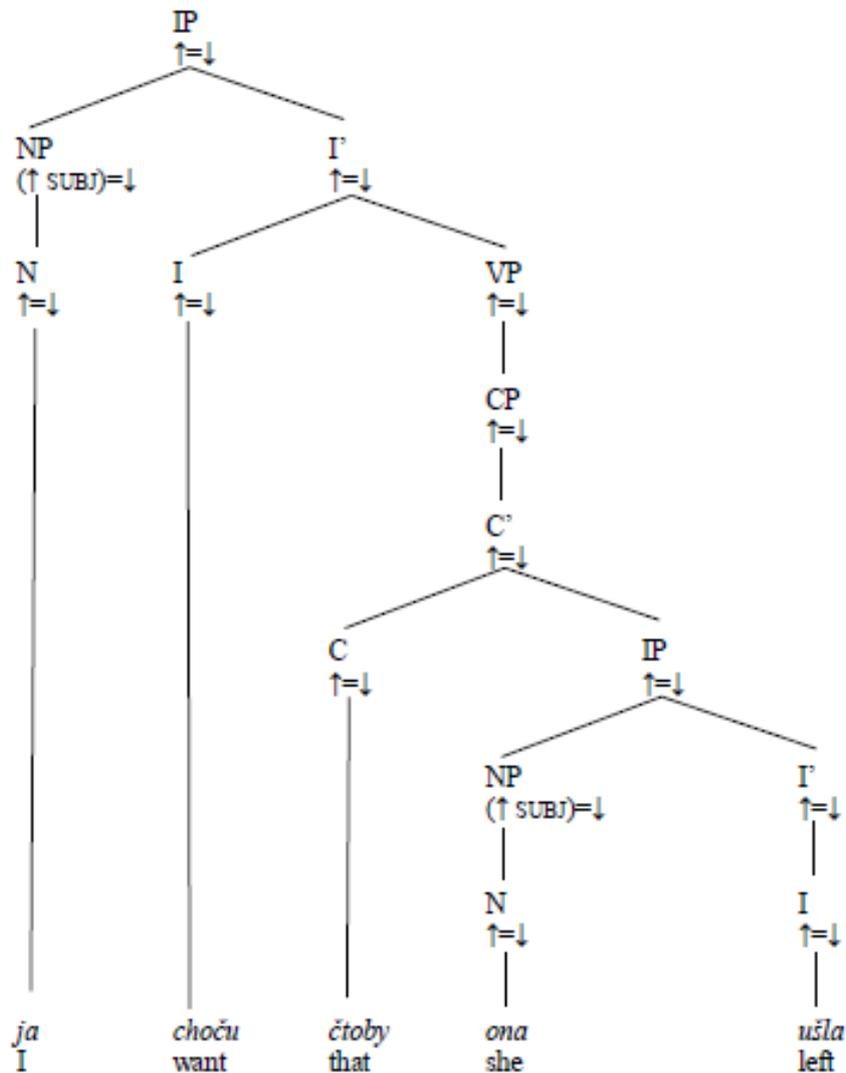


At this stage of development, case is used to mark GFs, whose assignment is always required at the sentence node⁵.

Finally, if the target language has structures at this stage, learners activate the Subordinate clause procedure. This happens when learners are able to exchange grammatical information across clauses, that is, between the main clause and its dependent in subordination (Pienemann 1998: 85). For instance, in the Russian sentence *ja choču, čtoby ona ušla* ‘I want her to leave’ the verb *chočet* ‘want’ in the main clause requires the verb of the dependent to be in past tense, *ušla* ‘left.FEM’, as shown in (88). This requirement goes beyond the main clause boundaries and is thus activated by the subordinate clause procedure.

⁵ The reader may notice that in (87) the sentence node is represented by an IP and not by S. As pointed out in De Smedt (1990), when the speaker builds up the syntactic structure, the process is determined by the unification of syntactic segments and not on the nature of the mother node. Therefore, when referring to unification at the sentence node level, this node can be S, IP or CP.

(88) Inter-clausal feature unification of the Russian sentence *ja choču, čtoby ona ušla* [I want her to leave]



However, this last stage of development is not considered in my research, in that case assignment does not go beyond the boundaries of the clause.

In sum, PT hypothesises that acquisition is determined by universal stages of acquisition, which require feature unification at greater syntactic distance and that cannot be skipped.

However, as already said, case is a morphological marker used to express syntactic relations. I will thus introduce the two schedules for syntactic development hypothesised by PT, as formulated by Bettoni & Di Biase (in press: § 1): the Prominence Hypothesis and

the Lexical-Mapping Hypothesis. The underlying idea beyond both hypotheses is that learners, after an initial stage in which they juxtapose single words and formulas, gradually learn how to map arguments and constituents to GFs from an initial fixed word order an canonical mapping towards non-canonical and freer solutions. The Prominence Hypothesis deals with the way learners develop more flexible word orders in the mapping of c-structure onto f-structure. The Lexical Mapping Hypothesis accounts for how learners develop the mapping of a-structure onto f-structure from default to non-default solutions.

The Prominence Hypotheses replaces the Topic Hypothesis (Pienemann, Di Biase & Kawaguchi 2005: 223) and accounts for the grammaticalisation of TOP and FOC into the syntactic development. In Bettoni & Di Biase (in press: § 1) the Prominence Hypothesis is spelled out as in (88).

(88) Syntactic development based on the Prominence Hypothesis (Bettoni & Di Biase in press: § 1)

STAGE	STRUCTURES
NONCANONICAL WORD ORDER	TOP _{XP} marked orders FOC _{XP} marked orders
XP _{DF} CANONICAL WORD ORDER	TOP _{XP} SVO / SOV / ... FOC _{WH-} SVO / SOV / ...
CANONICAL WORD ORDER	SVO / SOV / ... [QUE ^P SVO / SOV / ...]
LEMMA ACCESS	single words; formulas [QUE ^P single words; formulas]

^P = the QUE feature is exclusively prosodic

After a first stage when learners simply juxtapose single words and formulas, learners reach the Canonical word order stage. Here words are organised according to their pragmatic needs in the simplest mapping between c- and f-structures, that is, the canonical word order. This order involves that TOP is mapped onto SUBJ as the default solution and

arguments are arranged according to the order required by the target language in a simple, active, declarative, affirmative, minimally presuppositional and pragmatically neutral sentence (Kroeger 2004: 141).

At the next stage up, learners are able to give prominence to an element other than SUBJ. Such prominence involves that learners begin to introduce an element before the SUBJ, and thus disrupt the overlapping between SUBJ and TOP. Crucially, prominence is not given to a core element, which would require the ability to master full GF assignment, and is thus assigned to non-argument functions, such as TOP in declaratives, like in (89a) or FOC in questions, as in (89b).

- (89) a. na kartinke mama čitaet
 on picture mum reads
- b. gde Alěša byl?
 where Alěša was?

The fact that SUBJ is no longer in first position entails that a first differentiation between SUBJ and TOP has occurred. However, only a non-core element can be fronted at this stage, because the canonical word order that follows cannot be disrupted.

At the final stage of development, learners are able to map the DFs onto all the GFs, producing all the possible word orders allowed in a given language, as in (90), where a TOP_{OBJ} appears in first position.

- (90) etu knigu pročital Ivan
 that book read Ivan
 [that book, Ivan read]

Let us consider now the second hypothesis for syntactic development, the Lexical Mapping Hypothesis. It was first formulated in Pienemann, Di Biase & Kawaguchi (2005: 240) and recently revised by Bettoni & Di Biase (in press: § 1) as in (91). This hypothesis accounts for the way the learners move from a rigid canonical mapping of a- onto f-structure to the full flexibility of the optional choices triggered by the lexicon in assigning GFs to thematic roles.

(91) Syntactic development based on the Lexical Mapping Hypothesis (Bettoni & Di Biase: § 1)

STAGE	CONSTRUCTIONS
NONDEFAULT MAPPING	passives, causatives, benefactives, exceptional verb constructions, etc.
DEFAULT MAPPING AND ADDITIONAL ARGUMENTS	agent/experiencer mapped on SUBJ and/or patient/theme mapped on OBJ, and other members of the a-structure hierarchy, such as goals and locatives, mapped on GFs other than SUBJ and OBJ
DEFAULT MAPPING	agent/experiencer mapped on SUBJ and/or patient/theme mapped on OBJ
LEMMA ACCESS	single words & formulas

After the initial Lemma access stage, learners organise their utterances according to the Default mapping, that is, the higher roles <agent>/<experiencer> are mapped onto SUBJ and lower ones such as, if present, <patient>/<theme> onto OBJ.

At a further stage of development, learners begin to add further argument roles, like <goal>, <beneficiary>, <instrument> and <locative>, and map them onto an OBL θ . This further argument can be marked either by case, when the language has it, or by PP and thus differentiates from the OBJ.

Finally, learners reach the non-default mapping stage, which includes a large variety of constructions that vary significantly across languages. All these constructions, like passives, benefactives, causatives, etc., share a non-default mapping of thematic roles on GFs.

2.1.4 Developmentally Moderated Transfer

At the end of this section, after having introduced the theoretical framework in which I will conduct my analysis, I want to present a hypothesis that is integrated into PT and that will be relevant in my research, the Developmentally Moderated Transfer Hypothesis.

This theory deals with the debated issue of how the L1 is transferred into a L2. Being DMTH part of PT, it views transfer in a processing perspective, in that it assumes that transfer occurs only when the learner is developmentally ready for it. Its formulation dates back to the first formulation of PT (Pienemann 1998) and is spelled out in Pienemann, Di Biase, Kawaguchi & Håkansson (2005: 85) as follows:

- (a) L1 transfer is constrained by the processability of the given structure;
- (b) the initial state of the L2 does not necessarily equal the final state of the L1, because there is no guarantee that the given L1 structure is processable by the under-developed L2 parser.

DMTH has thus neither a full transfer nor a minimal transfer position. On the one hand, it excludes that transfer is possible at initial stages of development. On the other hand, it states that once the procedure required by a given structure is acquired, transfer takes place. In fact, Pienemann (2011) confirms that a structure is acquired more effectively once it is processable if it appears in the learner's L1.

DMTH has been tested in several studies. Here I will mention a study by Håkansson, Pienemann & Sayehli (2002) on the transfer of V2 in German L2 from Swedish L1, and several studies on word order in Japanese L2 by Kawaguchi (1999, 2002, 2005).

First, the study by Håkansson, Pienemann & Sayehli (2002) aimed at investigating how the V2 structure is transferred by Swedish learners of German L2. Both Swedish and German are V2 languages, that is, when any constituent is fronted, the verb has to appear in second position. One might claim that Swedish learners of German will be able to transfer the V2 structure from Swedish to German even at an initial stage and thus will skip the intermediate stage of the Prominence Hypothesis schedule, in which learners produce an ADJ followed by canonical word order – a structure that violate the V2 condition.

Data show that, despite the fact that both Swedish and German are V2 languages, Swedish learners of German follow the sequence of acquisition predicted by the Prominence hypothesis. In sum, data from the study by Håkansson Pienemann & Sayehli (2002) confirms the DMTH because the V2 structure is transferred from Swedish L1 to German L2 only when the learners are developmentally ready to do it.

The second group of studies I consider is about English L1 learners of Japanese L2 (Kawaguchi 1999, 2002, 2005). There is typologically distance between English and

Japanese, the former being a SVO language, the latter SOV. Kawaguchi investigated whether learners at an initial stage transfer their L1 word order to L2 word order. Data show that all her learners at an initial stage produce the canonical SOV Japanese word order, despite the fact that in their L1 the canonical word order is SVO. In sum, data from Kawaguchi's studies confirm that the initial state of L2 development is not the final state of L1 development.

So far, DMTH has been validated by studies that investigate how word order is transferred under the constraints of PT. But what happens with a morpho-syntactic feature such as case? How is case transferred from the L1 to the L2? And what happens if the L1 and the L2 are typologically so close that case is marked with the same endings? Can we hypothesise a full transfer based on morpho-phonematic similarities? My study on the acquisition of case in Russian L2 is a good testing ground for all these questions.

2.2. Review of the Literature

In this section, I will present some previous studies on the acquisition of case held within the PT framework: (§ 2.2.1) Baten (2011, 2013) on German L2, (§ 2.2.2) Bettoni, Di Biase & Medojević (in press) on Serbian as a heritage language, and Baten & Verbeke (subm.) on Hindi L2. The second part (§ 2.2.4) is dedicated to studies outside the theoretical framework of PT that specifically investigate the acquisition of Russian case: Gvozdev (1961) on Russian L1, Polinsky (1995, 2006) and Dubina & Polinsky (2013) on case loss and attrition in American Russian, Kempe & MacWhinney (1998) on German and Russian L2, Kempe & Brooks (2008) on case complexity in Russian L2.

2.2.1. The acquisition of case in German L2 (Baten 2011, 2013)

Kristof Baten is the first who aimed at incorporating the acquisition of case in the PT framework. His studies (2011, 2013) investigate the way case is learned in German L2, the

language that first and foremost triggered the birth of PT but whose acquisition of case system had never been explored before.

Case in German is marked mainly on determiners and sometimes on nouns. There are four cases in German: nominative, accusative, dative and genitive, but the latter one is less used.

Baten (2013) presents a longitudinal study of 11 Dutch learners of German L2. His corpus consists of a large data set of oral speech production regularly recorded in a period of two years. His developmental hypotheses are at the interface between syntax and morphology. They are summarised in (93).

(93) Developmental sequence for German L2: word order and case (Baten 2013: 284)

PROCEDURE	C-TO-F-MAPPING	WORD ORDER	CASE
Sentence	TOPIC = OBJ	OVS INV/V2	Functional marking
Phrasal	TOPIC = ADJ	*ADJ (XP + canonical order)	PCase
Categorial	TOPIC = SUBJ	NVN (canonical word order)	No case marking or one-to-one marking

The developmental procedures interface with the mapping of the c-structure onto the f-structure, with word order and with case. At the Category procedure stage, SUBJ is in TOP position and the constituents are arranged in canonical word order. Here case, if not omitted, is marked on single nouns by direct case mapping, that is, case is mapped onto single nouns without any feature unification. At the Phrasal procedure stage, case is introduced within the PP. Baten (2013) claims that at this stage the Phrasal procedure stage parallels the syntactic ADJ + canonical order stage, in which ADJ is in TOP position and a non-target canonical word order follows. Finally, at the Sentence procedure stage, case is assigned by functional marking, and thus irrespectively of the constituent position. Therefore, learners of German L2 are able to go beyond the rigidity of canonical word order and set the verb in second position, called with the transformational label of INV.

Furthermore, learners are able to mark OBJ when in TOP position, in the non-canonical OVS word order.

Baten (2013) investigates also the developmental sequences of case on verb arguments and in PPs. The development of case on verb arguments is linked with the development of syntax, in that the Category procedure stage is entangled with the canonical order stage and evidence for the Sentence procedure stage is given by non-canonical word order. The sequence of case development on verb arguments is shown in (94) (Baten 2013: 284).

- (94)
1. all-nominative
 2. direct case marking
 3. position marking
 4. functional marking

Baten's data show that at a very first stage learners never introduce case markers. Then, they begin to use markers in opposition with NOM forms. In particular, they tend to mark pre-verbal SUBJ by NOM and post-verbal OBJ by non-NOM. At a third stage, learners begin to mark SUBJ by NOM, OBJ θ by DAT and OBJ by ACC in this order. At this level, DAT is marked onto the first OBJ and ACC onto the second OBJ (the OBJ θ) irrespectively of the semantic restriction. Case is thus assigned by position. Only at the last stage case is functionally assigned. Evidence for this is provided by case assigned to the correct GFs in non-canonical positions.

The first two stages are shared also by the sequence of case development in PPs, which is shown in (95) (Baten 2013: 284).

- (95)
1. all-nominative
 2. direct case marking
 3. lexical case assignment (ACC / DAT)
 4. conceptual case assignment (ACC / DAT)

After the first stage, where case is not marked in PP (a stage not found in Baten's corpus), learners begin to introduce non-NOM forms. The next stage up involves lexical case assignment, triggered by the so-called one-way prepositions, those prepositions that

govern either ACC or DAT. The case is thus lexically required by the preposition. When learners are able to master also the two-way prepositions, which can govern both ACC and DAT, a further stage of development is assumed. Baten claims that in order to select the correct case, which is required not only by the preposition but also by the semantics of the sentence, learners ultimately need to assign case conceptually, by a kind of feature unification that goes beyond the boundaries of the phrase.

In sum, Baten (2013) provides a wide set of longitudinal data that confirm that the learners' progress is constraint by PT's processing procedures. At an initial stage, case is assigned by position, then it gradually becomes the main means by which GFs are assigned. Another positive element of Baten's study is the wide range of structures considered, from GF assignment to case assigned in PP.

2.2.2. The acquisition of case in Serbian as a heritage language (Di Biase, Bettoni & Medojević, in press)

The study on the acquisition of case in Serbian L2 by Di Biase, Bettoni & Medojević (in press) deals with a group of speakers of Serbian in contact with Australian English⁶.

Serbian, like Russian, is a Slavic language with case marked on nouns, pronouns and adjectives. There are six cases in Serbian: nominative, accusative, dative, genitive, instrumental, locative. The feature case is enmeshed with gender (masculine, feminine and neuter) and number (singular, plural), and is distributed in three classes.

Di Biase, Bettoni & Medojević (in press) hypothesise that learners develop from an initial Lemma access stage to freer word orders assigning case markers to GFs. Their hypothesis for the syntactic development of declaratives is shown in (96).

⁶ An exploratory version of the study can be found in Medojević (2009).

(96) Developmental stages hypothesised for Serbian L2 syntax based on the Prominence Hypothesis (Di Biase, Bettoni & Medojević in press)

STAGE	STRUCTURE	EXAMPLE
NONCANONICAL WORD ORDER	OV (topicalisation of OBJ)	<i>supu voli devojčica</i> [<i>soup-ACC.OBJ likes girl-NOM.SUBJ</i>] <i>supu devojčica voli</i> [<i>soup-ACC.OBJ girl-NOM.SUBJ likes</i>]
	VS (focalisation of SUBJ)	<i>voli devojčica supu</i> [<i>likes girl-NOM.SUBJ soup-ACC.OBJ</i>]
XP CANONICAL WORD ORDER	TOP SVO (topicalisation of ADJ)	<i>svakog dana đaci imaju ispit</i> [<i>every day-GEN.ADJ students-NOM.SUBJ</i> <i>have exam-ACC.OBJ</i>]
CANONICAL WORD ORDER	SVO	<i>jedem krofnu</i> [<i>(I) eat doughnut-ACC.OBJ</i>] <i>devojčica voli supu</i> [<i>the girl-NOM.SUBJ likes soup-ACC.OBJ</i>]
LEMMA ACCESS	<i>single words</i> <i>formulas</i>	<i>ja ser [I (like) cheese]</i> <i>zovem se Mary [my name is Mary]</i>

After the very first stage, when learners can use only single words and formulas, they move to the Canonical word order stage, where case marked nouns are used only in SVO sentences. At a later stage, learners can topicalise an ADJ followed by the canonical SVO word order. Only at a last stage can they produce the non-canonical VS and OV structures, where SUBJNOM is focalised and/or OBJACC is topicalised.

The study was conducted on a group of three teenage Serbian-Australian bilinguals, with Australian English as dominant language. The corpus was collected by dyadic conversations between the informants and a Serbian researcher. The data set confirms the developmental hypothesis for the more advanced stages (the overall level of the informants was quite advanced). All three informants have reached the non-canonical word order stage. However, their levels of proficiency vary, in that less advanced informant produces less non-canonical structures, less case markers and less accurate.

In sum, Di Biase, Bettoni & Medojević (in press) provides evidence of the Prominence Hypothesis applied to the acquisition of Serbian as a heritage language.

2.2.3. The acquisition of ergative case in Hindi L2 (Baten & Verbeke subm)

Another relevant work within the PT framework on the acquisition of case is by Baten & Verbeke (subm) on the acquisition of the ergative case in Hindi L2.

Hindi, unlike the previously mentioned languages, displays both NOM-ACC and a ERG-ABS case systems, the so-called split ergativity. This means that the SUBJ of finite transitive verbs with perfect morphology is marked by ERG, and all other SUBJs are marked by NOM. Thus, the acquisition of Differential Subject Marking (DSM) is investigated for the first time in PT.

Baten & Verbeke (subm) hypothesise a developmental sequence for the ergative case that accounts for the interface among feature unification, mapping and case development, as follows in (97).

(97) The developmental sequence of the ergative case (Baten & Verbeke subm)

FEATURE UNIFICATION	MAPPING	CASE DEVELOPMENT
Inter-phrasal	Non-direct mapping (= mapping is mediated)	The possibility of functional case use Overgeneralisation of ergative marker
No feature unification	Direct mapping	Default forms

At a very first stage, when learners are not able to exchange grammatical information between elements, they rely on default mapping and produce no case marker. At a second stage, learners begin to introduce ERG and over-extend it, irrespectively of the transitivity and aspect constraints. Finally, only when inter-phrasal feature unification takes place, will

learners be able to use ERG markers under the constraints required by Hindi.

This cross-sectional study involves a group of 11 Dutch learners of Hindi L2. Oral spontaneous data were elicited with a story-retelling task. Data analysis shows that six learners use exclusively default forms, three learners over-extend ERG to intransitive sentences, and two learners can functionally assign ERG, by distinguishing the contexts in which ERG is required from the ones requiring NOM.

2.2.3. Studies on the acquisition of case in Russian

In this section, I will present studies on the acquisition of case in Russian that were not conducted within the PT framework. The studies considered here include different approaches to the study of the acquisition of case. Gvozdev (1961) investigates the acquisition of case in Russian L1, Polinsky (1995, 2006) and Dubina & Polinsky (2013) consider case loss and attrition in American Russian, and Kempe & MacWhinney (1998) and Kempe & Brooks (2008) study complexity in the acquisition of case in Russian L2.

The first study is by Gvozdev (1961), a seminal study of a child's speech extensively recorded until the age of 9. The scope of the analysis goes beyond the acquisition of case in Russian L1, and considers broader aspects of the acquisition of grammar.

Gvozdev (1961) noticed that morphology develops later than syntax. At a very first stage the child used unmarked NOM SG forms. Between the age of 3 and 3,9 he acquired all the uses of grammatical cases. Gvozdev noticed that his learner began to mark case by differentiating NOM from ACC and GEN. Cases emerged simultaneously in different contexts, both in PP and VP. However, accuracy in the use of case endings was acquired later. Over-extensions of forms in the child's speech was common. For example, the unambiguous MASC/NEUT INST marker *-om* is over-extended to all the three genders, and preferred to the more frequent in the input – but more ambiguous – FEM INST *-oj* ending. Only after the emergence of the ACC marker *-u* the child introduces freer word orders, like OV.

Following Gvozdev (1961)'s analysis, Slobin (1966) developed the concept of 'inflectional imperialism' (Eisenbeiß, Narasimhan & Voeikova 2009: 374). Errors are

determined by over-extensions of certain forms, which are correct in some contexts and display unambiguity and overtness. This would explain why in Russian children extend the *-om* form for INST, or the *-ov* form for GEN PL to mark feminine nouns, like *sobaka* ‘dog’ (Gvozdev 1961: 388-9). In fact, the incorrect *sobak-ov* ‘dog-GEN.PL’ is preferred to the correct *sobak-ø* ‘dog-GEN.PL’, in that *-ov* is overt and more unambiguous than *-ø*.

Another set of studies was conducted on language attrition in American Russian. Polinsky (1995) noticed that in the language of Russian immigrants INST is not used in predicate structures and GEN is not used when lexically governed by certain verbs. She also noticed case attrition in prepositional OBLs. As far as case in GFs, American Russian displays a case shift from DAT to ACC and from ACC to NOM. In Polinsky (2006: § 4.1) a difference between more proficient and less proficient speakers is made, according to the level of attrition in case marking. She also noticed that case is not eroded in the *-ov* form for GEN and parallels this finding to Gvozdev (1961). In a recent study, Dubina & Polinsky (2013: 16) provide evidence of increasing case reduction in second-generation immigrant languages.

Another interesting study on the acquisition of case in Russian is by Kempe & MacWhinney (1998), who investigated the acquisition of overt morphological case by adult speakers of English L1 who were learning Russian L2 or German L2. Their approach allows for a contrastive analysis of the acquisition of case in these two languages. On the one hand, a rule-based approach predicts that learning is determined by paradigm complexity; thus the hypothesis is that the more complex Russian paradigm will be acquired later than the German one. On the other hand, an associative-based approach predicts that learning is determined by the cue-validity of single forms, that is, how often a form is a cue for a certain function and how reliably it marks this function. This would predict that German case will be acquired after Russian case.

Their data on comprehension were collected among 22 learners of Russian L2 and 22 learners of German L2, by means of two tasks: a lexical decision task and a picture choice task.

Data analysis confirms that learners of Russian L2 rely on case at a stage of acquisition earlier than the learners of German L2. Particularly, OVS sentences display a lower rate of incorrect first noun choices in learners of Russian L2, who are quicker in

associating case marking to agenthood. Another finding concerns how animacy affects interpretation of sentences. In Russian, the feature animacy interacts with declension and is thus confused with case marking. Inanimate nouns have stronger inflection/case associations and are thus processed faster. Animacy happens to contribute to the validity of inflectional cues and is more grammaticalised in Russian than in German.

Kempe & MacWhinney (1989)'s study ultimately supports that L2 learning has a large associative component and a connectionist model is useful to explore the way morphology is learned. They thus proposed a model based on recurrent neural network in order to account for the complex interplay between input and output in case morphology comprehension.

In a later study in Kempe & Brooks (2008), data from two experiments on comprehension suggest that case is better acquired in nouns with more transparent gender marking. The fusional nature of case marking thus affects how case is acquired; case is thus easier to acquire when the grammatical feature gender, number and animacy are more transparent.

2.3. The Hypotheses

In this section, I will present my developmental hypotheses for case morphology in Russian L2. First, in § 2.3.1 I will introduce a schedule for the development of morphology based on the 1998 version of PT by Pienemann and from Bettoni & Di Biase (in press: § 1). In § 2.3.2 I will introduce the Developmentally Moderated Transfer Hypothesis, which will be tested thanks to the varied background of L1s the learners of my study displays. In § 2.3.3, I will introduce an explorative hypothesis on the role played by cognitive load when feature unification involves more than two elements at the Phrasal procedure stage. Finally, in § 2.3.2 I will integrate my developmental hypothesis with Differential Case Theory (Butt & King 1991; King 1995) in order to account for the strategies learners use in assigning different kinds of case.

2.3.1. PT-based Morphological Developmental

The developmental hypothesis for case morphology in Russian L2 proposed in this section derives from PT's universal developmental hypothesis for morphology (Pienemann, 1998). The table in (98) shows the hypothesis, and comments follow.

(98) Developmental hypothesis for case morphology in Russian L2

STAGE	MORPHOLOGICAL OUTCOME	STRUCTURE	EXAMPLE
SENTENCE PROCEDURE	Inter-phrasal morphology	Case marking in TOPOBJ V	<i>knig-u čitaet mam-a</i> [book-ACC reads mum-NOM]
PHRASAL PROCEDURE	AP morphology	A NCASE	<i>dovolen rezultat-om</i> [happy result-INST]
	QP morphology	Q NGEN	<i>pjat' student-ov</i> [five students-GEN]
	VP morphology	V NCASE	<i>upravljaet biznes-om</i> [(s/he) manage business-INST]
	NP morphology	N NGEN	<i>kniga student-a</i> [book student-GEN]
		ACASE _i NCASE _i	<i>choroš-ich student-ov</i> [good-GEN students-GEN]
	PP morphology	P NCASE	<i>s druž'-jami</i> [with friends-INST]
CATEGORY PROCEDURE	Lexical form variation	NCASE, post-verbal NACC	<i>mama vs mamu</i> [mum-NOM vs mum-nom.NOM]
LEMMA ACCESS	Single words and formulas		<i>menja zovut lena</i> [my name is Lena] <i>malo urok</i> [few lesson]

At the Lemma Access stage, learners can only produce formulas or chunks of single words with no grammar. This means that case markers are either absent, as in (99) where the default NOM is used instead of the GEN required by the quantifier, or used in a formulaic way, as in the presentation formula (100), where in the speaker's interlanguage *menja* is not an ACC, but a mere sequence of syllables in a longer string.

(99) malo urok
few lesson

(100) menja zovut lena
[my name is Lena]

At the next stage up, grammaticalisation begins. At the Category procedure stage, learners begin to note the case feature by producing minimal lexical form variation. The initial opposition is usually between NOM and non-NOM forms, bearing any inflectional ending other than NOM. Such minimal formal variation is only restricted within the single word, as exemplified in (101), where variation is shown in the noun *mama* ‘mum’ marked by the ending *-e*, which is highly frequent in the input and displays a high level of ambiguity. Needless to say, this example is not target, because an ACC marker *-u* is required.

(101) a. mam-a čitaet
mum-NOM reads
b. videla *mam-e
(she) saw *mum-non.NOM

Notice that at this stage a post-verbal ACC is not sufficient evidence of feature unification within the VP, because ACC can be assigned by its post-verbal default position, as in (102).

(102) videla mam-u
(she) saw mum-ACC

It is thus possible to set ACC in post-verbal position among the structures that can emerge at the Category procedure stage, as already hypothesised in Baten (2013: 138) with reference to ACC in German L2.

The next stage up is the Phrasal procedure stage, when learners begin to introduce case when required by feature unification within a phrase. In Russian a large variety of structures belongs to this stage.

Within the PP, exchange of information between the preposition and its OBJ is

determined by the lexical requirement of the given preposition, as exemplified in (103), where *s* ‘with’ requires its OBJ to be case marked by INST.

(103) *s* *druz’-jami*
 with friends-INST

Unlike Baten (2013), I will not set prepositions requiring only one case and prepositions requiring more than one case into different procedural stages. As already mentioned in § 1.2.5, such a distinction is inconsistent if we assume that prepositions governing more than one case are different lexical entries that share the same PRED.

Within the NP, two structures are considered. First, feature unification is required when adjective and noun are both case marked, as exemplified in (104).

(104) *choroš-ich* *student-ov*
 good-GEN students-GEN

Secondly, feature unification within the NP is required to mark the second NP as GEN, when configurationally required by the sister N, like in (105).

(105) *kniga* *student-a*
 book student-GEN
 [the/a student’s book]

Within the VP, learners will be able to mark the OBJ by the case lexically required by the verb. As pointed out in Artoni & Magnani (2013), if OBJ is marked by default ACC in its default post-verbal position, there is no unequivocal proof of feature unification. In fact, as we have just seen above ACC is the default case in post-verbal position and can be assigned by position, without any exchange of information between the noun and the verb in the VP. Therefore, only OBJ marked by case other than ACC is taken as proof of progress to this stage, as exemplified in (106).

(106) *upravljaet* *biznes-om*
 (s/he) manages business-INST

Within the QP, GEN on the modifier noun is evidence of exchange of information, as in (107). Here I assume Neidle (1988), according to whom quantifiers are considered words selecting amounts of items, like the numerals, the negation *ne* ‘not’ and partitive quantifiers like *mnogo* ‘much’ and *malo* ‘few’. All these quantifiers govern GEN.

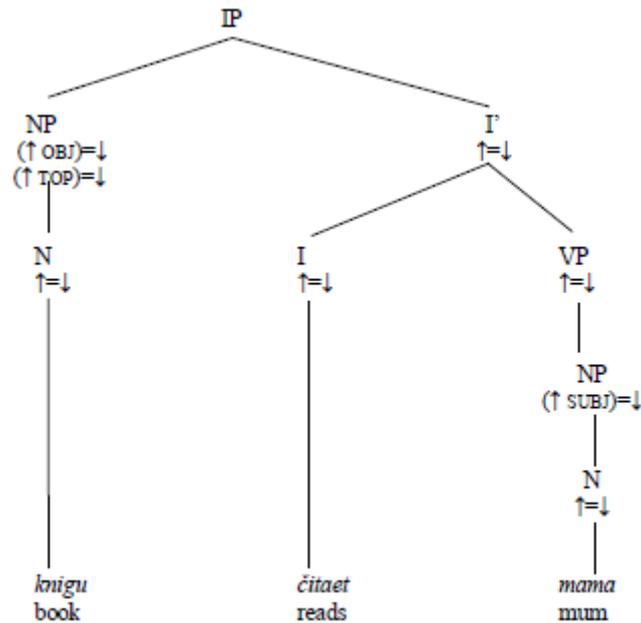
- (107) *pjat’* student-ov
 five students-GEN

Finally, within the AP, learners will be able to mark the noun with the correct case required by the adjective, as exemplified in (108).

- (108) *dovolen* rezultat-om
 happy rusult-INST
 [happy about the result]

At the last stage of the learners’ development of case morphology, learners are able to assign case to GFs at the sentence level. This means that case is assigned to GF irrespectively of the position in the c-structure. Indeed, evidence for exchange of information at the sentence level, and thus across phrases, can be found in Russian case when the OBJ or the OBL are displaced in TOP position, that is, to the left of the verb, as in (109).

(109) c-structure of the sentence *knigu čitaet mama* [a book, the mum reads]



For this reason, only ACC marking TOP_{OBJ} and DAT marking $\text{TOP}_{\text{OBLGOAL}}$ are proof of exchange of grammatical information between the VP and the external NP, as exemplified in (109a-b).

(109) a. knig-u čitaet mama
book-ACC reads mum
[a/the book, the mum reads]

b. svo-emu syn-u kupil ja knig-u
own-DAT son-DAT bought I.NOM book-ACC
[to my son, I bought a book]

The reader may have noticed that the developmental hypothesis for morphology cannot be disentangled without reference to syntax. As already pointed out in Bettoni & Di Biase (in press: § 1) in general, and in Artoni & Magnani (2013) for Russian, the morphological Category procedure stage interfaces with the syntactic canonical word order stage and the

Sentence procedure level with the non-canonical word order stage. On the one hand, the morphological resources of the Sentence procedure are prerequisites for marking GFs irrespectively of their syntactic position. On the other hand, only non-canonical word order provides evidence of case marking at a Sentence level. Furthermore, the interplay between syntax and morphology in the acquisition of case is connected to the discourse-pragmatic choices at the level of the information structure. In my study, I will not deal with syntax as such and mention syntactic features only when they provide evidence of morphological development.

2.3.2. Developmentally Moderated Transfer Hypothesis

In this section, I will formulate some hypotheses on how the learners' L1 may influence the way case is learned in Russian L2. When referring to transfer, I will consider only positive transfer. First, as pointed out in Gass & Selinker (1992: 15), transfer should not be viewed as a negative effect on learning, but as "a ground upon which further language development can take place". Secondly, negative transfer does not provide any evidence of activation of processing procedure and is thus irrelevant for my research.

PT's perspective on transfer is spelled out in the Developmentally Moderated Transfer Hypothesis. As already mentioned in § 2.1.4, according to DMTH, transfer is possible only when the learner's language processor is developmentally ready to process the given structure. On the one hand, this means that DMTH rejects a full transfer approach, in which the final state of L1 is the beginning of L2 acquisition, as assumed by Schwartz & Sprouse (1994, 1996). On the other hand, DMTH rejects the no-transfer position, according to which the L1 plays a minimal role in L2 acquisition, as in Platzack (1996)'s Initial Hypothesis of Syntax, which claims that initial stages of L1 and L2 are both determined by UG constraints.

According to DMTH, transfer is possible, but is constrained by the processability of the given structure. For instance, a structure requiring feature unification at a sentence level cannot be transferred to the L2 if the learner's development has just reached the Category procedure stage.

Moving to Russian case marking, DMTH allows the formulation of the following hypotheses: (a) even if learner's L1 has overt case marking, no case marked structure will be transferred until the learner's processing development is ready to do it; (b) at an initial state of development, case marking can not be explained in terms of transfer of the L1.

So far, in the PT literature transfer has been considered from a syntactic point of view. So, how is it possible to formulate a consistent DMTH-based hypothesis for case, a phenomenon at the interface between syntax and morphology? I will test DMTH on structures containing case marking.

If the L1 shares the same case markers of the L2 in a given structure, no prediction can be done about the nature of case marking, because a morpho-phonematic transfer is possible even at an initial stage. In this latter case, the presence of case marking cannot be considered as evidence of feature unification, in that it is not possible to tell whether the case marker is a chunk of code switching. However, if a learner fails in marking a given case in Russian and his/her L1 has the same case marker as Russian, this is strong counterevidence against the Full Transfer Hypothesis.

Accuracy plays a relevant role in the investigation of transfer. Evidence of transfer can be noticed in the rate of accuracy of morphemes, that will be higher in groups in which transfer is active, as assumed in studies like the one by Ionin & Montrul (2010).

To operationalise my DMTH-based hypothesis on the acquisition of case in Russian L2, I limit the scope of my analysis to OBJACC, a case that is used to mark structures belonging to three different stages of acquisition (Category in post-verbal position, Phrasal when the OBJ is modified by an adjective, Sentence in pre-verbal position). My hypotheses are formulated as follows:

- If the learner's L1 does not mark OBJ with case, no prediction can be done about transfer of case into the L2. In terms of overall accuracy, learners whose L1 does not mark case will be less accurate than learners whose L1 displays case marking.
- If the learner's L1 marks the OBJ with ACC, and the forms of ACC are different from the Russian ones, in line with the PT developmental hypothesis, (a) at an initial stage, OBJACC will be marked only in SVO word order, irrespectively of the learner's L1 word order, and (b) OBJACC in OVS word order will be introduced only when the learner has reached the Sentence procedure stage. Once the stage is reached, the

accuracy of learners whose L1 marks the OBJ with ACC is higher than the accuracy of learners whose L1 has no case marking.

- If the learner's L1 marks ACC with the same endings introduced in Russian, no prediction can be made. However, if the learner fails in marking OBJACC in the OVS word order, this is robust evidence against a no transfer position. Learners with such L1s are expected to be the most accurate in marking OBJ with ACC.

2.3.3. The role of cognitive load

In this section, I will introduce a topic not yet explored in PT: how the number of elements occurring in the same structure can affect the developmental path within a stage. If the exchange of information is required between more than two elements, it may involve a higher load of cognitive processing. In order to understand the matter, let us consider the examples in (110).

- (110) a. on celuet svo-ju žen-u
 he kisses own-ACC wife-ACC
 [he kisses his wife]
- b. on celuet svo-ju ljubim-uju mlad-uju žen-u
 he kisses own-ACC beloved-ACC young-ACC wife-ACC
 [he kisses his beloved young wife]

According to my developmental hypothesis, spelled out in § 2.3.1, the procedure activated to mark the case in the NP both in (110a) and in (110b) is the Phrasal procedure. However, in (110a) the feature unification is required between two elements, namely the head noun and its adjective, whereas in (110b) case agreement is required between four elements, the head noun and three adjectives. It would seem likely, that the latter structure will be produced later than the first one.

Alongside with one structure introducing more case marked elements, I will consider also the cognitive load created by phrases embedded in other phrases. In order to process the sentence in (111), as far as case marking is concerned, the activation of the Phrasal

procedure is sufficient. However, whereas in (111a) case is lexically assigned in the VP, in (111b) case is lexically assigned in the VP, configurationally assigned in its embedded NP and case agreement is required in the further embedded NP. In this latter example, the required exchanges of information involving case are more numerous: (i) between the verb and its OBJDAT, (ii) between the NP and its NGEN possessor and (iii) between the GEN noun and its GEN adjective.

- (111) a. volk izmenjal babušk-e
 wolf betrayed granma-DAT
 [the wolf betrayed the grandma]
- b. volk izmenjal babušk-e Krasn-oj Šapočk-i
 wolf betrayed grandma-DAT Red-GEN Hood-GEN
 [the wolf betrayed Red (Riding) Hood's grandma]

Although both in (111a) and in (111b) the activation of the Phrasal procedure is necessary, I hypothesise that soft barriers between these structures exist, in that the more embedded structures a sentence has, the less likely it will be produced by learners who have just reached the Phrasal procedure stage. The concept of soft barriers, spelled out in Bettoni & Di Biase (in press: § 1), refers to language specific intra-stage barriers that can be identified.

In sum, I hypothesise that, within the Phrasal procedure stage, learners develop from minimal feature unification between two elements to exchange of grammatical information between more elements both horizontally – in the same phrase – and vertically – between embedded phrases. If unable to handle more structures, learners will either avoid them or fail to mark all their elements.

2.3.4. Differential Case Theory-based Hypothesis

In § 2.3.1, I have introduced my developmental hypothesis for case morphology in Russian L2. The hypothesis is based on Pienemann's (1998) hierarchy of processing procedures that are identified through the syntactic distance of the required feature unification.

However, the concept of feature unification itself cannot account for the different nature of case marking and case assigning. In this section I will introduce how the Differential Case Theory can fit into the developmental hypothesis for morphology. The table in (112) integrates Artoni & Magnani (2013)'s interface between King (1995)'s case assignments and PT developmental stages. The structures considered in (112) slightly differ from the ones considered in (64), in that here the focus is on the learners' process rather than on the target language.

(112) Interfacing PT's stages for morphological development and King's revised system of case assignment in Russian

DEVELOPMENTAL STAGE		CASE ASSIGNMENT	STRUCTURE
Sentence procedure	↔	grammatical	ACC to OBJ
		configurational	GEN to NP daughter in NP → N NP
Phrasal procedure	↔	lexical	CASE by verb CASE by adjective CASE by preposition
		semantic	INST to <instrument> DAT to <goal> NOM to <agent> ACC to <patient >
Category procedure	↔	proto-configurational	NOM to pre-verbal N ACC to post-verbal N

At the Category procedure stage, learners are unable to exchange information beyond the boundary of the word and disrupt the canonical word order. Therefore, case can only be assigned by position and by semantics. Case assigned by position, here called proto-configurational, refers to the assignment of NOM to pre-verbal noun and ACC to post-verbal noun. This type of case assignment corresponds to the Canonical word order stage both in the Topic Hypothesis (Pienemann *et al.* 2005a) and the Prominence Hypothesis (Bettoni & Di Biase in press: § 1), according to which at an initial stage learners organise their discourse according to the canonical word order (i.e., simple, active, affirmative,

declarative, minimally presuppositional, and pragmatically neutral), which in Russian is SVO.

Case assignment by semantics refers to case mapped directly onto thematic roles. At this stage, learners assign NOM to <agent> and ACC to <patient>, as hypothesised for the initial stage by the Lexical Mapping Hypothesis, according to which at an initial stage learners map <agent> onto SUBJ and <patient> onto OBJ (Bettoni & Di Biase in press: § 1). Also DAT to <goal> and INST to <instrument> could emerge at the Category procedure stage; however, they appear in OBL_{GOAL} and ADJ structures, which are improbable with the learners' short utterances at this stage and require the Default mapping and additional argument stage to be activated.

At the Phrasal procedure stage, two kinds of case assignment require feature unification within the phrase: configurational and lexical case assignment. As far as configurational case assignment, learners can mark the NP by GEN in the structure NP → N NP. As far as lexical case assignment, learners can use case when lexically required by preposition, verb or adjective. However, given the complexity of matching between different heads requiring different cases, we do not assume that all the particular cases lexically required will be learned at this stage. In fact, I claim that learners at this stage are able to process lexical case, once the case feature is annotated in their lexicon, but each feature will be learned one-by-one.

At the Sentence procedure stage, learners assign case to GFs irrespectively of the position in the c-structure. Evidence for this is given by ACC assigned to OBJ in pre-verbal position. Here NOM to SUBJ is not considered as evidence of grammatical case assignment, because NOM is the default case and can thus be introduced without any feature unification. Notice here that the grammatical case assignment interfaces both with the Sentence procedure stage, in that it requires exchange of grammatical information at the sentence level, and with the Non-canonical word order stage, in that evidence of grammatical case assignment is possible only in non-canonical sentences.

In sum, I hypothesise that at the Category procedure stage learners assign case by semantics and by position, at the Phrasal procedure stage they are able to mark case configurationally and when lexically required by the head, and at the Sentence procedure stage they can assign case by GFs.

3. Methodology

This chapter presents the methodology used to test the developmental hypotheses for case morphology in Russian L2 (§ 2.3). The data set comes from a cross-sectional study conducted on 21 learners of Russian L2 from a varied L1 background (Azeri, Georgian, Italian, Romanian, Serbian, Slovak, Slovene and Turkish). Data have been elicited through six communicative tasks. The conversation with the researcher took place between June 2013 and May 2014 in Italy, Azerbaijan, Georgia and Slovakia. In the first section (§ 3.1), I will present the tasks targeting different structures. In the second section (§ 3.2), I will present the learners and their sociolinguistic background: a separate section (§ 3.3) briefly describes the learners' L1s case systems. The last section (§ 3.4) provides information about the corpus and the criteria used to include structures in the data set, as well as other issues concerning the analysis.

3.1. The tasks

In order to elicit the structures considered in my developmental hypotheses, learners were recorded while doing six tasks. In order to avoid metalinguistic speculation, the tasks presented communicative goals and introduced several distractors. Indeed, after the interviews, all the learners have been asked to guess what the aim of the interview was. None of them mentioned case among the possible topics of my research.

The first task, called *Znakomstvo* (Introduction), aimed at relaxing the informant by asking questions about his/her sociolinguistic background: age, L1, other L2s, level of education, profession, years of instruction in Russian L2, years of immersion in a Russian speaking environment and level of proficiency in Russian.

The second task, *Krasnaja Šapočka* (Red Riding Hood), is a story-retelling task. The learners had to tell this well-known tale, helped by a set of pictures emphasising particular details (cf. Appendix A). This task aims at eliciting several structures, such as case within PP, agreement within NP – the two main characters, *Krasnaja Šapočka* (Red Riding Hood)

and *Zloj Volk* (Evil Wolf), are always mentioned in an adjective-noun structure – case within VP, and case in QP (the main character is saved by three hunters). The freedom of choice and the communicative goal given by this task allow different versions of the story.

The third task, *Najdite Različija* (Spot the differences), consists of a comparison between two similar pictures in which some elements differ in number or colour (cf. Appendix B). The learners are asked to name the differences between the two pictures. Here the targeted structures are case agreement between adjective and noun, GEN after N, and case within PP.

The fourth task, *Ešče Krasnaja Šapočka* (Again Red Riding Hood), aims at eliciting case when lexically required by the verb. The learner has to create sentences using the elements shown in three different cards showing a character of the tale, an action and a second participant. Some of the actions shown in the cards involve verbs that require their OBJ to be marked by non-default cases (cf. Appendix C).

The fifth task, *Večerinka* (The party), is an adaptation of 'the animal task' used by Di Biase (2007) to elicit topicalised OBJs in Italian L2 (cf. Appendix D). The learners are introduced a set of characters who join a party. Each character has to bring something with them. Then the learners are shown two pictures, one showing a character, the other an object. The learners have to tell who bring what, by starting with the first picture on the left, sometimes showing a person, sometimes an object. Here the target structure is ACC case in OVS, when the OBJ is topicalised.

The last task, *Detektiv* (Detective), aims at eliciting case marking in questions (cf. Appendix E). The learner is introduced to a crime scene: the house where the murder took place, some weapons and the suspected killers. Then the learner had to ask some questions in order to fulfil his duty as detective.

3.2. The learners

In this section, I will introduce the learners of Russian L2 who took part to my study. For each learner I will mention their sociolinguistic background and other variables, like sex, age, level of education, L1(s), other L2(s), years of instruction in Russian and years of immersion in a Russian-speaking environment.

Every learner is assigned a certain level of proficiency according to the Common European Framework of Reference for Languages (CEFR), which evaluates production in terms of communicative proficiency, rather than grammatical accuracy. It is thus not surprising that the hierarchy between learners in terms of proficiency differs from the hierarchy in terms of PT stages. Since my study is cross-sectional, the learners are presented according to the PT stage they have reached, from beginners to advanced.

As clarified in the next section, the learners have been divided into three groups according to the way case is marked in their L1s. The groups are the followings:

- a. group 1: speakers of Italian;
- b. group 2: speakers of Azeri, Georgian, Rumanian and Turkish;
- c. group 3: speakers of Serbian, Slovene and Slovak.

The learners are thus introduced according to this classification. Data about the learners – identified by two letters – are shown in the tables (113), (114) and (115) in which they are listed in columns from the left to the right from beginners to advanced in terms of proficiency.

(a) Group 1

The first group consists of 7 Italian learners. The table in (113) shows that they are 6 females and 1 male, ranging from 20 to 48 years old. Two learners are enrolled in a Bachelor course, three are finishing their Master and the learner AA has a Master degree, while CI is doing a PhD.

(113) Group 1: the learners

LEARNER	GENDER	AGE	EDUCATION	L1	OTHER L2(S)	PROFICIENCY (CEFR)	INSTRUCTION (YEARS)	IMMERSION (YEARS)
AA	F	48	MA	Italian	English, German, Spanish	A2	1	
CI	F	26	PHD	Italian	English, Spanish, German, French	A2	3	0.1
AE	F	23	BA	Italian	English, French	B1	3	
EL	F	20	BA	Italian	English, German, Spanish	B1	2	
CR	F	22	MA	Italian, English	French, German	B2	3	
MT	M	22	MA	Italian	English, Polish	B2	3	
AN	F	23	MA	Italian	English, French, Spanish, German	C1	5	0.1

The learner AA has studied Russian for one year in a course organised by the Russian consulate. She speaks fluent English, German and Spanish and has an A2 level of Russian. The learner CI studied Russian during her Bachelor studies for three years, when she had the opportunity to spend a couple of months in Russia. She speaks English, Spanish, German and French and her level of Russian at the time of the interview was a basic A2. The learner AE has studied Russian at the university for three years and she declared she was attending private lessons. She speaks English and French and her level of Russian is B1. The learner EL is a student of Russian language and literature at the second year of Bachelor. She speaks English, German and Spanish and her level of Russian is a pre-intermediate B1. The learners CR and MT are both students at the first year of a Master degree and have studied Russian for 3 years. CR is bilingual, being native of Italian and English, and speaks French and German. MT speaks English and Polish, a language learned during a year spent in Poland, where he studied Russian as well. Both CR and MT have a B2 level of proficiency. The learner AN is a student at her last year of Master

degree. She has studied Russian for five years and she is proficient in English, French, Spanish and German. Her level of competence in Russian is C1. She spent a couple of months in Russia, where she attended courses of Russian language and culture and six months in Slovakia, where she attended university courses held in Russian.

(b) Group2

The second group consists of 1 Turkish, 2 Rumanians, 2 Georgians and 2 Azeri. As shown in (114), they are 4 females and 3 males, from 10 to 27 years. The 10 years old girl is still attending primary school, while 4 learners are studying in a Bachelor course and 2 have finished their Master studies.

(114) Group 2: the learners

LEARNER	GENDER	AGE	EDUCATION	L1	OTHER L2(S)	PROFICIENCY (CEFR)	INSTRUCTION (YEARS)	IMMERSION (YEARS)
MU	M	22	BA	Turkish	English	A1	0.5	
DN	F	24	BA	Rumanian	English, Italian	B1	5	5
LK	F	25	MA	Georgian	English, French	B2	5	3
BD	M	27	MA	Georgian	English	B2		3
CH	F	10	School	Azeri	Turkish, English	C1		2
NA	F	22	BA	Rumanian	Italian, English, French, Spanish	C2	8	3
BB	M	21	BA	Azeri	English, Turkish, Italian, Swedish	C2	6	10

The learner MU is Turkish and has studied Russian for six months in a university course in Slovakia. He speaks good English and his level of Russian is A1. The learner DN is Rumanian and studied Russian for five years at the school in a Russian-speaking region of Moldova. She speaks also English and French and her level of Russian at the time of the

interview was B1. The learners LK and BD are Georgian who were exposed for three years to Russian. While LK studied Russian for 5 years at the primary school, BD has never attended any course of Russian language. Their level of Russian is B2 and both speak good English – a language mastered during their Master studies held in the Netherlands. LK speaks also good French. CH is an Azeri girl. She was born in Sweden and she has lived for 2 years within a Russian speaking community in Azerbaijan. She speaks also Turkish and some English and her level of Russian is C1. The learner NA is Rumanian and attended a Russian school for 3 years. She has studied Russian for 8 years and her level of proficiency is very high. She also speaks fluent Italian and good English, French and Spanish. The learner BB is an Azeri student of a Bachelor course in Translation. He masters English, Italian, Turkish and Swedish. He has studied Russian for 6 years and has spent 10 years in an environment in which he had to practice Russian every day with friends and some relatives.

(c) Group3

The third group consists of 6 Slovaks, 1 Serbian and 1 Slovene. The table in (115) shows that this group of speakers of Slavonic languages is composed by 6 females and 1 male, aged from 19 to 35 years old, all university students. The learners are here listed according to their level of proficiency.

(115) Group 3: the learners

LEARNER	GENDER	AGE	EDUCATION	L1	OTHER L2(S)	PROFICIENCY (CEFR)	INSTRUCTION (YEARS)	IMMERSION (YEARS)
KA	F	20	BA	Slovak	French, English, Spanish	A2	0.5	
PA	M	21	BA	Slovak	English, Spanish, Czech, Arabic	A2	0.5	
JO	F	22	BA	Serbian	Italian, English, Spanish	B1	2	
MR	F	35	MA	Slovene	English, German, Croatian	B1		2
DA	F	19	BA	Slovak	English, German, Croatian	B1	0.5	
BE	F	20	BA	Slovak	English, Hungarian, Croatian	B2	1	
DO	F	22	MA	Slovak	English, French, Croatian, Turkish, German	C2	4	0.5

The learners KA and PA are Slovak students at a Bachelor course in Languages and Translation. KA is nearly native speaker of French and speaks good English and Spanish. PA is highly proficient in English, Spanish and Czech and speaks some Arabic. Both have attended a six months course of Russian at the university and have reached an A2 level of proficiency. JO is a Serbian student at her second year of Bachelor in Foreign Languages and Literatures. She speaks also good Italian and English and her level of Russian is B1. MR is a Slovene student attending her second Master course. She has never studied Russian in a language course, but she spent about two years in the Caucasus and Central Asia in Russian speaking countries, where she had to learn it for everyday communication with local people. She is fluent in English, German and Croatian and her level of Russian is B1. DA and BE are two Slovak students at their first year of Bachelor in Foreign

Languages and they both study also English and Croatian. In addition, DA speaks some German, while BE speaks some Hungarian, because she comes from a region in Slovakia where the majority of population is Hungarian. DA has a B1 level of Russian, while BE has a B2 level and six months of instruction in Russian language before the beginning of the university. The more proficient learner is DO, a Slovak student of a Master course in Translation, who is nearly native of Russian, fluent in English, French and Croatian and she speaks good German and Turkish.

3.3. The L1 background

In this section, I will present how case is marked in the learners' L1s. As already mentioned in the previous section, in order to account for the DMTH the learners are divided into 3 groups, according to their L1s as follows:

- a. Group 1: speakers of Italian, a language that marks case only in a few personal pronouns
- b. Group 2: speakers of Azeri, Georgian, Rumanian and Turkish, all languages with overt case marking
- c. Group 3: speakers of Serbian, Slovene and Slovak, all Slavic languages that overtly mark ACC in the same way as Russian does.

(a) Group 1

Italian is a language with a rich verb and noun morphology, which marks case only on certain pronouns and clitics, as shown in (116). The 1st and 2nd person singular pronouns have different NOM and ACC forms, the latter being used also in PP as in *per me* 'for me'. The 3rd person singular clitics – which are considered in LFG as markers on the verb (Dalrymple 2001: 80) – display an ACC / DAT alternation.

(116) Case-marked pronouns and clitics in Italian

	Person	Number	Gender	NOMINATIVE	ACCUSATIVE	DATIVE
Pronoun	1 st	SG		io	me	
	2 nd	SG		tu	te	
Clitic	3 rd	SG	FEM		la	le
	3 rd	SG	MASC		lo	gli

As far as word order concerns, Italian can be listed among the non-configurational languages but, unlike Russian, GFs are marked mainly by head marking strategies. Let us compare (117a), a canonical SVO sentence, with (117b), a non-canonical OVS displaying a TOP_{OBJ}. While in (117a) the SUBJ is determined by SUBJ-verb agreement of person and number and the OBJ marked by its post-verbal position, in (117b) the SUBJ is determined by agreement in person and number with the auxiliary and the OBJ is indicated by the coreferential resumptive clitic and agreement with the lexical verb.

- (117) a. Mattia ha visto le ragazze
 Mattia.3.SG saw.3.SG the girls
- b. le ragazze le ha viste Mattia
 the girls.PL.FEM cl.PL.FEM aux.3.SG seen.PL.FEM Mattia.3.SG

(b) Group 2

Azeri, Turkish, Georgian and Rumanian have overt case markings that highly differ from the Russian system. I will introduce one by one how case is marked in Azeri and Turkish, in Georgian and in Rumanian.

In Azeri and Turkish, two languages belonging to the same Turkic language family, case is marked with an agglutinative strategy whereby each morpheme carries only one piece of grammatical information. There are six cases in Azeri and Turkish: nominative, accusative, genitive, dative, locative and ablative. The table in (118) shows the suffixes used in Azeri and Turkish to mark case on nominals (nouns, pronouns and adjectives). Because of the phenomenon of vowel harmony active in both languages, the vowels in the

suffixes vary according to the vowel in the stem.

(118) Azeri and Turkish case-marking suffixes (after Lewis 1967: 34 and Khudzarov 2009: 95)

CASES	AZERI	TURKISH
NOMINATIVE	-∅	-∅
ACCUSATIVE	-i / -ü / -ı / -u	-i / -ü / -ı / -u
GENITIVE	-(n)in / -(n)ün / -(n)in / -(n)un	-(n)in / -(n)ün / -(n)in / -(n)un
DATIVE	-(y)e / -(y)a	-(y)e / -(y)a
LOCATIVE	-da / -de	-de / -da / -te / -ta
ABLATIVE	-den / -dan	-den / -dan / -ten / -tan

Case is used in NP and in Postpositional Phrases. Both in Azeri and Turkish word order is variable. The unmarked word order is SOV, but all the six possible permutations among the core elements are possible for discourse-pragmatic reasons. The element immediately preceding the verb is focalised, the element following the verb is background information, while the first position marks TOP (Göksel & Kerslake 2005: 343-347).

In Georgian case is marked on nouns and adjectives with an agglutinative strategy. Georgian displays a complex split-ergativity system, which interacts with tense, aspect and verbal class, as shown in (119).

(119) Split ergativity system in Georgian (Aronson 1982: 462)

CLASS	SERIES	SUBJ	OBJ	IND OBJ
I. transitive	present / future	NOM	DAT	DAT
	aorist	ERG	NOM	DAT
	perfect	DAT	NOM	postposition – <i>tvis</i>

II. passives and change of states		NOM	/	DAT

III. intransitive activities	present / future	NOM	DAT	DAT
	aorist	ERG	NOM	DAT
	perfect	DAT	NOM	postposition – <i>tvis</i>

IV. verbs of feeling, emotion, states of being		DAT	NOM	/

There are seven cases in Georgian: nominative, ergative, dative, genitive, instrumental, adverbial and vocative. The declension paradigm of case markers on nouns is shown in (120), whereas (121) shows the case markers on adjectives. Notice that only adjectives with a consonant stem inflect, while adjectives with a vowel stem do not inflect at all.

(120) Georgian case-marking paradigm: Nouns (after Aronson 1982: 460)

CASES	SINGULAR			PLURAL		
	CONSONANT STEM	TRUNCATING VOCALIC STEMS		NON- TRUNCATING VOCALIC STEMS	UNMARKED	STYLISTICALLY MARKED
		-a	-e			
NOM	-i			-∅	-eb-i	-ni
ERG	-ma			-m	-eb-ma	-t / -ta
DAT			-s / -∅		-eb-s / -eb-∅	-t / -ta
GEN		-is		-s	-eb-is	-t / -ta
INST		-it		-ti		-eb-it
ADV		-ad		-d		-eb-ad
VOC	-o			-o / -∅ / -v	eb-o	-no

(121) Georgian case-marking paradigm: Adjectives (after Aronson 1982: 461)

CASES	FORMS
NOMINATIVE	-i
ERGATIVE	-ma
DATIVE	-∅
GENITIVE	-i
INSTRUMENTAL	-i
ADVERBIAL	-∅
VOCATIVE	-o

Case can appear in Postpositional Phrases. Word order in Georgian is motivated by a TOP-FOC organisation of the sentence, rather than a configurational SUBJ-OBJ pattern. The topic precedes the focus and the focus immediately precedes the verb. Therefore, SOV and

OVS are used to focalise the OBJ, whereas SVO and OSV are used to focalise the SUBJ.

Amongst the Romance languages, Rumanian is the only one that displays overt case marking on nominals. In Rumanian there are five cases: nominative, accusative, genitive, dative and vocative. However, only personal pronouns occur in different forms according to all the five case, while if we consider only nouns and adjectives the number of cases can be reduced to three: nominative-accusative, dative-genitive and vocative. The table in (122) shows the five case system marking of Rumanian pronouns, while the three case system of nouns is shown in (123) and (124), when nouns are definite and when they are indefinite respectively. In Rumanian the article is enclitic and thus interacts with case markers.

(122) Rumanian case-marking paradigm: Pronouns (after Cojocaru 2003: 461)

NUMBER	PERSON	NOMINATIVE	ACCUSATIVE		DATIVE	
			STRESSED	UNSTRESSED	STRESSED	UNSTRESSED
SG	1 ST	eu	pe mine	mă	mie	îmi
	2 ND	tu	pe tine	te	ție	ți
	3 RD MASC	el	pe el	il	lui	îi
	3 RD FEM	ea	pe ea	o	ei	
PL	1 ST	noi	pe noi	ne	nouă	ne
	2 ND	voi	pe voi	vă	vouă	vă
	3 RD MASC	ei	pe ei	ii		
	3 RD FEM	ele	pe ele	le	lor	le

(123) Rumanian case-marking paradigm: Definite nouns (after Cojocaru 2003: 33)

CASE	MASCULINE		FEMININE		NEUTER	
	SG	PL	SG	PL	SG	PL
NOM-ACC	-ul	-i	-a	-ele	-ul	-ele
VOC	-ule	-ilor	-o	-elor	-le	-lo
GEN-DAT	-ului	-ilor	-ei	-elor	-ului	-elor

(124) Rumanian case-marking paradigm: Indefinite nouns (after Cojocaru 2003: 33)

CASE	MASCULINE		FEMININE		NEUTER	
	SG	PL	SG	PL	SG	PL
NOM-ACC	-ø	-i	-ă	-e	-ø	-ă
VOC	-ule	-ilor	-o	-elor	-le	-lo
GEN-DAT	-ø	-i	-e	-e	-ø	-ă

(c) *Group 3*

In Serbian, Slovak and Slovene case is marked on nouns, pronouns and adjectives, enmeshed with other nominal features, such as gender, animacy, number and class. Even though I will present separate tables for the noun declension in each language, the reader can appreciate that the case systems of the three languages are almost identical and very similar to the Russian one (cf. (14) in § 1.2.1).

In Serbian there are seven cases: nominative, vocative, accusative, genitive, dative, instrumental and locative. The table in (125) shows the case paradigm for nouns and how forms vary according to gender (masculine, feminine or neuter), number (singular or plural) and class.

(125) Serbian case-marking paradigm: Nouns (after Derbshire 1993: 301-2)

S I N G U L A R						
	MASCULINE		NEUTER		FEMININE	
	HARD STEM	SOFT STEM	-o STEM	-e STEM	VOWEL STEM	CONSONANT STEM
NOM	-∅	-∅	-o	-e	-a	-∅
VOC	-e	-u	-o	-e	-o	-∅
ACC	-∅	-a	-o	-e	-u	-∅
GEN	-a	-a	-a	-a	-e	-i
DAT	-u	-u	-u	-u	-i	-i
INST	-om	-em	-om	-em	-om	-i / -ju
LOC	-u	-u	-u	-u	-a	-i

P L U R A L						
	MASCULINE		NEUTER		FEMININE	
	HARD STEM	SOFT STEM	-o STEM	-e STEM	VOWEL STEM	CONSONANT STEM
NOM	-i	-evi	-a	-a	-e	-i
VOC	-i	-evi	-a	-a	-e	-i
ACC	-e	-eve	-a	-a	-e	-i
GEN	-a	-eva	-a	-a	-a	-i
DAT	-ima	-evima	-ima	-ima	-ama	-ima
INST	-ima	-evima	-ima	-ima	-ama	-ima
LOC	-ima	-evima	-ima	-ima	-ama	-ima

In Slovak there are six cases: nominative, accusative, genitive, dative, instrumental and locative. As shown in (126), case markers vary according to animacy, gender (masculine, feminine or neuter), number (singular or plural) and class.

(126) Slovak case-marking paradigm: Nouns

S I N G U L A R						
	MASCULINE		NEUTER		FEMININE	
	ANIMATE	INANIMATE	-o STEM	-e STEM	VOWEL STEM	CONSONANT STEM
NOM	-∅	-∅	-o	-e	-a	-∅
ACC	-a	-∅	-o	-e	-u	-∅
GEN	-a	-a	-a	-a	-y / -e	-e
DAT	-ovi	-u	-u	-u	-e / -i	-i
INST	-om	-om	-om	-om	-ou	-ou
LOC	-ovi	-e / -i	-e	-i	-e / -i	-i

P L U R A L						
	MASCULINE		NEUTER		FEMININE	
	ANIMATE	INANIMATE	-o STEM	-e STEM	VOWEL STEM	CONSONANT STEM
NOM	-i	-y / -e	-a	-ia	-y / -e	-e
ACC	-ov	-y / -e	-a	-ia	-y / -e	-e
GEN	-ov	-ov	-∅	-∅	-∅	-i
DAT	-om	-om	-am	-iam	-am	-am
INST	-mi	-mi	-ami	-ami	-ami	-ami
LOC	-och	-och	-ach	-iach	-ach	-ach

In Slovene there are six cases: nominative, genitive, dative, accusative, instrumental and locative. As in the already mentioned Slavic languages, case markers vary according to animacy, class and number. A peculiarity of Slovene is the use of dual number, alongside with singular and plural. The table in (127) shows the declension paradigm for nouns.

(127) Slovene case-marking paradigm: Nouns (after Kacin 1972: 26-35)

S I N G U L A R						
	MASCULINE		NEUTER		FEMININE	
	ANIMATE	INANIMATE	-o STEM	-e STEM	1ST CLASS	2ND CLASS
NOM	-∅	-∅	-o	-e	-a	-i
ACC	-a	-∅	-o	-e	-o	-∅
GEN	-a	-a	-a	-a	-e	-e
DAT	-u	-u	-u	-u	-i	-i
INST	-em	-om	-om	-em	-o	-jo
LOC	-u	-u	-u	-u	-i	-i

D U A L						
	MASCULINE		NEUTER		FEMININE	
	ANIMATE	INANIMATE	-o STEM	-e STEM	1ST CLASS	2ND CLASS
NOM	-a	-a	-i	-i	-i	-i
ACC	-a	-e	-i	-i	-i	-i
GEN	-ev	-a	-∅	-∅	-∅	--∅
DAT	-ema	-oma	-oma	-ema	-ama	-ama
INST	-ema	-oma	-oma	-ema	-ama	-ama
LOC	-ih	-ih	-ih	-ih	-ah	-ah

P L U R A L						
	MASCULINE		NEUTER		FEMININE	
	ANIMATE	INANIMATE	-o STEM	-e STEM	1ST CLASS	2ND CLASS
NOM	-i	-i	-a	-a	-e	-e
ACC	-e	-e	-a	-a	-e	-e
GEN	-ev	-ov	-∅	-∅	-∅	-∅
DAT	-em	-om	-om	-em	-am	-am
INST	-i	-i	-i	-i	-ami	-ami
LOC	-ih	-ih	-ih	-ih	-ah	-ah

In all the Slavonic languages considered here, case can appear in several phrases (NP, VP, PP, AP and QP) and can be lexically, grammatically, configurationally or semantically assigned. As far as word order concerns, the canonical word order in Serbian, Slovak and Slovene is SVO, whereas all the six possible permutations are possible for discourse-pragmatic reasons. In sum, from a syntactic point of view, there is no difference

between case in Russian and in these three languages, which are typologically very close and genetically members of the same family of Slavic languages.

3.4. The corpus

In this section, I will present the corpus collected among the 21 learners of Russian L2. Not their whole production is relevant for my research. I have thus set some criteria in order to retain the relevant items. After mentioning the operational criteria for determining the acquisition of a given structure, at the end of this section will I describe the corpus and give the numbers of structures analysed for each learner.

After data collection, I transcribed the dialogues in an excel spreadsheet, in Latin characters (cf. Appendix F). The criteria for transcription are as follows in (128).

(128)

- In case of vowel neutralisation or mispronounce of certain phones, the target form has been typed.
- . indicates a short pause
- .. indicates a long pause
- # indicates incomprehensible chunks
- ? indicates interrogative intonation
- 9 indicates repetition of a word already introduced by the interviewer

Each line contains one clause. All case marked words have been highlighted in bold and their endings listed in a separate column. In a further column, the type of constituent in which case marking appear is specified, according to the following labels in (129).

(129)

- NP: case marking within noun phrase
- VP: case marking within verb phrase
- PP: case marking within prepositional phrase
- QP: case marking within quantifier phrase (including numeral and negation – cf. King 1995)
- AP: case marking within adjectival phrase
- NP VP: case marking on topicalised OBJ or OBL_{GOAL}

Excluded from my analysis are all the cases that appear in formulaic utterances, such as *menja zovut Marja* ‘my name is Mary’ and *mne dvadcat’ tri goda* ‘I’m twenty three years old’, and also information about the place and institution where the learner has studied Russian, such as *ja učus’ v universitete v Verone* ‘I study at the university in Verona’, because of a high probability of having been learned as an unanalysed chunk.

When more than one case is introduced in one clause, and thus case occurs in embedded structures, different columns codify the respective case markers. The rightmost column is the lower its node, as exemplified in (130), a line of AN’s production. The example in (130) – *potom u devoški pervoj kartinki est’ tёмnye volosy* ‘then the girl in the first picture has dark hair’ – is to be read as: in the line number 58, during the second task, the learner AN produces case in PP with an embedded NP, which is mother of another NP. The column titled Form 1, 2 and 3 show the endings by AN in the respective phrases.

(130) AN: line with embedded case marked structures

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	EMB 2	FORM 2	EMB 3	FORM 3
58	2	AN	potom u devoshki pervoj kartinki est tjomnye volosy	PP	i	NP	i	NP	oj

Finally, in another column a label case is given to each form.

Case is evidence of dependency at the syntactic level while the endings introduced in the learners’ production are morphological elements. Since the learner’s interlanguage is a variable system, I set some criteria that will establish correspondences between the endings in the learners’ production and cases. In case of target-like case marking, the structure has been considered correct, as exemplified in (131a). In case of unambiguously wrong case marking, the structure has been labelled with an upper star preceding the wrong case, as in (131b). In case of default NOM when another case is required, the structure has been signalled by NOM preceded by upper star, as in (131c). In case of non-target case marking due to wrong gender or class assignment, the structure is considered correct, as in (131d) where EL correctly marks the feminine noun *balerina* ‘dancer’ by INST but with the masculine ending *-om*. In case of ambiguous case marking, a question mark indicates uncertain case assignment, as in (131e).

(131) a. BD: target-like case marking

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUC 1
10	INTRO	BD	iz ukrainy tozhe	PP	y	P Ngen

b. LK: unambiguous wrong case marking

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUC 1
9	INTRO	LK	tol'ko s uchiteljam razgovorivala	PP	am	P N*dat

c. AE: lack of marking

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUC 1
2	INTRO	AE	dvadcat tri god	QP	∅	Q N*nom

d. EL: correct case, wrong gender assignment

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUC 1
67	3	EL	ona xochet stat' balerinom	VP	om	V Ninst

e. AA: ambiguous case assignment

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUC 1
3	INTRO	AA	v oktibrja	PP	a	P N*?

To determine whether a learner has reached a given stage, I have set three criteria – listed in (132).

(132) A structure is acquired if the learner produces:

1. at least three correct cases in the given structure,
2. at least on two different lexical items,
3. of which at least one has a low degree of ambiguity due to case syncretism.

These operational criteria are in line with the concept of emergence criterion spelled out in Pallotti (2007) and adopted in Bettoni & Di Biase (in press: § 1). However, because not only emergence but also accuracy is considered in my further analysis, it will be measured as the ratio between target-like markers and contexts per structure.

In sum, the corpus considered consists of 1181 case markers, distributed among 21 learners – grouped into three subgroups – as follows:

Group 1: total of 350 case markings, 24 by AA, 50 by CI, 34 by AE, 46 by EL, 71 by CR, 66 by MT, 59 by AN.

Group 2: total of 458 case markings, 0 by MU, 63 by DN, 60 by LK, 73 by BD, 85 by CH, 76 by NA, 101 by BB.

Group 3: total of 373 case markings, 44 by KA, 77 by PA, 33 by JO, 42 by MR, 71 by DA, 35 by BE, 71 by DO.

The average of case markers produced by each learner is 56, ranging from no context – and thus no occurrences – in MU to 101 by BB.

4. Analysis

In this chapter, I will present the analysis conducted on the data set described in § 3.4. In the following section (§ 4.1), the analysis will be organised according to the learners' three groups. This allows to test the Developmentally Moderated Transfer Hypothesis, which will be dealt with in a further section (§ 4.2). In a third section (§ 4.3), data will be analysed in terms of cognitive loading. Finally, in § 4.4 I will present how different learners can use different case assignments, according to the Differential Case Theory.

4.1. Testing the Developmental Hypothesis

In this section, I will test the development hypotheses for case morphology according to the PT stages, as illustrated in § 2.3.1. In the tables, the learners who have reached higher stages of PT are on the right, whereas lower stages of acquisition are on the left. Then the order within the same stage is determined by the learners' accuracy. PT developmental stages are listed bottom up and separated by a continuous black line, while dotted lines separate structures belonging to the same stage of acquisition. A plus and a minus indicate respectively a correct and a wrong case marker, as described in the following paragraph.

At the Category procedure stage, a plus indicates presence of ACC marker on a noun in default post-verbal position. As already mentioned, ACC marking of nouns in post-verbal position is not evidence of exchange of grammatical information, since ACC can be assigned by position. At this level, minuses are not considered, because a default NOM would be evidence of lack of feature unification between the verb and the noun within the VP, a structure that requires the Phrasal procedure to be activated.

Moving to the Phrasal procedure stage, within PP morphology, I have excluded all the nouns marked by *-e*, the default ending in PP. A plus thus indicates correct case marking, and a minus indicates default NOM, which is evidence of lack of case assignment.

Within the NP, I have considered GEN governed by NP and agreement between noun and adjective. In the first case, a plus indicates the presence of GEN, while a minus indicates the presence of any case other than GEN. In the latter case, a plus indicates presence of case agreement between the two constituents; a minus indicates lack of agreement, usually default NOM on the adjective.

Within the VP, I have excluded the *-u* marker, which might be assigned to post-verbal nouns by position. A plus thus indicates correct case other than ACC within the VP, a minus indicates lack of case assignment, that is, default NOM.

Within the QP, a plus indicates presence of GEN, a minus lack of it, that is, default NOM or any case other than GEN.

Within the AP, a plus indicates presence of any case other than default NOM, which is signalled by a minus.

At the Sentence procedure stage, evidence of feature unification entails the correct use of case marking on preverbal OBJ or OBL_{GOAL}. Any case other than the one required is signalled by a minus.

The stages learners have reached are signalled in the table by a continuous thicker line, while a jagged line indicates steps within the stages, that is, sequences of development empirically found among structures belonging to the same stage of acquisition.

(a) Group 1

The first group, composed by Italian L1 speakers of Russian L2, produced 350 case markers, distributed among the learners as shown in the table (133).

(133) Group 1: PT developmental stages of the acquisition of case morphology

STAGE	OUTCOME	STRUCTURE	AA	CI	AE	EL	CR	MT	AN
SENTENCE PROCEDURE	Inter-phrasal morphology	TOPOBL-DAT V	0	0	0	0	+1	+1	+3
		TOPOBJ-ACC V	-3	-4	-4	-4	+4 -1	+3 -1	+6
PHRASAL PROCEDURE	AP morphology	A NCASE	0	0	0	0	0	0	0
	QP morphology	Q NGEN	0	+1	-2	+2	+2	+1	+2
	NP morphology	N NGEN	0	-1	+2 -4	+1	+1	+6	+2
		ACASE _i NCASE _i	0	+4 -1	0	+3 -3	+17 -1	+8	+12
	VP morphology	V NCASE	-11	-12	+3 -4	+2 -7	+5 -2	+8 -2	+4
	PP morphology	P NCASE	-7	-14	+3 -4	+7	+11 -2	+16 -2	+13
CATEGORY PROCEDURE	Lexical form variation	post-verbal NACC	+3	+5	+5	+5	+10	+10	+8

At the Category procedure stage, all the learners mark ACC in post-verbal position. The beginner AA marks ACC three times on two different lexical items, as exemplified in (134).

(134) AA: krasnaja šačka videt babušk-u
red hood sees grandmother-ACC

The learners CI and AE produce five ACC occurrences each, whereas the more advanced CR and MT mark ACC in post-verbal position ten times. The learner AN introduces ACC in the default position eight times. Only AE and CR mark ACC on pronouns in post-verbal position, twice and once respectively, as exemplified in (135).

(135) AE: ejo *mam-e *sprasi ejo
 her *mum-? *ask her-ACC

In sum, all the learners can mark case at the Category procedure stage, but they differ in terms of quantity, because the more advanced learners (CR, MT and AN) produce about two times more occurrences than the beginners (AA, CI, AE and EL). The production of ACC marked pronouns is scarce.

At the Phrasal procedure stage, different structures have been considered. Within the PP, the learners AA and CI use NOM 7 and 14 times respectively, as in (136).

(136) AA: vidjat *volk v *krovat
 (they)see *wolf.NOM in *bed.NOM

In addition, AA produces only NOM in PP, whereas CI produces only one occurrence of *-e*, the ending I have excluded in my analysis for its high level of ambiguity and its default use as PREP marker in the PP as evidence of the activation of the Phrasal procedure. The learner AE correctly marks case in the PP three times using the unambiguous INST marker *-om* onto two lexical items – *nož* ‘knife’ and *Aleksandr* ‘Alexander’, as in (137), and NOM four times. She has thus acquired the structure.

(137) AE: tolko s aleksandr-om
 only with Alexander-INST

The learner EL produces seven occurrences of case within the PP with several endings, namely, *-e*, *-y*, *-oj*, *-om* and *-ami*, as in (138). She never uses NOM in this structure.

(138) EL: chodit' v centr-e s mo-imi druz'j-ami
 walk in centre-PREP with my-INST friends-INST

The learners CR and MT produce 11 and 16 occurrences of case within the PP respectively and both use NOM in the PP two times. They introduce a variety of endings, such as *-e*, *-y*, *-oj*, *-ej*, *-om*, *-a*, *-ach*, *-ami* and *-u*.

Finally, the learner AN is always accurate and produces 13 occurrences of case within the PP. Her production includes the endings *-e*, *-y*, *-oj*, *-ej*, *-a* and the unambiguous INST

markers *-om* and *-ami*, as in (139).

(139) AN: vybrat' meždu dvu-mja dorog-ami
 choose between two-INST roads-INST

Moving to case within the VP, the table in (133) shows only the numbers of post-verbal non-ACC markers, whereas a minus indicates default NOM, and thus evidence of lack of case assignment.

The learners AA and CI produce default NOM 11 and 12 times respectively and never produce non-ACC case within the VP, as exemplified in (140). For this reason, I can safely state that they cannot produce case within the VP.

(140) CI: volk vstrečaeť *babušk-a
 wolf meets *grandmother-NOM

The learners AE and EL produce three and two non-ACC cases respectively in post-verbal position, as in (141), although they are quite inaccurate – they produce default NOM in the VP four and seven times respectively –.

(141) EL: ona chočet stat' balerin-om
 she wants become dancer-INST

Two occurrences in EL's production and the only two non-ACC cases in AE within the VP consist of case marked pronouns, as in (142).

(142) AE: on skaži emu
 he say? him.DAT

The more advanced learners CR and MT produce five and eight non-ACC cases respectively, as in (143), and only two NOM markers each in the VP. Two out of five occurrences in CR's production consist of pronouns.

(143) MT: ona ljubít košek-ø
 she loves cats-ACC

The most advanced learner AN produces four occurrences of non-ACC cases, all INST, as in (144), and never uses NOM in the VP.

(144) AN: ona z анимаetsja gitar-om i trub-oj
 she practices guitar-INST and trumpet-INST

Within the NP, first I will show data about case agreement between adjective and noun, and then GEN when required by the preceding noun.

The learners AA and AE never produce case agreement between adjective and noun.

In CI's production, we can find four occurrences of agreement between adjective and noun, but they all involve the same lexical item *Krasnaja Šapočka* 'Red Riding Hood', as in (145), and thus are not evidence of acquisition of the structure.

(145) CI: mama zdajut krasnu-ju šapočk-u
 mum ?gives red-ACC hood-ACC

in addition, the learner CI fails once in marking the correct case on the adjective, as shown in (146).

(146) CI: v *paduanskoe universitet-e
 in *Paduan.NOM university-PREP

The learner EL for three times marks the adjective with NOM instead of introducing the same case as in the noun, as in (147).

(147) EL: ja rabotaju v *turističeskij galer-e
 I work in *touristic.NOM gallery-PREP

However, we can state that agreement between adjective and noun in the NP has emerged in EL's production in that she produces three occurrences of agreement on three different lexical items and with the unambiguous INST markers *-imi* and *-ami*, as in (148).

(148) EL: chodit' v centr-e s mo-imi druž'j-ami
 walk in centre-PREP with my-INST friends-INST

The advanced learners CR, MT and AN use a convincing number of case agreement between adjective and noun, namely, 17 by CR, 8 by MT and 12 by AN, as exemplified in (149).

(149) MT: volosy perv-oj devočk-i
 hair first-GEN girl-GEN

The rate of accuracy is very high, because agreement is missed only in one case by CR, as shown in (150), where there is a case mismatching between a NOM noun and two adjectives marked by GEN.

(150) CR: razgovorivaju na russkom s *dv-uch *russk-ich *družja
 (I) speak in Russian with *two-GEN *Russian-GEN*friends.NOM

As far as GEN required by noun in the NP, only the learner MT produces a convincing number of structures, a total of six. The beginner AA never introduces such a structure, whereas the learner CI fails in marking the only structure she produces, as shown in (151).

(151) CI: imja *ubit-ø
 name *dead-NOM
 [the dead's name]

The learner AE correctly marks two GEN and uses default NOM four times instead of GEN, even in the same sentence, as shown in (152a) and (152b).

(152) AE: a. idti domoj babušk-i
 go house grandmother-GEN
 [visit (her) grandmother]

b. idti domoj *babušk-a
 go house *grandmother-NOM
 [visit (her) grandmother]

The learners EL, CR and AN never fail in marking GEN in this structure, but their production is scarce, that is, one occurrences in EL and CR and two in AN, as exemplified in (153).

(153) AN: on vychodit v dom babušk-i
 he goes out into house grandmother-GEN
 [he leaves to grandmother's house]

Case within the QP is rare and none of the learners produces a sufficient number of occurrences to state that the structure has emerged.

The learner AA never produces such a structure, whereas AE produces twice a default NOM instead of the required GEN, as in (154).

(154) AE: tri *god nazad
 three *year.NOM ago

The other learners, namely, CI, EL, CR, MT and AN, produce only one or two GEN each in the QP, as exemplified in (155), and they are always accurate.

(155) MT: cvet-a knig-ø naoborot
 colour-NOM book-GEN contrary

The use of case within the AP is very rare in the target language and is never introduced in the learners' production.

At the Sentence procedure stage, the correct use of ACC markers and DAT markers in pre-verbal position are evidence of inter-phrasal case assignment, which is required by TOP_{OBJ} and TOP_{OBL}.

As far as TOP_{OBJ}, a structure prompted by the party task, the learners AA, CI, AE and EL always fail in marking the OBJ by ACC and use the default NOM, as in (156).

(156) AE: *butylk-a prinjos medsestr-a
 *bottle-NOM brought nurse-NOM
 [a bottle, the nurse brought]

Among this group, the learner AA uses a NOM marked pronoun in pre-verbal position in the formula shown in (157).

(157) AA: kak *oni zavut?
how *they.nom (they) call?
[how do they call them? i.e., what is their name?]

CR and MT produce a sufficient number of ACC markers, that is, four in CR's production and three in MT's production, as exemplified in (158).

(158) CR: gitar-u prinjos balerin-a
guitar-ACC brought dancer-NOM
[a guitar, the dancer brought]

Because in (159) SUBJ-V agreement is incorrect, case is the only means by which GFs are determined. Both the learners CR and MT fail one time to mark ACC in pre-verbal position, as in (159).

(159) CR: *butylk-a prinjos medsestr-a
*bottle-NOM brought nurse-NOM
[a bottle, the nurse brought]

As far as the use of case marked pronouns, the learner MT produces one occurrence of wrong NOM pronoun in pre-verbal position, as exemplified in (160), while the learner CR produces one correct ACC pronoun, as shown in (161).

(160) MT: *kto on ubil?
*who.NOM he.NOM killed?
[whom did he kill?]

(161) CR: kogo alěš-a ubil?
whom.ACC Alěša-NOM killed?

The advanced learner AN produces six occurrences of correct ACC in pre-verbal position,

as exemplified in (162), in particular five markers on nouns and one ACC pronoun.

- (162) AN: butylk-u prinesla medsestr-a
 bottle-ACC brought nurse-NOM
 [a bottle, the nurse brought]

Moving to TOP_{OBL}, the learners AA, CI, AE and EL never introduce this structure. The learner CR and MT introduce one occurrence of pre-verbal DAT, which is required by the exceptional verb *nravit'sja* 'like', as shown in (163).

- (163) CR: krasn-oj šapočk-e nravitsja gruš-a
 Red-DAT Hood-DAT likes pear-NOM
 [Red Riding Hood likes pear]

Although accurate, one occurrence is not enough to state that CR and MT have acquired the structure.

Finally, the advanced learner AN produces three occurrences of DAT in pre-verbal position, two marked on nouns and one on a pronoun, as in (164).

- (164) AN: volk ej sprašivaet
 wolf.NOM her.DAT asks
 [the wolf asks her]

Summarising the analysis of learners in Group 1, the learners AA and CI have reached the Category procedure stage, as proved by their ability of marking ACC in post-verbal position. When case is introduced by structures that require grammatical exchange of information, these learners often use the default NOM. The learner CI seems to be more advanced than AA in that she correctly marks one noun by GEN in the QP and introduces adjective noun agreement four times on the same lexical items. Thus the evidence for development beyond this stage is insufficient.

The learners AE and EL have also safely reached the Phrasal procedure stage, but with differences in number of emerged structures and in terms of accuracy. In particular, evidence of emergence in the learner AE can be found in case within the PP and the VP;

however, accuracy in the PP and in the VP is very scarce and the number of wrong NOM is higher than the correct case markers. Default NOM is used by AE also within the QP and in the NP. The learner EL is able to mark case within the PP and the NP, as far as case agreement between the adjective and the noun concerns. She introduces case also in the VP, in the QP and GEN required by the NP, but the number of occurrences is not sufficient to state that the structures have emerged. In terms of accuracy, EL never uses the wrong NOM in the PP and in the QP; on the other hand, in the NP the number of errors equals the number of correct occurrences and in the VP it is higher than the right cases. No structure at the Sentence procedure stage has emerged in AE's and EL's production. Evidence of lack of the activation of this procedure is given by four occurrences in which the learners AE and EL produced default NOM instead of ACC required by TOP_{OBJ}.

The learners CR and MT have reached also the Sentence procedure stage. They both produce a relevant number of ACC in post-verbal position at the Category procedure stage and several occurrences of case within the PP, the VP and the NP at the Phrasal procedure stage. In terms of accuracy, both CR and MT produce a few errors in the PP and the VP, namely, two occurrences each in the structures considered. At the Sentence procedure stage, MT and CR mark ACC in TOP_{OBJ} four and three times respectively and they miss it only one time each. They produce one occurrence of DAT in TOP_{OBL}, which is not sufficient to prove that they have acquired also this structure.

Finally, the learner AN has reached the Sentence procedure stage and displays a high level of competence and accuracy. She never introduces the default case NOM in structures when case is required by feature unification and thus her rate of accuracy is 100%. AN produces ACC in pre-verbal position at the Category procedure stage and case within the PP, the VP and the NP at the Phrasal procedure stage. At the last stage of acquisition, she produces ACC in pre-verbal position and is the only learner who uses a sufficient number of DAT markers in pre-verbal position, evidence of acquisition of the structure TOP_{OBL}.

In sum, all the seven learners of the first group have reached the Category procedure stage, five learners on the right (AE, EL, CR, MT and AN) have also reached the Phrasal procedure stage, and only three of them (CR, MT and AN) have reached the last stage of development, the Sentence procedure stage. Data analysis on the first group confirms the implicational stages of PT and suggests the following steps within the stages:

- within the Phrasal procedure stage: PP and VP > NP > QP;
- within the Sentence procedure stage: TOP_{OBJ} > TOP_{OBL}.

These latter empirical findings will be compared with results from the other two groups of learners.

(b) Group 2

The second group, composed by Turkish, Rumanian, Georgian and Azeri learners of Russian L2, produced 458 case markers, distributed amongst the learners as shown in the table (165).

(165) Group 2: PT developmental stages of the acquisition of case morphology

STAGE	OUTCOME	STRUCTURE	MU	DN	LK	BD	CH	NA	BB
SENTENCE PROCEDURE	Inter-phrasal	TOPOBL-DAT V	0	0	0	+1	+5	+2	+1
	morphology	TOPOBJ-ACC V	0	-5	-5	+6	+11 -2	+7	+9
PHRASAL PROCEDURE	AP morphology	A NCASE	0	0	0	0	0	0	+1
	QP morphology	Q NGEN	0	+1	-1	+1	0	+4	+4
	NP morphology	N NGEN	0	+1	+9 -2	+9 -2	+2	+1	+4
		ACASE _i NCASE _i	0	+14	+5	+11 -2	+22	+6 -2	+15
	VP morphology	V NCASE	0	+6 -5	+7 -2	+5 -3	+8 -2	+10	+7
	PP morphology	P NCASE	0	+6 -1	+9 -1	+15	+17 -5	+23 -3	+32
CATEGORY PROCEDURE	Lexical form variation	post-verbal NACC	0	+13	+11	+8	+7	+10	+13

The beginner MU was not able to complete none of the tasks and his production is limited to formulas, as in (166).

(166) MU: menja zovut mustafa
my name is Mustafa

At the Category procedure stage, all the six learners but MU mark ACC in post-verbal position, as in (167).

(167) DN: muzykant kupil trub-u
 musician bought trumpet-ACC

The number of occurrences of ACC in post-verbal position is convincing in all the learners and there is no significant variation amongst the learners' production, which vary from 7 occurrences in CH to 13 in DN and BB.

Moving to the Phrasal procedure stage, I will present case within the PP, the VP, the NP, the QP and finally within the AP.

As far as case within the PP, all the learners but MU produce a sufficient number of cases in this structure. Here I want to remember that I have excluded from the table the ambiguous ending *-e*, which might be assigned by default in the PP.

The learner DN introduces seven occurrences of case in the PP, three on nouns, as in (168a), and four case marked pronouns, as in (168b).

(168) DN: a. skol'ko let u killer-a?
 how many years.GEN at killer-GEN
 [how old is the killer?]

 b. volk za nej
 wolf after her-INST

The ambiguous *-e* is used 11 times, and the NOM only once.

The learner LK produces nine occurrences of case in the PP, five on nouns, as in (169a) and four on pronouns, as in (169b). She uses the unambiguous INST marker *-om*, evidence of case assignment.

(169) LK: a. s bol'sh-im život-om
 with big-INST belly-INST

b.	ona	sabirjot	cvety	k	nej
	she	collects	flowers	to	her.DAT

LK uses the ambiguous *-e* six times, and produces wrong NOM only once.

The learners BD and BB use a high number of cases within the PP, 15 and 32 respectively, and they are always accurate. BD uses seven different endings (*-e*, *-i*, *-ej*, *-om*, *-ami*, *-u* and *-ogo*) and two case marked pronouns, whereas BB nine types of endings (*-e*, *-i*, *-ej*, *-om*, *-ami*, *-u*, *-a*, *-ø* and *-ogo*) and one pronoun.

Finally, the learners CH and NA produce a high number of occurrences within the PP, but are inaccurate five and three times respectively. Among the 17 occurrences in CH's production, one is a pronoun; NA never introduces case marked pronouns in the PP. The types of endings used by CH and NA are various and include the unambiguous INST markers *-om* and *-ami*.

As far as case within the VP concerns, all the learners but MU introduce a convincing number of non-ACC case markers in the VP.

The learners DN, LK, BD and CH use a sufficient number of structures at this stage, six, seven, five and eight respectively, on several lexical items and in unambiguous contexts, as exemplified in (170).

(170) LK:	ona	zanimaetsja	muzyk-oj
	she	practices	music-INST

The number of pronouns in the VP is two in DN, one in BD and three in CH.

In terms of accuracy, the learners DN, LK, BD and CH introduce from two up to five NOM in VP context, which are evidence of lack of case assignment, as in (171).

(171) LK:	krasnaja	šapočka	ljubit	*kot?
	red	hood	loves	*cat.NOM ?

The advanced learners NA and BB produce ten and seven cases respectively and are always accurate. Their range of endings is various and they produce one personal pronoun each in the VP, as exemplified in (172).

(172) NA: prinesi ej chlebušek!
 bring her.DAT little bread!

As far as case within the NP, all the learners but MU are able to mark case when required by adjective-noun agreement, whereas only LK, BD and BB produce a convincing number of GEN when required by the previous noun.

The learners DN, CH and BB produce more than ten occurrences of case agreement between adjective and noun – 14 by DN, 22 by CH and 15 by BB, as exemplified in (173), and are always accurate.

(173) CH: žělt-ogo volos-a
 yellow-GEN hair-GEN

The learner LK produces five occurrences of correct case agreement between adjective and noun with different lexical items and in a variety of contexts, as in (174). LK is always accurate in producing this structure.

(174) LK: oni videli volk-a s bol'š-im život-om
 they saw wolf-ACC with big-INST belly-INST

The learner BD produces 11 correct case agreements in the NP and the learner NA produces six occurrences, but they both miss adjective-noun agreement in two contexts, as exemplified in (175).

(175) NA: tam govoritsja na russk-om *jazyk
 there speak in Russian-PREP *language.NOM
 [there Russian language is spoken]

Moving to GEN in the NP, the learners DN, CH and NA do not produce a sufficient number of occurrences to prove that the structure has emerged.

The learners LK and BD produce nine GEN each in the NP, as exemplified in (176).

(176) BD: cvet karandaš-a
colour pencil-GEN
[the colour of the pencil]

Therefore, we can say that LK and BD have acquired the structure, even if they fail to mark GEN two times each, as in (177).

(177) LK: cvet *obuv'
colour *shoe.NOM
[the colour of the shoe]

The learner BB produces four times correct GEN in the NP, as in (178), and he is always accurate.

(178) BB: tretij režit životik volk-a
third cuts little belly wolf-GEN
[the third one cuts the wolf's little belly]

Moving to case within the QP, only NA and BB produce four occurrences of GEN, a sufficient number that provides evidence of acquisition of the structure, as in (179).

(179) BB: čerez nekol'ko čas-ov
in not many hours-GEN

The learners MU and CH never produce QP, the learners DN and BD mark one GEN in the QP, and the learner LK fails in marking by GEN the only QP in her production.

As far as case within the AP, only BB introduces it in one sentence, as shown in (180), which is not sufficient to state that the structure has emerged.

(180) BB: tureckij bliže naš-emu jazyk-u
Turkish closer our-DAT language-DAT
[Turkish is closer to our language]

At the Sentence procedure stage, the more advanced four learners, namely BD, CH,

NA and BB are able to mark case in pre-verbal position.

As far as TOP_{OBJ}, the learners DN and LK always use default NOM when forced by the party task to topicalise the OBJ, as in (181).

- (181) LK: *gruš-a prinesla prepodavatel'nic-a
*pear-NOM brought teacher-NOM
[a pear, the teacher brought]

The learner BD produces six ACC in pre-verbal position, five on nouns, as in (182a) and one on a personal pronoun, as shown in (182b). He is always accurate.

- (182) BD a. gruš-u prinesla prepodavatel'nic-a
 pear-ACC brought teacher-NOM
 [a pear, the teacher brought]
- b. volk ejo sprašivaet
 wolf.NOM her.ACC asks
 [the wolf asks her]

The learner CH produces 11 ACC in pre-verbal position, seven marked on nouns, as in (183a), and four on personal pronouns, as exemplified in (183b). CH is not always accurate, in that she uses default NOM two times instead of target ACC, as shown in (183c).

- (183) CH a. vilk-u prinesla balerin-a
 fork-ACC brought dancer-NOM
 [a fork, the dancer brought]
- b. menja tože učili
 me.ACC also taught
 [they also taught me]
- c. *šapk-a odevat'
 *hat.NOM wear
 [to wear a hat]

The learner NA produces seven ACC in pre-verbal position, four on nouns, as in (184a),

and three on pronouns, as in (184b). She is always accurate.

- (184) NA a. vilk-u prinesla medsestr-a
 fork-ACC brought nurse-NOM
 [a fork, the nurse brought]
- b. ego ubili
 him.ACC killed
 [(they/somebody) killed him]

Finally, the learner BB produces nine ACC in pre-verbal position, six on nouns, as in (185a), and three on pronouns, as in (185b). He is always accurate.

- (185) BB a. gitar-u prinesla balerin-a
 guitar-ACC brought dancer-NOM
 [a guitar, the dancer brought]
- b. volk ejo s"el
 wolf.NOM her.ACC ate
 [the wolf ate her]

As far as TOP_{OBL}, CH produces a sufficient number of DAT in this structure, whereas the learners MU, DN and LK never use it.

The learners BD and BB produce only one occurrence of DAT in pre-verbal position; also the learner NA, who introduces DAT for two times, does not produce a sufficient number of occurrences.

The learner CH uses DAT in preverbal position five times, four on nouns, as in (186a), and once on a pronoun, as shown in (186b).

- (186) CH a. krasn-oj šapočk-e kot mešaet
 red-DAT hood-DAT cat.NOM disturbs
 [the cat disturbs Red Riding Hood]
- b. čto ja tebe daju?
 what I you-DAT give?
 [what do I give you?]

In sum, MU is still at the Lemma access stage, whereas all the other six learners of the second group have reached the Category procedure stage and the Phrasal procedure stage as well; the four learners on the right (BD, CH, NA and BB) have also reached the last stage of development, the Sentence procedure stage. Data analysis on the second group confirms the implicational stages of PT and suggests the following steps within the stages:

- within the Phrasal procedure stage: PP and VP and NP > QP;
- within the Sentence procedure stage: TOP_{OBJ} > TOP_{OBL}.

These latter empirical findings are not in contradiction with the steps found in the first group.

(c) Group 3

The third group consists of seven learners of Russian L2, all speakers of Slavic languages. They produced 373 case markers, distributed amongst the learners as shown in (187).

(187) Group 3: PT developmental stages of the acquisition of case morphology

STAGE	OUTCOME	STRUCTURE	JO	MR	BE	KA	PA	DA	DO
SENTENCE PROCEDURE	Inter-phrasal morphology	TOPOBL-DAT V	0	+1	+1	0	0	+2	+2
		TOPOBJ-ACC V	-4	+3 -1	+8	+4	+5	+7	+10
PHRASAL PROCEDURE	AP morphology	A NCASE	0	0	0	0	0	0	0
	NP morphology	N NGEN	0	+1	+1	0	+5	+3 -1	+2
		ACASE _i NCASE _i	+1	+2 -1	0	+2 -1	+14 -1	+12	+11 -1
	QP morphology	Q NGEN	0	-3	0	+3 -1	+1 -2	+1	+1
	VP morphology	V NCASE	+2	+4 -2	+4	+9 -1	+9	+9 -1	+6
	PP morphology	P NCASE	+8	+5	+9 -1	+13 -1	+17	+12	+17
CATEGORY PROCEDURE	Lexical form variation	post-verbal NACC	+13	+11	+8	+7	+11	+11	+13

At the Category procedure stage, all the learners use a sufficient number of ACC in post-verbal position.

The learner JO uses ACC in post-verbal position 13 times, two of which are pronouns, as in (188).

(188) JO: volk chočet ejo
wolf wants her.ACC

The learner KA uses 7 ACC on nouns, as in (189). The occurrences are 11 in MR, PA and DA, 8 in BE and 13 in DO. The number of ACC marked pronouns is two in JO, PA, DA and DO and one in BE.

(189) KA: chače est' devuš-k-u
?want eat girl-ACC

At the Phrasal procedure stage, all the learners can mark case within the PP, the VP and the NP. Differences between the learners can be found in terms of accuracy, number of occurrences produced per structure and emergence of the rarer structures.

Within the PP, the learner JO produces eight occurrences, two of which are case marked pronouns, as in (190). As far as case markers on nouns, she uses the ambiguous ending *-e* and the less ambiguous *-y*, *-ej* and *-oj*. She is always accurate.

(190) JO: volk idet k nej
 wolf goes to her.DAT

The learner MR produces five occurrences of case in the PP, four on nouns, as in (191a) and one that is an ACC marked pronoun, as in (191b). She uses the endings *-e*, *-i*, *-oj* and *-u* and is always accurate.

(191) MR: a. u gost-i
 at guest-GEN

 b. volk za nejo
 wolf after her.ACC

The learner BE uses 9 case markers in the PP, all marked on nouns, as in (192a). She uses the endings *-e*, *-y*, *-oj*, *-ej*, *-a*, *-u* and $-\emptyset$. BE fails in marking one case in the PP by producing NOM, as in (192b)

(192) BE: a. s učitel'nic-ej
 with professor-INST

 b. ja znaju (i)z *film
 I know from *film.NOM

The learner KA produces 13 occurrences of case in the PP, all marked on nouns, as in (193a), and introduces several markers, like *-e*, *-oj*, *-ej* and the unambiguous INST marker *-ym*. She marks one noun by NOM, as in (193b).

- (193) KA: a. govorit' s prijatel'n-ym
 talk with friend-INST
- b. na *vtor-oga *kartink-a
 on *second-? *picture-NOM

The learner PA uses 17 case markers in the PP, 16 on nouns, as in (194a), and one on a pronoun, as in (194b). He uses the endings *-e*, *-y*, *-u* and the unambiguous INST markers *-om* and *-ym*. PA is always accurate in this structure.

- (194) PA: a. otvorili ego život s nož-om
 (they) open his belly with knife-INST
- b. volk chotel ist' za nejo
 wolf wanted go after her.ACC

The learner DA produces 12 occurrences of case in the PP, 11 on nouns, as in (195a) and one that is an ACC marked pronoun, as in (195b). She uses a large variety of endings, like *-e*, *-i*, *-oj*, *-a*, *-u* and the unambiguous INST markers *-om* and *-ami* and the PREP marker *-ach*. She is always accurate.

- (195) DA: a. s mo-im brat-om
 with my-INST brother-INST
- b. smotrit na ejo
 looks at her.ACC

Finally, the learner DO produces 17 occurrences of case in the PP, 15 on nouns, as in (196a) and two marked pronouns, as in (196b). She uses a large variety of endings, like *-e*, *-i*, *-oj*, *-u* and the unambiguous INST markers *-om*, *-ym* and *-ami*. She is always accurate.

- (196) DO: a. stul so stol-om
 chair with table-INST

- b. idti za nejo
go after her.ACC

Moving to case within the VP, all the learners but JO produce a sufficient number of non-ACC cases on a variety of lexical items. Their level of accuracy is high, in that four learners are always accurate and the other three use the default NOM at most three times. The learner JO is always accurate but she produces only two DAT endings on nouns, as exemplified in (197). The number of occurrences is not sufficient to state that the structure is acquired.

- (197) JO: gruš-a nraivitsja devočk-e
pear-NOM likes girl-DAT
[the girl likes pear]

The learner MR produces four occurrences in the VP, all marked on different lexical items. She introduces the unambiguous INST marker *-om*, as in (198a), and two incorrect NOM forms, as in (198b).

- (198) MR: a. devuška stanet zanimaetsja balet-om
girl becomes practice ballet-INST
- b. devuška chočet stat' *balerin-a
girl wants become *dancer-NOM

The learner BE produces four occurrences of case other than ACC in the VP, all marked on nouns on varied lexical items, as in (199). She is always accurate.

- (199) BE: ona chotit stat' balerin-oj
she wants become dancer-INST

The learner KA produces nine occurrences of case in the VP, eight on nouns, as in (200b) and one DAT marked pronoun, as in (200b). She marks with wrong NOM one noun, as in (200c).

- (200) KA: a. ona chočet stat' tancič-ej
 she wants become dancer-INST
- b. ona skaž emu
 she ?say him.DAT
- c. ona znaet *volk
 she knows *wolf.NOM

The learner PA is always accurate and produces nine occurrences in the VP, eight on nouns, as in (201a) and one DAT marked pronoun, as in (201b).

- (201) PA: a. krasnaja šapočka zanimaetsja muzyk-oj
 red hood practices music-INST
- b. skazala emu
 (she) said him.DAT

The learner DA produces nine occurrences of case in the VP, all marked on nouns, as in (202a). She marks with wrong NOM one noun, as shown in (202b).

- (202) DA: a. ona chočet stat' baletk-oj
 she wants become ?dancer-INST
- b. ona nosit *korzink-a
 she carries *bag-nom

Finally, the learner DO produces six occurrences of case in the VP, all marked on nouns, as exemplified in (203). She is always accurate.

- (203) DO: zanimaetsja muzyk-oj
 (she) practices music-INST

Moving to case within the QP, only KA produces a sufficient number of occurrences that provides evidence of the acquisition of this structure, whereas JO and BE have no

contexts.

The learner MR is wrong three times, in that she uses NOM, as in (204).

(204) MR: tri *godin-y
 three *years-NOM

The learner KA produces GEN in the QP three times, as in (205a), and uses wrong NOM once, as shown in (205b).

(205) KA: a. šest' mesjac-ev tol'ko
 six months-GEN only

 b. tri *mužčin-y
 three *men.NOM

The learner PA produces only one GEN in the QP, as shown in (206a), and uses NOM two times, as exemplified in (206b).

(206) PA: a. odin dvadcat' god-a
 one twenty year-GEN

 b. četyre *mesjac
 four *month.NOM

The learner DA uses GEN in the QP only once, as shown in (207)

(207) DA: vosem' let
 eight years-GEN

The learner DO produces only one occurrence of GEN in the QP, as shown in (208).

(208) DO: četyre god-a
 four year-GEN

Moving to case marking within the NP, only three learners (PA, DA and DO) produce a sufficient number of structures at this stage. In both the structures considered

(case agreement between adjective and noun and GEN required by NP) all the learners are accurate and produce a maximum of one error each.

The learner JO uses one correct INST agreement between adjective and noun, as shown in (20). Here the INST feminine noun *učitel'nicěj* 'teacher' agrees in case but not in gender with the INST masculine adjective *moëm* 'my'. JO never uses GEN required by the NP.

(209) JO: s mo-ëm učitel'nic-ej
 with my-INST professor-INST

The learner MR produces two case agreements, as in (210a), and one GEN in the NP, as shown in (210b). In one occurrence, she does not mark the adjective by the required ACC, as shown in (210c). Her production is thus not sufficient to state that case in the NP has emerged.

(210) MR: a. videli zlozn-ego vulk-a
 (they) saw evil-ACC wolf-ACC

 b. ne zname ime čelovek-a
 not ?know name person-GEN

 c. ona videla grozn-u vulk-a
 she saw evil-? wolf-ACC

The learner BE produces only one structure within the NP, a GEN required by its noun head, as shown in (211).

(211) BE: smotrit dom babušk-i
 sees house grandmother-GEN
 [(he) sees the grandmother's house]

The learner KA produces two correct agreements between adjective and noun, as in (212a), and one incorrect, as shown in (212b). She never uses GEN required by the NP.

- (212) KA: a. krasn-oj šapočk-e zima
 Red-DAT Hood-DAT ?cold
 [Red Riding Hood is cold]
- b. na *vtor-oga *kartink-a
 on second-? *picture-NOM

The learner PA correctly uses case agreement 14 times, as exemplified in (213a). He is not accurate once, as shown in (213b), where the adjective does not agree with the ACC marked noun.

- (213) PA: a. s mo-im tovarišč-em
 with my-INST comrade-INST
- b. vstretila *zl-oj volk-a
 (she) met *evil-NOM wolf-ACC

Within the NP, the learner PA can also mark GEN when required by its head NP, as shown in (214), one of the five occurrences in his production.

- (214) PA: devuška et-oj skazk-i
 girl this-GEN tale-GEN
 [the girl of this tale]

Case in the NP has emerged in DA's production. She produces 12 occurrences of case agreement between adjective and noun, as in (215a). She produces three times GEN in the NP, as in (215b), and is incorrect only one time, as shown in (215c).

- (215) DA: a. s mo-imi druž'j-ami
 with my-INST friends-INST
- b. volk vchodil v dom babušk-i
 wolf entered into house grandmother-GEN
 [the wolf entered the grandmother's house]

- c. idti k dom-u *babušk-a
 go to house-DAT *grandmother-NOM
 [go to visit grandmother]

Finally, within the NP the learner DO produces 11 occurrences of case agreement between adjective and noun, as exemplified in (216a), and the only error in her production, which consists of an over-extension of the PREP ending for adjective *-om* to the noun, as shown in (216b).

- (216) DO: a. pro krasn-uju šapočk-u
 about Red-ACC Hood-ACC
- b. na drug-om *kras-om
 on other-PREP *beauty-INST

Although DO has safely acquired case within the NP, she produces only two occurrences of GEN required by the NP, as exemplified in (217).

- (217) DO: ručka tam zelěn-ogo cvet-a
 pen there green-GEN colour-GEN
 [the pen there is green]

None of the learners produces any occurrence of case within the AP.

At the last stage of development, all the learners but JO can mark ACC in TOP_{OBJ}, and none of them produces a sufficient numbers of DAT in pre-verbal position as evidence of acquisition of TOP_{OBL}.

The learner JO is the only learner of this group that has not reached the Sentence procedure stage. When the tasks forced her to topicalise the OBJ, she produced default NOM three times. It is interesting to notice that in two occurrences not only she marked the pre-verbal <theme> by NOM, but also she marked post-verbal <agent> by ACC, the default case in that position, as in (218).

(218) JO: *gruš-a prinës *učitel'nic-u
 *pear-NOM brought *professor-ACC
 [?a pear brought the professor / ?a pear, the professor brought]

This use of case suggests that case system in JO's interlanguage is primarily based on position, irrespectively of the mapping of case onto arguments and onto GFs.

The learner MR uses correct ACC marker in pre-verbal position three times, as in (219a), and uses default NOM once, as shown in (219b). Although TOP_{OBJ} is acquired, the only occurrence of a DAT marked pronoun in pre-verbal position, shown in (219c), is not evidence of acquisition of TOP_{OBL}.

(219) MR: a. gitar-u prinesla balerin-a
 guitar-ACC brought dancer-NOM
 [a guitar, the dancer brought]

 b. *vilk-a prinesla predovatelnic-a
 *fork-NOM brought professor-NOM
 [a fork, the professor brought]

 c. devuš-k-a nej skazala
 girl-NOM her.DAT said
 [the girl said to her]

The learner BE uses ACC in pre-verbal position eight times, four times on nouns, as in (220a), and four times on pronouns, as in (220b). She uses a DAT pronoun only once, as shown in (220c).

(220) BE: a. butylk-u prinesla medsestr-a
 bottle-ACC brought nurse-NOM
 [a bottle, the nurse brought]

 b. ego zarezali
 him.ACC cut
 [they cut him]

- c. ona emu skazala
 she.NOM him.DAT said
 [she said to him]

At the same stage, the learners KA and PA produce four and five correct ACC markers in pre-verbal position, as in (221). They are always accurate and never introduce DAT in pre-verbal position.

- (221) KA: grušk-u priněsla prepodavatel'nic-a
 pear-ACC brought professor-NOM
 [a pear, the professor brought]

The learner DA is always accurate at this stage and marks ACC in pre-verbal position seven times, four on nouns, as in (222a), and three on pronouns, as in (222b).

- (222) DA: a. gitar-u prinesla balerin-a
 guitar-ACC brought dancer-NOM
 [a guitar, the dancer brought]
- b. kogda ego ubili?
 when him.ACC killed?
 [when did they kill him?]

DA marks DAT in pre-verbal position two times, once on a noun, as in (223a), and once on a pronoun, as in (223b).

- (223) DA: a. krasn-oj šapočk-e nravitsja gruš-a
 Red-DAT Hood-DAT likes pear-NOM
 [Red Riding Hood likes pears]
- b. ona emu govorit
 she.NOM him.DAT tells
 [she tells him]

The learner DO topicalises OBJ ten times, and thus marks ACC four times on nouns, as in (224a), and six times on pronouns, as in (224b).

- (224) DO: a. butylk-u prinesla medsestr-a
 bottle-ACC brought nurse-NOM
 [a bottle, the nurse brought]
- b. ejo otkusit'
 her.ACC bit
 [to bit her]

The learner DO uses DAT in pre-verbal position two times, once on a noun, as shown in (225a), and once on a pronoun, as shown in (225b).

- (225) DA: a. krasn-oj šapočk-e nraivitsja gruš-a
 Red-DAT Hood-DAT likes pear-NOM
 [Red Riding Hood likes pears]
- b. mam-a ej predlagaet
 mum-NOM her.DAT offers
 [mum offers to her]

In sum, all the learners of the third group have reached the Category procedure stage and the Phrasal procedure stage, as well. Within this latter stage, different learners can produce case in different structures. The learner JO can produce case within the PP; the learners MR and BE can produce case within the PP and the VP; the learner KA can produce case within the PP, the VP and the QP; the learners PA, DA and DO can produce case within the PP, the VP and the NP. At the next stage up, all the learners but JO have reached the Sentence procedure stage. Although JO's production is very accurate and her level of proficiency according to CEFR is higher than other learners, such as PA and KA, she cannot mark case when word order is non-canonical. Within the Sentence procedure stage, the structure TOP_{OBJ} is acquired by six learners (MR, BE, KA, PA, DA and DO), whereas none of them produces a sufficient number of occurrences of TOP_{OBL}. Data analysis on the third group confirms the implicational stages of PT and suggests the following steps within the stages:

- within the Phrasal procedure stage: PP > VP > NP and QP;

These empirical findings confirm the steps found in the previous groups.

To conclude this section of data analysis according to the PT developmental hypothesis for case morphology in Russian L2, I will present all the 21 learners of the three groups set along the developmental path in (226). This table shows the learners from beginner to advanced in terms of the PT stages and the steps they have reached relative to case morphology. A plus indicates emergence of the structure, a minus indicates absence of evidence for case, and an empty cell indicates missing context for case.

(226) PT developmental stages of acquisition of case morphology: overview

STAGE	STRUCTURE	MU	AA	CI	JO	AE	EL	DN	LK	MR	BE	CR	KA	PA	DA	DO	MT	BD	NA	AN	CH	BB	
SENTENCE PROCEDURE	TOPobj- DAT V																						
	TOPobj- ACC V	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	
PHRASAL PROCEDURE	A NCASE																						
	Q NGEN																						
	N NGEN																						
	ACASE! NCASE!																						
CATEGORY PROCEDURE	V NCASE	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	P NCASE	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
CATEGORY PROCEDURE	post-verbal NACC	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

The learner MU is still at the Lemma access stage, in that he uses only formulas.

At the Category procedure stage, the learners AA and CI are able to mark ACC in post-verbal position, but fail when case is required by feature unification in phrasal or sentence contexts. All the other learners on the right produce case marking at this stage.

At the next stage of development, 18 learners have also reached the Phrasal procedure stage. Empirical data suggest steps within this stage of development, as in (227).

(227) case in the PP > case in the VP > case agreement in the NP > GEN in the NP / QP > case in the AP

Case within the PP is introduced by all the learners at this stage, whereas case within the VP is used by all the learners but JO. Moving to case within the NP, 13 out of 18 learners at this stage can mark case agreement between the adjective and the noun, and seven can correctly use GEN when required by the NP. All the learners that can mark this latter structure are also able to mark case agreement within the NP but not viceversa. As far as GEN within the QP, only three learners use it and from my data it is not clear whether it emerges later than GEN in the NP. Only BB uses case in the AP.

Finally, 13 learners have reached the last stage of development, the Sentence procedure stage. The eight learners who have not reached this stage provide evidence of lack of case assignment in structures prompted by the elicitation tasks. All the 13 learners at this stage can mark ACC in TOP_{OBJ}, but only the learners AN and CH produce a sufficient number of DAT in TOP_{OBL}.

In sum, my data confirm PT implicational stages of acquisition in that any learner at a given stage of development provides evidence of case marking requiring the activation of lower procedures and thus no stage is skipped.

4.2. Testing the Developmentally Moderated Transfer Hypothesis

In this section, I will test my Developmentally Moderated Transfer Hypothesis on Russian L2, as spelled out in § 2.3.2. I have limited the scope of my analysis to the acquisition of ACC, since my learners are grouped according to the way ACC is marked in

their L1s. The first group's L1 never marks ACC on nouns and marks ACC only on certain personal pronouns, the second marks ACC also on referential nouns but with a variety of forms different from the Russian ones, and the third group marks ACC in the same way as Russian does.

The tables in (228), (238) and (248) show the distribution of ACC markers amongst the learners, who are listed left-to-right from beginner to advanced. Structures are listed bottom up from initial to later stages of development. A distinction is made between pronouns (PR) and referential nouns (RN). Correct ACC markers are signalled by a plus, and default NOM form is indicated by a minus. The reader may notice that here, unlikely in § 4.1, accuracy – and not emergence – is considered. Whereas PT stages are determined on the basis of the emergence of structures, DMTH investigates to what extent a structure is correctly transferred or not into the L2.

(a) Group 1

The table in (229) shows the development of ACC in the first group, which consists of Italian learners of Russian. Black thick lines show the border of the developmental stages the learners have reached and are based on the analysis shown in the previous section (§ 4.1).

(229) Group 1: development of ACC

STAGE	STRUCTURE		AA	CI	AE	EL	CR	MT	AN
SENTENCE PROCEDURE	TOPOBJ-ACC V	PR	-1	0	0	0	+1	-1	+1
		RN	-2	-4	-3	-4	+3 -1	+3	+4
PHRASAL PROCEDURE	P NACC	PR	0	0	0	0	0	0	+1
		RN	+1 -2	+1	0	+1	0	0	0
	AACC NACC	RN	0	+3	0	0	+4	+1	+1
CATEGORY PROCEDURE	post-verbal NACC	PR	0	0	+1	-2	+1	0	0
		RN	+3 -11	+5 -12	+4 -4	+5 -5	+9 -2	+10 -2	+8

As already shown in § 4.1, at the Category procedure stage, all the learners can mark ACC in post-verbal position. It is worth noticing that even if one can claim that this structure belongs to the Phrasal procedure stage, ACC is the default case to appear in post-verbal position and therefore might be assigned simply by position, without the activation of any kind of feature unification. In terms of accuracy, the numbers of NOM exceed these of ACC in the two beginners AA and CI, equals in AE and EL, diminish in the advanced CR and MT and is null in the most proficient AN.

The examples (230a) and (230b) show a correct use of ACC marking in post-verbal position and a wrong use of NOM respectively.

- (230) AE: a. oficiant prinës ložk-u
 waiter brought spoon-ACC
- b. ona ljubit *košk-a
 she loves *cat- NOM

The use of ACC pronouns is limited to one occurrence each in AE and CR, while the learner EL fails twice to mark ACC pronoun in post-verbal position, as shown in (231a-b).

- (231) EL: a. volk smotrit *ona
 wolf looks *she.NOM
- b. on est *ona
 he eats *she.NOM

At the Phrasal procedure stage, two structures are taken into consideration: ACC agreement between adjective and noun in the NP and ACC in the PP.

Agreement of ACC between adjective and noun is absent in the learners AA, AE and EL. The learners CI and CR use this structure three times and four times respectively. However, CI marks ACC only on the adjective-noun pair *Krasnaja Šapočka* ‘Red Riding Hood’, as in (232).

- (232) CI: mama zdajut krasnu-ju šapočk-u

mum ?wait red-ACC hood-ACC
 [mum is waiting for Red Riding Hood]

The learners MT and AN produce the structure once on the same lexical items, as shown in (233).

(233) MT: volk est krasnu-ju šapočk-u
 wolf eats red-ACC hood-ACC

As far as ACC within the PP, it is introduced only by AA, CI, EL and AN with a scarce number of occurrences. The learner AA correctly marks ACC once, as in (234a), and misses it two times, as in (234b), where she uses default NOM instead. Notice in the following examples that the lexical selection of the preposition and the lexical entry of the verb are inaccurate, in that the verb should be *idti* ‘go’ instead of *igrat’* ‘play’ and it should select the preposition *k* instead of *v*. However, the preposition *v* can select ACC and is thus considered here.

(234) AA: a. igrat’ v babušk-u
 ?play/go to grandmother-ACC

 b. volk igrat’ *veloce* v *babušk-a
 wolf ?play/go [ITA] fast to *grandmother-NOM

The learner CI produces one occurrence of ACC in the PP, as shown in (235).

(235) CI: ona dolžna idu v kurcevju-ju
 she must ?go to ?short-ACC
 [?she should catch the shortest way]

The learners AE, CR and MT never produce any context in which ACC is required in the PP.

The learner EL produces one ACC in the PP, as shown in (236). However, the form *domoj* is not formally ACC-marked, in that, it is the formula used to express motion towards one’s home (from the word *dom* ‘home’) and in target Russian it is not introduced by a

preposition.

(236) EL: ochotniki pojti v domoj
hunters go to home.ACC

The learner AN uses one ACC marked pronoun, as shown in (237).

(237) AN: volk idët za nejo
wolf goes after her.ACC

In sum, none of the learners produced a convincing number of ACC markers at the Phrasal procedure stage.

Moving to the Sentence procedure stage, ACC is used to mark TOP_{OBJ} and is correctly introduced by the three most advanced learners CR, MT and AN. A detailed analysis of this structure can be found in § 3.1.

In terms of DMTH, the analysis on the production of ACC in the group of Italian L1 learners, a language that mark ACC only on some pronouns, will be a basis of comparison with the other groups, whose L1s introduce ACC marking both on pronouns and referential nouns.

(b) Group 2

The table in (238) shows the development of ACC in the second group, which consists of Azeri, Georgian, Rumanian and Turkish learners of Russian. Black thick lines show the border of the developmental stages the learners have reached and are based on the analysis shown in the previous section (§ 4.1).

(238) Group 2: development of ACC

STAGE	STRUCTURE		MU	DN	LK	BD	CH	NA	BB
SENTENCE PROCEDURE	TOPOBJ-ACC V	PR	0	0	0	+1	+4	+3	+3
		RN	0	-5	-5	+5	+7 -1	+4	+6
PHRASAL PROCEDURE	P NACC	PR	0	0	0	0	0	0	0
		RN	0	+2	0	0	0	0	+3
	AACC NACC	RN	0	+2	+1	+2	+4	0	+2
CATEGORY PROCEDURE	post-verbal NACC	PR	0	+2	+1	0	+3	+4	+2
		RN	0	+11 -2	+10 -2	+8 -1	+4 -2	+6	+11

At the Category procedure stage, all the learners but MU can mark ACC in post-verbal position. In terms of accuracy, only NA and BB are always accurate at this stage.

The learners DN, LK and CH mark ACC both on the noun and on the pronoun, as exemplified in (239a) and (239b).

- (239) LK: a. ona posmotrela babušk-u
she saw grandmother-ACC
- b. s'est ejo
eat her.ACC

All the three learners fail in marking ACC in post-verbal position two times, as exemplified in (240), although their L1s mark ACC in that position.

- (240) LK: videt' ejo *babušk-a
see her *grandmother-NOM

The learner BD uses ACC in post-verbal position only on nouns, with eight target occurrences and on non-target occurrence, as in (241a-b).

- (241) BD: a. muzykanty prinesli trub-u
 musicians brought trumpet-ACC
- b. vrač prinēs *kartošk-a
 doctor brought *potato-NOM

As already mentioned, only NA and BB always mark ACC correctly in post-verbal position, both on noun, as in (242a) and on pronouns, as in (242b).

- (242) BB: a. volk vospominaet babušk-u
 wolf recognises grandmother-ACC
- b. počemu ubili ego?
 why killed him.ACC?
 [why did they kill him?]

Moving to ACC at the Phrasal procedure stage, I will present how ACC is marked as agreement between adjective and noun and when ACC is used in the PP.

The learner DN produces ACC agreement two times on the same lexical pair *Krasnaja Šapočka* ‘Red Riding Hood’, as in (243).

- (243) DN: volk chočet kušat' krasnu-ju šapočk-u
 wolf wants eat red-ACC hood-ACC

The learner DN uses ACC twice when required by the preposition, as in (244). Notice here that the structure in (244) has been considered correct, although the lack of motion in the sentence requires PREP after *v*, because the preposition *v* can select also ACC case and is thus evidence of feature unification at the PP level.

- (244) DN: vy byli v kuchn-ju
 you were in kitchen-ACC

The learners LK and BD introduce only one and two occurrences respectively of ACC at the Phrasal level, that is, ACC agreement between adjective and noun, as shown in (245). They never use ACC in the PP.

(245) LK: oni spasli krasnu-ju šapočk-u
 they saved red-ACC hood-ACC

Also the learner CH uses ACC only in the NP, as exemplified in (246). She never marks ACC in the PP.

(246) CH: krasna-ja šapočk-a svo-ego kot-a ljubít
 red-NOM hood-NOM own-ACC cat-ACC loves
 [Red Riding Hood loves her cat]

The learner NA never marks ACC in phrasal contexts. This data seems in contradiction with PT hypotheses, in that the Phrasal stage is skipped in NA's production. However, as already demonstrated in § 4.1, NA can mark case within the Phrasal procedure, but she uses only cases other than ACC.

The learner BB can mark ACC both in the NP, as in (247a), and in the PP, as in (247b).

(247) BB: a. slušat' russku-ju muzyk-u
 listen to Russian-ACC music-ACC
 b. ja pošel v škol-u
 I went to school-ACC

At the last stage of development, the Sentence procedure stage, ACC is used to mark TOP_{OBJ} and is correctly introduced both on nouns and pronouns by the four most advanced learners BD, CH, NA and BB. A detailed analysis of this structure can be found in the previous section.

In terms of DMTH, the analysis on the production of ACC in the group of learners whose L1s introduce ACC marking both on pronouns and referential nouns leads to interesting findings.

First, data exclude the Full Transfer Hypothesis, in that the learners DN, LK, BD and CH produce errors in marking ACC in post-verbal position and DN and LK never mark ACC on TOP_{OBJ}, although ACC is marked in the same structures in their L1s.

Secondly, comparison between ACC production in the first and in the second groups

suggests that accuracy is higher in the latter group, and thus in those learners whose L1 has overt case marking.

(c) Group 3

The table in (248) shows the development of ACC in the third group, which consists of Slavic learners of Russian, whose L1s mark ACC with the same morphemes used in Russian. Black thick lines show the border of the developmental stages the learners have reached and are based on the analysis shown in § 4.1.

(248) Group 3: development of ACC

STAGE	STRUCTURE		JO	MR	BE	KA	PA	DA	DO
SENTENCE PROCEDURE	TOPOBJ-ACC V	PR	-1	0	+4	0	0	+3	+6
		RN	-3	+3	+4	+4	+5	+4	+4
PHRASAL PROCEDURE	P NACC	PR	0	+1	0	0	+1	+1	+2
		RN	0	0	0	0	+6	+2	+6
	AACC NACC	RN	0	+2 -1	0	0	+2 -1	+2	+3
CATEGORY PROCEDURE	post-verbal NACC	PR	+2	0	+1	0	+2	+2	+2
		RN	+11	+11	+7	+7	+9	+9	+11

At the Category procedure stage, all the learners produce a sufficient number of ACC in post-verbal position that range from seven occurrences by KA to 13 by JO and DO, as exemplified in (249).

(249) DA: ochotnik deržaet butylk-u
 hunter carries bottle-ACC

The learners MR, KA and DA produce one or two errors in marking ACC at this stage, as exemplified in (250), although ACC is marked by *-u* also in their L1s, namely, Slovene and Slovak.

(250) MR: oficiant prines *ložk-a
 waiter brought *spoon-NOM

At the Phrasal procedure stage, the three learners JO, BE and KA never introduce ACC marking. As already explained in the analysis of the second group, this by no means interferes with the fact that all the three learners have reached this stage of acquisition. The learner MR produces ACC agreement between adjective and noun two times correctly, as in (251a) and once fails in marking the adjective by ACC, as in (251b).

(251) MR: a. *volit* tvo-ju košk-u
 [SLO] (she) loves your-ACC cat-ACC

 b. ona videla *grozn-u vulk-a
 she saw *evil-? wolf-ACC

The learner MR introduces also one occurrence of ACC pronoun in the PP, as shown in (252).

(252) MR: volk za nejo
 wolf after her.ACC

The learner PA produces several structures at this stage. He correctly marks ACC agreement between adjective and noun two times, as in (253a), and fails in marking it once, as shown in (253b).

(253) PA: a. posmotreli krasnu-ju šapočk-u
 (they) saw red-ACC hood-ACC

 b. vstretila *zl-oj volk-a
 (she) met *evil-NOM wolf-ACC

The learner PA marks ACC in the PP, six times on nouns, as in (254a) and once on a pronoun, as shown in (254b).

- (254) PA: a. idět za babušk-u
 goes after grandmother-acc
- b. volk ist' za nejo
 wolf go after her.ACC

The learner DA uses ACC two times in the NP, as in (255a), and three times in the PP, two on a noun, as in (255b), and once on a pronoun, as in (255c).

- (255) DA: a. imeet krasnu-ju rubašk-u
 has red-ACC shirt-ACC
- b. ona idět za babušk-u
 she goes after grandmother-ACC
- c. smotrit na nejo
 (he) looks at her.ACC

The learner DO produces several occurrences of ACC in phrasal contexts, three ACC agreements in the NP, as in (256a), six ACC marked nouns in the PP, as in (256b), and two ACC marked pronouns in the PP, as in (256c).

- (256) DO: a. našli tam krasnu-ju šapočk-u
 (they) found there red-ACC hood-ACC
- b. pro krasnu-ju šapočk-u
 about red-ACC hood-ACC
- c. idti za nejo
 go after her.ACC

At the Sentence procedure stage, ACC is used to mark TOP_{OBJ} and is correctly introduced by all the learners except of JO, who always uses wrong NOM. The use of ACC marked pronouns in TOP_{OBJ} is limited to the learners BE, DA and DO. A detailed analysis of this structure can be found in § 4.1.

In terms of DMTH, the analysis on the production of ACC in the group of learners of

Slavic L1 background leads to the following findings.

First, data exclude the Full Transfer Hypothesis, in that the learners MR, KA and DA produce errors in marking ACC in post-verbal position and JO never marks ACC on TOP_{OBJ}, although not only those structures are present in their L1s, but also they are expressed by the same morphological means. This finding broadens the scope of DMTH, which is thus validated not only terms of syntactic transfer, but also in terms of morpho-syntactic transfer.

Secondly, comparison between ACC production in the first, in the second and in the third groups suggests that accuracy is higher in the latter group. In order to provide precise data about how accuracy is distributed among the three groups, the table in (257) shows the ratio between correct use of ACC and the number of occurrences of the structure in the learners' production, ranging from 0 accuracy to 1, which means full accuracy. Each learner is mentioned together with the number of the group to which it belongs. The learners are distributed from left to right according to the PT stage of development they have reached. It is thus not surprising that higher accuracy does not always matches with higher stage of development.

(257) Accuracy in ACC marked structures amongst the learners

STAGE	STRUCTURE	MU 2°	AA 1°	CI 1°	JO 3°	AE 1°	EL 1°	DN 2°	LK 2°	MR 3°	BE 3°	CR 1°	KA 3°	PA 3°	DA 3°	DO 3°	MT 1°	BD 2°	NA 2°	AN 1°	CH 2°	BB 2°	
SENTENCE PROCEDURE	TOPobj-ACC V	0	0	0	0	0	0	0	0	1	1	.80	1	1	1	1	.75	1	1	1	1	.92	1
PIRASAL PROCEDURE	P NACC	.33	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	AACC NACC	1	1	1	1	1	1	1	1	.66	1	1	.66	1	1	1	1	1	1	1	1	1	1
CATEGORY PROCEDURE	post-verbal NACC	.21	.29	1	.56	.42	.87	.85	.85	1	.83	.88	1	.92	1	.84	.89	1	1	1	1	1	1

At the Category procedure stage, the three learners below 0.5 of accuracy belong to the first group; the learners that range from 0.5 to 0.99 are three of the first group, three of the second group and three of the third group; the learners that display full accuracy are one of the first group, three of the second group and four of the third group.

At the Phrasal procedure stage, if ACC is introduced, it is almost always accurate, apart from adjective-noun agreement in two learners of the third group, which display 0.66 of accuracy.

The Sentence procedure stage is acquired by three learners of the first group, by four of the second group and by six of the third group. Accuracy is below 1 in two learners out of three in the first group, in one learner out of four in the second group and in none of the six learners of the third group.

In sum, data analysis on accuracy suggests that learners whose L1s mark ACC with the same forms as Russian are more accurate than learners whose L1s mark ACC with different forms. Accuracy decreases even more in learners whose L1 uses ACC marking only on a few pronouns. Higher accuracy correlates with more typological similarity between the learners' L1s and Russian.

DMTH is validated by data on the acquisition of ACC in Russian L2 in that learners can positively transfer ACC marking under the constraints of PT developmental stages of acquisition.

4.3. Testing the Cognitive Load Hypothesis

In this section, I will test the Cognitive Load Hypothesis, according to which learners develop from minimal exchange of grammatical information between two elements to exchange of grammatical information among more elements both horizontally (i.e., in the same phrase) and vertically (i.e., between embedded phrases).

In order to account for the role of cognitive load in the learners' development I will first show the distribution amongst the learners of multiple marking within the NP and the VP and then the distribution of embedded phrases.

The table in (259) shows the number of case markings within the same phrase in the

learners' production. I have considered only the NP and the VP, because they are the only phrases in which learners produce more than one case marked element, as exemplified in (258a) and (258b), respectively an NP with three case marked elements and a VP with two case marked elements.

- (258) BD: a. so svo-imi et-imi korzink-ami
 with own-INST these-INST baskets-INST
 [with these baskets of her]
- b. medsestra prinës vod-u i butylk-u
 nurse brought water-ACC and bottle-ACC

In the table, as above, the learners are listed from beginner to advanced from left to right, according to the PT stages of development. A thicker line between LK and MR separates the learners who haven't reached the Sentence procedure stage from those who have. In this table, a plus indicates a target-like structure, and a minus an incorrect one in target Russian. Unlike the tables in § 4.1, here accuracy, and not emergence, is investigated, and thus only target-like case markers are considered as valid.

(259) Distribution of case marked structures within the NP and VP

STRUCTURE	JO	AE	EL	DN	LK	MIR	BE	CR	KA	PA	DA	DO	MT	BD	NA	AN	CH	BB
VNCASE	+1	0	0	-1	0	+1	0	+1-1	0	+1	+1-1	+1	+2-1	0	0	+2	0	0
NCASE																		
VP	13-3	+7-6	+7-7	+13-3	+13-2	+10-3	+11	+11-5	+14-2	+11	+13-2	+14	+12-2	+10-3	+15	+8	+10-2	+16
ACASE	0	0	0	0	0	0	0	-1	0	0	0	0	0	+1	0	0	0	0
ACASE																		
NCASE																		
NP	+1	0	3-3	+13	+5	+2-1	0	+15	+2-2	+14-1	+12	+11-1	+8	+10-1	+5-2	+12	+22	+15
ACASE																		
NCASE																		

The learners MU, AA and CI are excluded by this analysis, because they cannot activate the Phrasal procedure, required by the NP and the VP.

As far as learners at the Phrasal procedure stage, none of them uses more than one adjective in the NP and only JO correctly uses multiple markers in the VP once, as shown in (260).

(260) JO: mama dala devojk-*e* chleb i butylk-*u*
 mum gave girl-*DAT* bread and bottle-*ACC*

DN produces one sentence with the first noun marked by ACC instead of DAT and the second one by NOM instead of ACC, as shown in (261).

(261) DN: mama skazala **ejo* **dorog-a*
 mum told **her-ACC* **way-NOM*

Moving to the learners who have reached the Sentence procedure stage, BD correctly marks two adjectives in the NP, and seven learners out of 13 use correct multiple case marking in the VP. As already mentioned, BD correctly marks INST on two adjectives and one noun, as shown in (262).

(262) BD: so svo-*imi* et-*imi* korzink-*ami*
 with own-*INST* these-*INST* baskets-*INST*
 [with these baskets of her]

CR, who is accurate in marking adjective and noun case agreement 15 times, cannot handle case marking when she uses two adjectives, as shown in (263).

(263) CR: s **dv-uch* **rusk-ich* **druz'-ja*
 with **two-ACC* **Russian-ACC* **friends-NOM*

As far as two nouns in the VP, the learners BE, KA, BD, NA, CH and BB never use this structure. The learners MR, PA and DA produce one correct structure each, as exemplified in (264a), the learner AN produces two correct occurrences, and the learners CR, DA and MT each produce one or two correct occurrences and one error, as exemplified in (264b).

- (264) PA: a. posmotreli babušk-u i krasnu-ju šapočk-u
 (they) saw grandmother-ACC and red-ACC hood-ACC
- b. mama daět *krasnu-ju *šapočk-u chleb
 mama gives *red-ACC *hood-ACC bread

In sum, the learners who have reached the Phrasal procedure stage use no multiple case marking in the NP and one in the VP (in JO's production). Amongst the learners who have reached the Sentence procedure stage, BD correctly marks two adjectives in the NP and seven learners (MR, CR, PA, DA, DO MT and AN) correctly produce case marking on two nouns in the VP. Data suggests that only advanced learners are able to manage more than one element in the phrase.

Let us move to the analysis of the number of embedded phrases. The table in (265) shows the number of embedded phrases introduced by the learners. As usual, the learners are listed from left to right from lower to higher PT stages. A plus indicates a target-like structure, and a minus an incorrect one in target Russian. A thicker line separates those learners who are at the Phrasal procedure stage and those who have also reached the Sentence procedure stage. The level of embedding ranges from I (one phrase) to IV (four embedded phrases). Learners who haven't reached the Phrasal procedure are excluded by this analysis.

(265) Distribution of embedded phrases amongst the learners

EMB	JO	AE	EL	DN	LK	MR	BE	CR	KA	PA	DA	DO	MT	BD	NA	AN	CH	BB	
IV																			
III				+8	+2					+4	-1		+1	-1	-1	+2	-1	+1	
II	+2-2		+4-7	+6-4	+5-1	+3-4	-2	+17-5	+3-4	+16-6	+16-1	+17-1	+7-3	+14	+11-3	13-4	+20-3	+22	
I	+20-7	+14-21	+18-11	+19-10	+31-12	+24-7	+29-3	+27-6	+29-4	+26-4	+37-3	+39	+38-4	+34-5	+54-1	+25-1	+35-6	+63	

At the Phrasal procedure stage, the learner AE never uses embeddings, the learners JO and EL produce embedding at level II and the learners DN and LK produce embedding at level III. JO and EL are more accurate in embedding at level I, where they correctly mark 20 out of 27 and 18 out of 29 structures respectively, whereas in embedding at level II they correctly mark case in two out of four and four out of 11 structures respectively. The example in (266a) shows a correct case marking in a NP daughter of PP and the example in (266b) shows wrong case assignment of an adjective within a NP daughter of PP.

- (266) EL: a. s mo-im preodavatel-ej
with my-INST teacher-INST
- b. s *moj drug-ej
with *my.NOM friend-INST

The learners DN and LK are always accurate in embedding at level III, precisely eight and two times respectively. The example in (267) shows a DAT marked NP daughter of PP, which is daughter of VP.

- (267) DN: ona idet k svo-ej babušk-e
she goes to her-DAT grandmother-DAT

Both are less accurate in embedding at level II, where DN produces six correct structures out of ten and LK is correct five times out of six. Their accuracy decreases in embedding at level I. Unlike the prediction of the cognitive load hypothesis, these two learners are more accurate when case is used in embedded structures at deeper levels.

Moving to levels of embedding amongst the learners who have reached the Sentence procedure stage, MR, BE, CR, KA and DO produce structures up to the level II. Seven learners mark case in structures up to level III and BD produces two structures at level IV of embedding, but he is always wrong at this level. The four learners MR, BE, CR and DO are very accurate at level I of embedding and less accurate at level II. Here MR and KA are inaccurate four times out of seven, BE is always inaccurate (twice), CR is inaccurate five times out of 23 and DO here introduces the only error in her production. The examples in

(268a) and (268b) show a correct and a wrong use of case in a NP within the PP, and thus at level II of embedding.

- (268) KA: a. na *prv-ij kartink-e
 on *first-NOM picture-PREP
- b. na vtor-oj kartink-e
 on second-PREP picture-PREP

Among the seven learners who introduce embedding up to level III, DA, NA and CH produce one wrong occurrence each, as in the NP embedded in a PP embedded in a VP in (269a). PA, MT, AN and BB are always correct, as exemplified in the NP embedded in a NP embedded in a PP in (269b).

- (269) DA: a. idti k dom-u *babušk-a
 go to house-DAT *grandmother-NOM
- PA: b. na drug-oj stran-e gor-y
 on other-PREP side-PREP mountain-GEN

Finally, BD is the only learner who introduces structures at level IV of embedding. He is always inaccurate both at level IV and at level III, as shown in the NP embedded in NP embedded in PP embedded in VP in (270a) and in the NP embedded in a NP embedded in a PP in (270b).

- (270) BD: a. idti k babušk-e *krasnu-ju *šapočk-u
 go to grandmother-DAT *red-ACC *hood-ACC
- b. s postavščik-ami naš-ego *product-y
 with provider-INST our-GEN *products-NOM

BD is always accurate (14 times) at level II and is correct 34 times out of 39 at level I.

In sum, the learners at the Phrasal procedure stage display low degree of accuracy in embedding of level I and II, which is introduced by all the learners but AE. The two

learners DN and LK, who introduce structures at level III at this stage, are always accurate, against the expectations. All the learners at the Sentence procedure stage produce structures at level II of embedding. Eight learners produce structures also at level III and BD two structures at level IV of embedding. The overall accuracy is higher at lower level of embedding, and only BB can master all his structures at all three levels of embedding.

To conclude, data on the number of agreeing elements in the NP and in the VP, and on the depth of embedded structures do not provide robust evidence for the Cognitive Load Hypothesis. The overall impression is that either learners avoid using many elements (like JO) or fail in marking all the elements when they attempt to introduce more elements than they can process (like BD). However, some learners (like LK and DN) provide counterevidence to the hypothesis and are more accurate in structures where the number of elements to process is higher. More abundant data with a larger variety of case markers may give a clue as to why this is so.

4.4. Testing the Differential Case Theory Hypothesis

In this last section, I will analyse how case assignment develops amongst the learners. The table in (272) shows different case marked structures, grouped according to the type of case assignment involved. Whereas in § 4.1 I have shown how case emerges at different stages of PT development, here I will show how the different types of case assignment fit into PT stages. As in § 4.2, accuracy rather than emergence is considered, because case assignment always refers to a specific case and thus evidence of case assignment are target-like case markers.

At the Category procedure stage, I have considered proto-configurational case assignment of ACC to post-verbal noun and semantic case assignment of DAT to <goal> and INST to <instrument>. Because ACC is the default case after a verb, but other cases can appear in this position, a plus in the table (272) indicates presence of ACC, and no minus is introduced. On the other hand, the assignments of DAT to <goal> and INST to <instrument> are mandatory, and thus a plus indicates correct use of case, and a minus the presence of a non-target marker. Here NOM to pre-verbal noun and to <agent>, and ACC to <patient> are

not considered, because they cannot be tested. On the one hand, NOM is the default case and its assignment cannot be proved; on the other hand, ACC to <patient> can appear either in post-verbal or in pre-verbal position, and thus is already considered as proto-configurational case and grammatical case assignment respectively.

At the Phrasal procedure stage, I consider lexical case assignment required by preposition, verb and adjective and configurational GEN assigned to a NP daughter of NP and sister of N. A plus indicates a target structure, a minus indicates any other non-target case marking. As to case required by preposition, a plus indicates use of one of the possible cases selected by the preposition. For example, PREP and ACC are always correct with the preposition *v*, but INST is not (cf. §1.2.3). For this reason, a sentence like the one in (271), where a verb of motion selects the preposition *v* and the preposition selects PREP case, instead of target-like ACC, is considered correct here. The error in this sentence is the selection of the preposition *v* requiring PREP instead of the preposition *v* requiring ACC, whereas no error is found in case selection within the PP.

(271) ja edu *v moskv-e
 I go *to Moscow-PREP

At the Sentence procedure stage, I have considered grammatical case assignment of ACC to OBJ, evidence of which can be found only in the TOP_{OBJ} structure.

In the table in (272) the learners are listed, as usual, from left to right from beginners to advanced according to PT developmental stages, which are signalled by thick black lines.

(272) Distribution of different case assignments amongst the learners

STAGE	ASSIGN STRUCT	CATEGORY PROCEDURE			PHRASAL PROCEDURE			SENTENCE PROCEDURE
		PROTO-CONFIGURATIONAL AOC to post-verbal N	SEMANTIC		LEXICAL CASE by P	CASE by V	CONFIGURATIONAL CASE by A	GRAMMATICAL AOC to OBJ
			DAT to <goal>	INST to <inst>				
		0	0	0	0	0	0	0
	AA	+3	-1	0	-7	0	0	-3
	CI	+5	-3	0	+1-14	0	-1	-4
	JO	+13	+2-1	0	+10	-2	0	-4
	AE	+5	+2	0	+5-4	-3	-2	-4
	EL	+5	-1	0	+15-4	+1	+2	-4
	DN	+13	+4-3	0	+17-3	0	+1	-5
	IK	+11	+1	0	+15-4	+2	+9-2	-5
	MB	+11	+1-1	0	+10-3	+1-1	+1	+3-1
	BE	+8	0	0	+11-3	+2	+1	+8
	CR	+10	+2-2	0	+25-3	+1-1	+2	+4-1
	EA	+7	+3	0	+13-3	+1-1	0	+4
	PA	+11	+2	0	+28-3	+2	+5	+5
	DA	+11	+1-2	0	+24	+2	+3-1	+7
	DO	+13	0	+1	+26	+4	+2	+10
	MT	+10	+2	+1	+21-3	+2	+1	+3-1
	ED	+8	+2-1	0	+26-1	+2	+9-2	+6
	NA	+10	+2	+1	+35-3	+2	+1	+7
	AN	+8	0	0	+20-3	+4	+2	+6
	CH	+7	+1	0	+25-5	+1	+1	+11-2
	BS	+13	+1	0	+30	+3	1	+9

At the Category procedure stage, all the learners but MU can mark ACC in post-verbal position, 14 learners out of 21 can assign DAT to <goal> and only the three learners DO, MT and NA introduce INST to mark <instrument>.

The use of ACC in post-verbal position ranges from three occurrences in the beginner AA to 13 in JO, DN, DO and BB, as exemplified in (273).

(273) DN: muzykant kupil trub-u
 musician bought trumpet-ACC

Among the 14 learners that mark <goal> by DAT, eight learners (AE, LK, KA, PA, MT, NA, CH and BB) are always accurate, as exemplified in (274a). Six learners (JO, DN, MR, CR, DA and BD) introduce both correct and incorrect use of DAT, whereas AA, CI and EL are always incorrect, as in (274b), where <goal> is marked by ACC. The learners MU, BE and DO never introduce the role <goal>.

(274) JO: a. mama dala devočik-e chleb
 mum gave girl-DAT bread
 CI: b. rasskazaet *krasnu-ju *šapočk-u
 (she) tells *red-ACC *hood-ACC

It should be noted that, although the structure belongs to the Category procedure stage, none of the learners below the Phrasal procedure stage is able to mark it. This might be explained by the fact that <goal> is associated to the GF OBLGOAL (King, 1995) and thus requires activation of the intermediate stage of the Lexical Mapping Hypothesis (Bettoni & Di Biase in press: § 1).⁷

The use of INST to mark <instrument> is rare and introduced only by DO, MT and NA, as exemplified in (275).

⁷ Bettoni & Di Biase (in press: § 1) identified an intermediate stage in the Lexical Mapping Hypothesis which consists of canonical mapping and additional arguments. Crucially, <goal> is listed among the additional arguments that map onto an OBLθ.

(275) DO: nož-om razrezali život
 knife-INST cut belly
 [they cut his belly with a knife]

The three learners who introduce this structure have reached the Sentence procedure stage. This might be explained by the fact that <instrument> is associated to the GF ADJ and at low stages of development learners tend to produce shorter sentences with core arguments.

Further up, among the 18 learners who have reached the Phrasal procedure stage, all 18 can use lexical case required by the preposition, 15 when case is lexically required by the verb and only one can mark lexically required by the adjective.

Amongst the learners who can mark case required by the preposition, only JO, DA, DO and BB are always accurate, as exemplified in (276a). All the other 14 learners use at least one case that is not required by the preposition, as in (276b), where the preposition *v* requires either ACC or PREP, but never requires INST.

(276) DA: a. v slovack-om jazyk-e
 in Slovak-PREP language-PREP

KA: b. idět v *les-om
 goes into *wood-INST

Moving to case lexically required by the verb, 15 learners can mark it correctly, as in (277a), the four learners AA, CI, JO and AE always miss it, as in (277b), and MU and DN never introduce verbs requiring non-ACC cases.

(277) MR: a. devuška z анимаetsja balet-om
 girl practices dance-INST

JO: b. ona z анимаetsja *muzyk-u
 she practices *music-ACC

As already mentioned in previous sections, only BB introduces case when lexically required by the adjective, as shown in (278), where the adjective *bliže* ‘closer’ requires its noun to be DAT marked.

(278) BB: tureckij bliže naš-emu jazyk-u
 Turkish closer our-DAT language-DAT
 [Turkish is similar to our language]

Within the Phrasal procedure stage, also configurational assignment of GEN in the NP is considered. Among the 17 learners that introduce this structure, 12 are always accurate, as in (279a), the two learners CI and AE are always inaccurate, as exemplified in (279b), and the three learners LK, DA and BD are most of the times accurate.

(279) MR: a. ne zname ime človек-a
 not know name person-GEN

AE: b. priechala domoj *babušk-e
 arried house *grandmother-DAT

Moving to the Sentence procedure stage, 13 learners mark a pre-verbal OBJ by ACC with different levels of accuracy; 9 learners are always accurate at this stage, as in (280a), whereas the four learners MR, CR, MT and CH introduce one or two wrong NOM instead of ACC to mark the pre-verbal OBJ, as in (280b).

(280) PA a. vilk-u prinesla balerin-a
 fork-ACC brought dancer-NOM
 [a fork, the dancer brought]

CH: b. *šapk-a odevat'
 *hat.NOM wear
 [to wear a hat]

In sum, the development of case assignment parallels the PT based developmental stages. Data confirms the Differential Case Theory based hypothesis, in so far as proto-configurational and semantic case assignments at the Category level precedes lexical and configurational case assignments at the Phrasal procedure stage and grammatical case assignment is introduced at the Sentence procedure stage. Data provide empirical evidence of steps within the stages, as follows:

- at the Category procedure stage: proto-configurational ACC to post-verbal noun > semantic DAT to <goal> > semantic INST to <instrument>
- at the Phrasal procedure stage: lexical by preposition > lexical by verb / configurational GEN in the NP > lexical by adjective.

5. Conclusion

In this final chapter of my dissertation, I will sum up first how I defined the research questions and dealt with them, and then I will conclude with a summary of the findings of my research.

In order to study how case morphology develops in learners of Russian L2, I have first reported how case is described in formal grammar (§ 1), concentrating on how Russian case is treated in Lexical-Functional Grammar. Case is a morphological feature that not only marks relations between constituents at the syntactic level but also involves semantic aspects. LFG considers case as a phenomenon involving mappings between structures. In a work by Nordlinger (1998), case is considered as the main grammatical means by which non-configurational languages build syntax. King and Butt (1991) classify the different natures of case assignments among languages in the so-called Differential Case Theory. Moving from the general description of case to the specificity of Russian, several theories of case can be applied to this language. On the one hand, Jakobson (1936, 1958) and Neidle (1988) propose to decompose the six Russian cases into binary features based on their semantics. On the other hand, King (1995) applies a DCT based classification to the description of case in Russian and identifies four types of case assignment: configurational, semantic, lexical and grammatical. In my work, I have assumed this latter view.

In the second part of my dissertation (§ 2), I have concentrated on the acquisitional process. In order to investigate how case is acquired, I have presented Processability Theory (Pienemann 1998; Pienemann *et al.* 2005a; Bettoni & Di Biase, in press), the theory of SLA that I use as the main theoretical framework. In order to explain the core tenets of PT, I have first (§ 2.1) presented the two theoretical bases on which PT is founded, that is, the already mentioned Lexical-Functional Grammar for language description, and Levelt's psycholinguistic model for language production. I have then presented the universal implicational stages for the development of morphology (Pienemann 1998) and the interfaces with syntax required by case (Pienemann *et al.* 2005a, Bettoni & Di Biase in press). I have also introduced the Developmentally Moderated Transfer Hypothesis (Pienemann *et al.* 2005b), a theory that claims that transfer from the

L1 to the L2 is possible only under the constraints of PT developmental stages.

In a second section (§ 2.2), I have discussed other works on the acquisition of case within PT, namely, Baten (2011, 2013) on German L2, Di Biase, Bettoni & Medojević (in press) on Serbian as a heritage language, and Baten & Verbeke (subm.) on Hindi L2. I have also considered other seminal works on the acquisition of case in Russian outside the PT framework, namely, Gvozdev (1961), Polinsky (1995, 2006), Dubinina & Polinsky (2013), Kempe & MacWhinney (1998) and Kempe & Brooks (2008).

I have finally proposed my own research hypotheses (§ 2.4). First, I have formulated the hypotheses for the developmental path of Russian case morphology by adapting the PT universal developmental hypotheses (Pienemann 1998). Secondly, I have adapted the DMTH to the acquisition of the ACC case in Russian L2, and thus hypothesised that although the learner's L1 marks ACC, no transfer is possible if the relevant stage is not yet reached, and its accuracy will be higher in the already emerged structures. Thirdly, with regard to the role played by cognitive load, I claim that within the Phrasal procedure stage depth of embedding and accuracy in case marking are higher in more advanced learners. Fourthly, I have hypothesised that the different types of case assignment in Russian described by King (1995) can fit into PT developmental hypotheses.

In the third part of my dissertation (§ 3), I have described the methodology to test my hypotheses. In order to elicit case, the learners had to complete five communicative tasks that aimed at eliciting case in specific structures. The learners that took part in my research are 21 learners of Russian L2 with a variety of L1s, which can be divided into three groups. Seven learners are Italian, and thus speak a language in which case is not marked on nouns. Seven learners are Azeri, Georgian, Rumanian and Turkish, all speakers of L1s in which case is used. The third group of seven learners consists of speakers of Serbian, Slovak and Slovene, all Slavic languages in which case is marked with similar endings as those used in Russian. The corpus collected among the 21 learners consists of 1181 analysable case markers, about 56 on average per learner.

In the fourth chapter (§ 4), I have presented the analysis conducted on the data collected among the 21 learners of Russian L2.

First, data confirms that learners follow the implicational stages of acquisition hypothesised by PT, in that any learner at a given stage of development provides evidence

of the emergence of case marking requiring the activation of lower procedures. In particular, one learner is at the Lemma access stage, two learners are at the Category procedure stage, 18 learners have reached the Phrasal procedure stage, and 13 of them have reached also the Sentence procedure stage.

With regard to intra-stage development, within the Phrasal procedure stage, my empirical data suggest steps within this stage of development, in the following sequence. Case is marked first in the PP, then in the VP, then again in the NP and finally in the QP and AP. Within the NP, agreement between adjective and noun emerges before GEN required by the NP → N NP. Within the Sentence procedure stage, two learners out of the 13 who can mark ACC in TOP_{OBJ} produce also a sufficient number of DAT in TOP_{OBL}. This suggests that the topicalisation of OBJ is acquired before that of OBL_{DAT}.

Secondly, my analysis on the acquisition of ACC confirms the DMTH in so far as learners can transfer ACC marking only under the constraints of PT developmental stages of acquisition. First, DN, LK and JO, who haven't reached the Sentence procedure stage, cannot transfer ACC from their L1s into the TOP_{OBJ}, a structure at this stage. Secondly, evidence of transfer, once the stage is reached, is provided by the rate of accuracy in learners of the groups 2 and 3 who, at any level of proficiency, are more accurate than Italian learners. The presence or absence of case marking in the learners' L1s thus affects their accuracy in the stages they have already reached.

My corpus provide some evidence for the Cognitive Load Hypothesis within the Phrasal procedure stage with regard to the number and accuracy of elements and of embedded structures. Data show the tendency to avoid multiple case marking within a structure. On the other hand, more advanced learners not only introduce more case marked nouns and embeddings, but also display a higher rate of accuracy. However, two intermediate learners provide counterevidence to this tendency, in that they are more accurate in structures where the number of elements to process is higher.

Finally, data confirms my fourth hypothesis, which claims that King's (1995) different types of case assignments can fit into PT's stages of development. Proto-configurational ACC in post-verbal position and semantic DAT to <goal> are introduced at the Category procedure stage. At the Phrasal procedure stage, lexical case by preposition and then by verb appears, followed by configurational GEN in NP → N NP. Only at the

Sentence procedure stage, ACC is assigned by grammatical case assignment. Data provide empirical evidence of steps within the stages, as shown in (281a-b) within the Category procedure and the Phrasal procedure stages respectively.

(281) a. proto-configurational ACC > semantic DAT to <goal> > semantic INST to <instrument>

b. lexical by preposition > lexical by verb / configurational GEN in the NP > lexical by adjective

To conclude, this study contributes to research within the Processability Theory in several aspects. First, the inclusion of Russian among the languages in which PT has been tested widens the cross-linguistical validity of the morphological stages hypothesised by PT. Secondly, this study on Russian case contributes to research on case within the PT framework, a trend that has recently become of interest because of its relevance at the interface between morphology and syntax. Thirdly, the learners' varied L1 backgrounds allowed to validate the DMTH in Russian and widened its scope of syntax to morpho-syntax. Finally, my research has also paved the way to a wider reliance of LFG by PT, in that different types of case assignment seem to correspond to different types of feature unification.

The limits of my work suggest trends for further research on the acquisition of case in Russian L2. First, a longitudinal study could show the developmental path I have reconstructed through a cross-sectional study. Secondly, I have tested a sample of 21 learners, whereas a larger number of participants would lead to more statistically significant results.

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APPENDICES

Appendix A: *Krasnaja Šapočka* task

Appendix B: Spot the differences task

Appendix C: Picture description task

Appendix D: *Večerinka* - the party task

Appendix E: Detective task

Appendix F: Corpus

APPENDIX A

Krasnaja Šapočka task



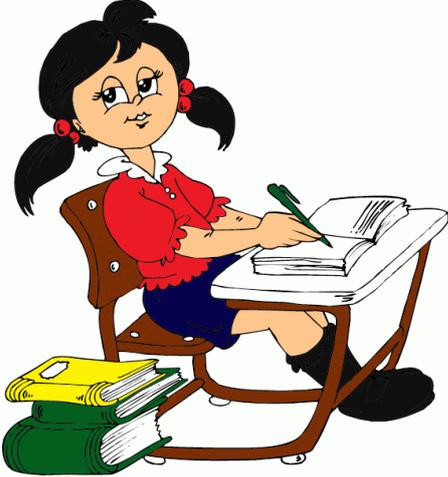




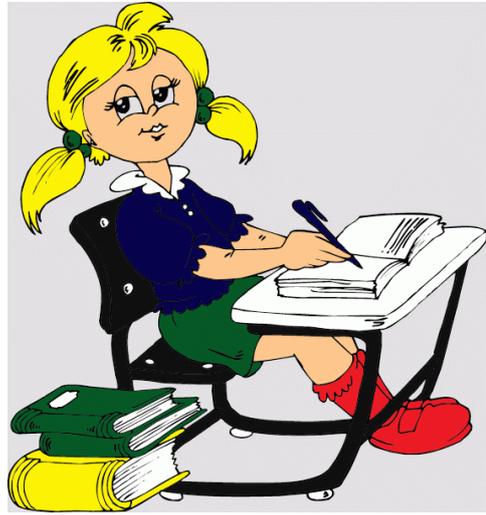
Original pictures by Claudia Artoni

APPENDIX B

Spot the differences task



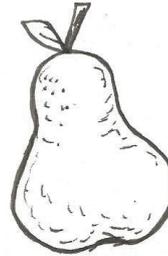
Первая картинка



Вторая картинка

APPENDIX C

Picture description task



_____ **нравиться**



_____ **заниматься**



любить



стать

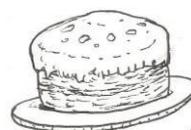
APPENDIX D

Večerinka - the party task

Посмотри на следующие картинки и скажи КТО ЧТО принёс.

Но ВНИМАНИЕ:

Начинай всегда от первой картинке!





APPENDIX E

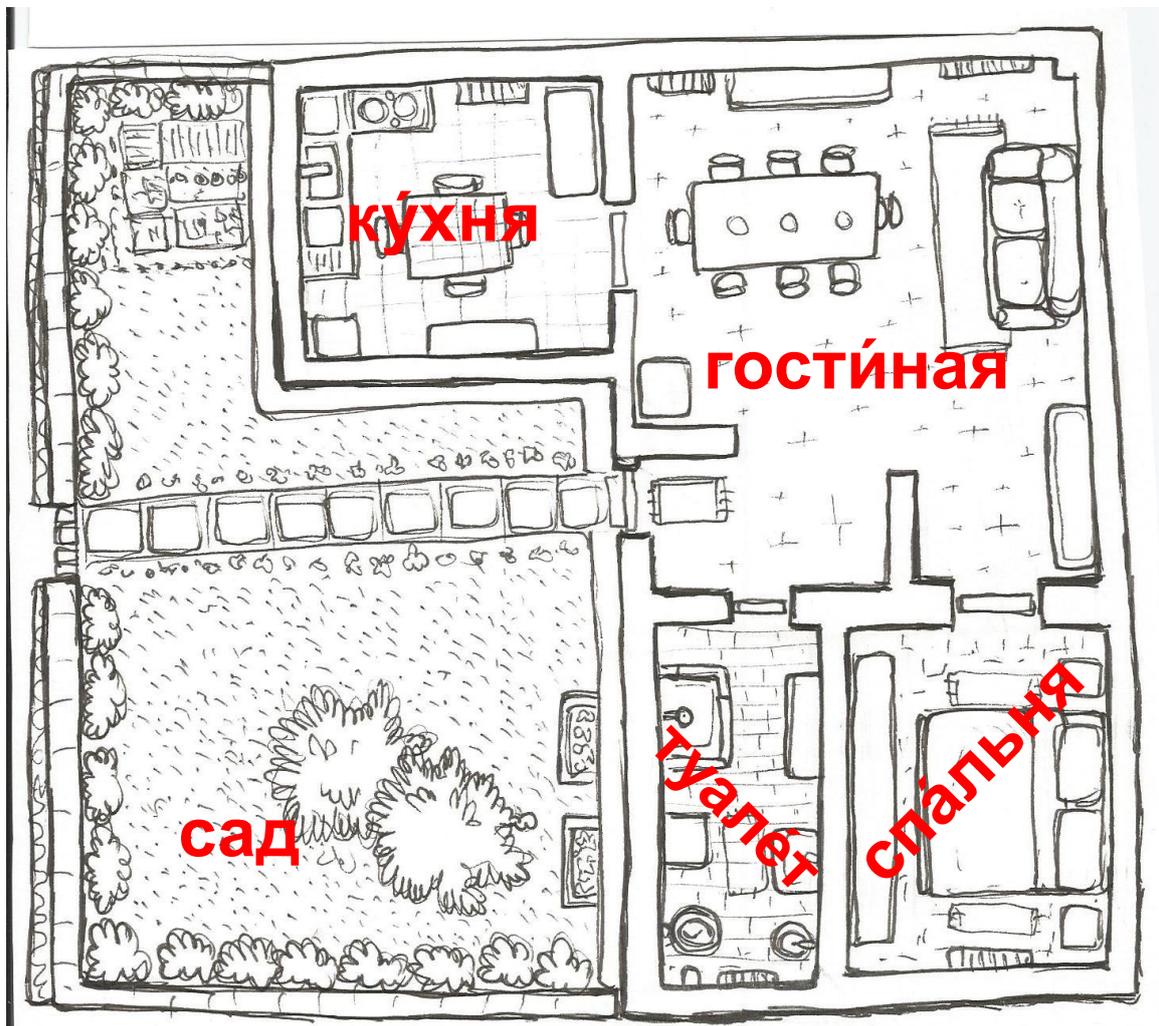
Detective task

Вы замечательны детектив Шерлок Холмс.

Нам нужна ваша помощь: вчера вечером случилось что-то ужасное...

УБИЙСТВО!!!

... вот квартира человека... квартира убитого...



... и вот опасные предметы, которые мы нашли в этой квартире...

НОЖ



ПИСТОЛЕТ



стул



**разбитая
бутылка**



... а вот люди, которые бы ли вчера в квартире убитого человека.

Один из них убил этого человека...



Вы должны заполнить эту таблицу. Как?

Спросите меня всё то, что Вы хотите знать, а я буду отвечать

Анализ детектива	
Место убийства:	
Время убийства:	
Орудие убийства:	
Киллер:	... лет
	Место происхождения:
	Имя:

... и наконец... что мы еще не знаем ???



Original pictures by Claudia Artoni

APPENDIX F

Corpus

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INTRO	AA	menja zovut anna						
2	INTRO	AA	sorak vosem						
3	INTRO	AA	v oktibrja	PP	a	P N*?			
4	INTRO	AA	anglijckij nemecyj ispanskij						
5	INTRO	AA	da						
6	INTRO	AA	v russkij konsulat	PP	∅	P N*nom			
7	INTRO	AA	ja ne znaju						
8	INTRO	AA	net						
9	INTRO	AA	v tovarisch v russkij tovarisch	PP	∅	P N*nom			
10	INTRO	AA	tancevat ja tancevaju						
11		1 AA	mama 9dajot ovoshi						
12		1 AA	shapochka krasnaja davat dajosh ovushi babuska babusku	VP	a	V N*nom			
13		1 AA	ejo mama govorit	formula					
14		1 AA	v lesu						
15		1 AA	krasnaja shapochka igrat v lesu	formula					
16		1 AA	i vstrechat volk	VP	∅	V N*nom			
17		1 AA	ona govorit						
18		1 AA	ona govorit						
19		1 AA	ona igrat v babusku	VP		V *P	PP	∅	P Nacc
20		1 AA	i ja ne znaju						
21		1 AA	on si ferma cvety						
22		1 AA	i volk igrat veloce v babuska	VP		V *P	PP	a	P N*nom
23		1 AA	i krasnaja shachka vidish videt babusku	VP	u	V Nacc			
24		1 AA	kakaj bolshoj ushi						
25		1 AA	kakaj bolshoj glaza						
26		1 AA	kakaj bolshoj nos						
27		1 AA	kakaj bolshoj zuby						
28		1 AA	i volk obedaet krasnaja shapochka	VP	a	V N*nom			
29		1 AA	i oxotniki idjut v doma	VP		V P	PP	a	P N*a
30		1 AA	i vidjat volk v kravat	VP	∅	V N*nom			
30		1 AA	i vidjat volk v kravat	PP	∅	P N*nom			
31		1 AA	na bolshoj zhivot						
32		1 AA	i oni znajut						
33		1 AA	on obedat qualcosa						
34		1 AA	oni ubit strumentale coltello						
35		1 AA	krasnaja shapochka videt babusku	VP	u	V Nacc			
36		2 AA	volosy i sapogi						
37		2 AA	svety?						
38		2 AA	kartinka dva tri						
39		2 AA	kniga knigi						
40		2 AA	i odezhda						
41		3 AA	krasnaja krapushka obedaet nnavitsja grushka						
42		3 AA	krasnaja shapochka xolodna						
43		3 AA	krasnaja shapochka znamatsja gitara	VP	a	V N*nom			

44	3 AA	krasnaja shapuska spatet			
45	3 AA	krasnaja shapochka ljubit koshku	VP	u	V Nacc
46	3 AA	krasnaja shaposhka stat balerina	VP	a	V N*nom
47	4 AA	butylka medsestra			
48	4 AA	medsestra prisla butylka	VP	a	V N*nom
49	4 AA	muzykant prisl truba	VP	a	V N*nom
50	4 AA	gitara pri balerina	NP VP	a	N*nom V
51	4 AA	vrach obedat kartoshka	VP	a	V N*nom
52	4 AA	grushka uchitelnica			
53	4 AA	ja ne znaju			
54	4 AA	medsestra prigla torta	VP	a	V N*nom
55	4 AA	oficant prinesla lozhka lozhku	VP	a	V N*nom
56	4 AA	vilka prinesla balerina	NP VP	a	N*nom V
57	5 AA	gde ubijstva?			
58	5 AA	kogda?			
59	5 AA	kakoj orudnie 9ubijstva?			
60	5 AA	kakoj killer let?			
61	5 AA	skolko let?			
62	5 AA	cheloveka . Russkij imja?			
63	5 AA	otkuda otkuda 9mesto 9proisxozdenija?			
64	5 AA	kak oni zavut?	NP VP	PR oni	N*nom V
65	5 AA	ja ne znaju			
66	5 AA	muzh o zhenzhina?			

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INTRO	CI	Menja zovut chiara						
2	INTRO	CI	mne dvadcat shest let						
3	INTRO	CI	v universitete						
4	INTRO	CI	da						
5	INTRO	CI	ja byla v moskve						
6	INTRO	CI	da						
7	INTRO	CI	ja znaju anglijskij jazyk ispanskij jazyk francuzkij jazyk i nemeckij jazyk						
8	INTRO	CI	italjanskij jazyk						
9	INTRO	CI	devuchka						
10	INTRO	CI	net ona albaniskij i						
11	INTRO	CI	my . Da						
12	INTRO	CI	v universitete						
13	INTRO	CI	v paduanskoe universitete	PP	e	P Nprep	NP	∅	A*nom Nprep
14	INTRO	CI	tri goda	QP	a	Q Ngen			
15	INTRO	CI	sejchas ja zanimaju						
16	INTRO	CI	ja igraju v futbole	VP		V P	PP	e	P Nprep
17	INTRO	CI	ili ja chitaju romany						
18	INTRO	CI	i smotru telvizor						
19	INTRO	CI	ili slushaju muzyk						
20	1	CI	mama zdajut krasnuju shapochku . Xleb kratoshki i . Butylka	VP	u a	V N*acc N*nom	NP	ju	Aacc Nacc
21	1	CI	mama rasskazaet krasnuju shaposhku	VP	u	V N*acc	NP	ju	Aacc Nacc
22	1	CI	chto babushka ne						
23	1	CI	babushka chustvuet sebja ploxo						
24	1	CI	i rekomendujut krasnuju shapuchku	VP	u	V N*acc	NP	ju	Aacc Nacc
25	1	CI	chto ona dolzhna idu v lesu						
26	1	CI	no ona dolzhna idu v kurceviju	VP		V P	PP	ju	P Aacc
27	1	CI	kak ja						
28	1	CI	v kurceviju put'						
29	1	CI	no krasnaja shapochka ne slushajut						
30	1	CI	krasnuju shapochku idut						
31	1	CI	i ona znakovstujet volk	VP	∅	V N*nom			
32	1	CI	i rasskazujut						
33	1	CI	chto babushka chuvstvuet sebja ploxo						
34	1	CI	krasnaja shapochka idut						
35	1	CI	i volk idut						
36	1	CI	ona smotrel svet						
37	1	CI	no volk vstrechaet babushka	VP	a	V N*nom			
38	1	CI	krasnaja shapochka . Dver						
39	1	CI	i videt volk na krovat	VP	∅	V N*nom			
40	1	CI	i videt volk na krovat	PP	∅	P N*nom			
41	1	CI	ona videt volk	VP	∅	V N*nom			
42	1	CI	i kak po russkij chidere?						
43	1	CI	ona sprashivaet volk	VP	∅	V N*nom			
44	1	CI	pochemu on ushi i glaza i takoj nos i takaja kak po russkij rot?						
45	1	CI	i kak takoj zuby?						
46	1	CI	volk xotet est krasnoj shapochki	VP	i	V N*gen	NP	oj	Agen Ngen

47	1 CI	i ona krichaet			
48	1 CI	i tri oxotniki slushajut krichat			
49	1 CI	i oni ubit volk	VP	∅	V N*nom
50	1 CI	i s nozh oni	PP	∅	P N*nom
51	1 CI	oni ubit volk i	VP	∅	V N*nom
52	1 CI	babushka i krasnaja shapochku oni radi			
53	2 CI	v vtoraja kartinka devochka blondinka	PP	a	P N*nom
54	2 CI	v stene na vtoraja kratinka tri kartiny			
55	2 CI	v stene na vtoraja kratinka tri kartiny	PP	a	P N*nom
56	2 CI	na vtoraja kartinka dve	PP	a	P N*nom
57	2 CI	na pervaja kartinka devoshka krasnyj pulover	PP	a	P N*nom
58	2 CI	i chjornyj . . Sapogi			
59	2 CI	na vtoraja kartinka ja vizhu tetrad	PP	a	P N*nom
60	2 CI	ja vizhu tri knigi			
61	2 CI	no dve zeljonyj i odnu zhjoltyj			
62	2 CI	vo vtoraja kartinka devochka zeljonaja jubka	PP	a	P N*nom
63	2 CI	no v pervaja chjornuju	PP	a	P A*nom
64	2 CI	v vtoraja kartinka ruchka chjornuju ruchku	PP	a	P N*nom
65	2 CI	no v pervuju chjornyj	PP	ju	P A*acc
66	3 CI	krasnaja shapochka nrvaitsja grushu	VP	u	V Nacc
67	3 CI	krasnaja shapochka ona xolodna			
68	3 CI	krasnaja shapochka zanimatsja muzyku	VP	u	V N*acc
69	3 CI	krasnaja shapochka ona strashnyj			
70	3 CI	krasnaja shapochka ljubit koshki	VP	i	V N*nom
71	3 CI	krasnaja shapochka mechtajut stat balerinka	VP	a	V N*nom
72	4 CI	butylka prinjos medsestra	NP VP	a	N*nom V
73	4 CI	muzykant prinjos truba	VP	a	V N*nom
74	4 CI	gitara prinjos balerina	NP VP	a	N*nom V
75	4 CI	vrach prinjos kartoshki			
76	4 CI	grusha prinjos prepodavatael	NP VP	a	N*nom V
77	4 CI	medsestra prinjos vypechka	VP	a	V N*nom
78	4 CI	oficiant prinjos lozhka	VP	a	V N*nom
79	4 CI	vilka prinjos balerina	NP VP	a	N*nom V
80	5 CI	gde chelovek byl ubit?			
81	5 CI	kogda on byl ubit?			
82	5 CI	kak on byl ubit?			
83	5 CI	gde rodilos killer?			
84	5 CI	skolko let?			
85	5 CI	kak svoi imja?			
86	5 CI	imja ubit	NP	a	N N*nom
87	5 CI	kak nazyvajut chelovek kto ubit?			

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1		
1	INTRO	AE	menja zovut alessia					
2	INTRO	AE	dvadcat tri god	QP	∅	Q N*nom		
3	INTRO	AE	v univiersitete v venecie					
4	INTRO	AE	potumo chta ja uchus v venecie					
5	INTRO	AE	tri god nazad	QP	∅	Q N*nom		
6	INTRO	AE	ja znaju anglijskij jazyk i potom francuzskij jazyk					
7	INTRO	AE	ja uchu russkij					
8	INTRO	AE	italjan italjanskij					
9	INTRO	AE	tolko s aleksandrom	PP	om	P Ninst		
10	INTRO	AE	on drug menja	NP	PR menja	N Ngen		
11	INTRO	AE	da ja ochen ljublju sport					
12	INTRO	AE	ja zanimala					
13	INTRO	AE	ja zanimaju volejbol	VP	∅	V N*nom		
14	INTRO	AE	ja byla balerina klasicheskaja					
15	INTRO	AE	eto vsjo ja dumaju					
16		1 AE	chto ja skazhe'					
17		1 AE	ejo mat xochet davaj ej buterbrot i vin	VP	PR ej	V Ndat		
18		1 AE	i ejo mama dumat o babushke	PP	e	P Nprep		
19		1 AE	potomu chto ona kravat					
20		1 AE	i ejo mame sprasi ejo	VP	PR ejo	V Nacc		
21		1 AE	chto ona dolzhna idti domoj babushka	NP	a	N N*nom		
22		1 AE	koshko xochet buterbrot					
23		1 AE	no ejo ne xochet davat					
24		1 AE	ona pet pojot					
25		1 AE	potomu chto ona peshkom idti domoj babushke	NP	e	N N*dat		
26		1 AE	potom est ja ne pomnju					
27		1 AE	ona ne znala					
28		1 AE	chto on eto byl tam					
29		1 AE	i ona skazhi emu	VP	PR emu	V Ndat		
30		1 AE	chto ona dolzhna idti domoj babushki	NP	i	N Ngen		
31		1 AE	ona shla					
32		1 AE	i no ona ne pomnila					
33		1 AE	chto ej nuzhno idti domoj babushke	NP	e	N N*dat		
34		1 AE	potomu chto ona videla cvety					
35		1 AE	i poetomu zloj volk priexal domoj babushke pered devushka	NP	e	N N*dat		
35		1 AE	i poetomu zloj volk priexal domoj babushke pered devushka	PP	a	P N*nom		
36		1 AE	i kogda devushka priexala domoj babushke	NP	e	N N*dat		

37	1 AE	ona uvidela chto est zloj volk v kravate	PP	e	P Nprep
38	1 AE	i kogda ona uvidela etot			
39	1 AE	ona dumala o kak ejo babushke byla			
40	1 AE	i kak eta babushka est			
41	1 AE	nos glaza i tak dalee			
42	1 AE	i potom zloj volk xochet est devushka devushku	VP	a	V N*nom
43	1 AE	i poetomu oxotniki uslishali shumki			
44	1 AE	i oni kogda on			
45	1 AE	kogda zloj volk spaesh spaet			
46	1 AE	oni umejut eto s nozh s nozhom	PP	om	P Ninst
47	1 AE	v konce koncov vse rady			
48	2 AE	zdes est tri kartiny			
49	2 AE	i zdes dva			
50	2 AE	ona blondinka i ona brunetka			
51	2 AE	i u nejo est zeljonye kasichki			
52	2 AE	u nejo est			
53	2 AE	eta rubashka krasnaja i ne krasnaja			
54	2 AE	kogda ja ponimaju kak svety ja govorju			
55	2 AE	eta jabka jubka zeljanaja i eta sirjonaja			
56	2 AE	eta stol chjornaja i eta ne chjornaja			
57	2 AE	eti knigi zeljony			
58	2 AE	i eto zhjolty			
59	2 AE	zdes est odin knig zhjoltyj			
60	2 AE	i dva zeljonyj			
61	2 AE	i odin samyj kak eto			
62	2 AE	i potom est ruchka zeljony i seryj			
63	2 AE	i sapogi krasivyj dlja blondinka cheloveka	PP	a	P N*nom
64	2 AE	i chjornyj dlja brunetka	PP	a	P N*nom
65	3 AE	je nrvajtsja grushu	VP	u	V Nacc
66	3 AE	a ej xolodno			
67	3 AE	ah . Ja ona zanimaetsja muzyku	VP	u	V N*acc
68	3 AE	ona boetsja			
69	3 AE	ona ljubit koshka koshku	VP	a	V N*nom
70	3 AE	ona staet balerinka balerina	VP	a	V N*nom
71	4 AE	butylka prinjos medsestra	NP VP	a	N*nom V
72	4 AE	muzykan prinjos grusha no truba trubu	VP	a	V N*nom
73	4 AE	gitar prinjos balerina			
74	4 AE	vrach prinjos kartoshku	VP	u	V Nacc

75	4 AE	grusha prinjos ah ot uchitelnica	NP VP	a	N*nom V
76	4 AE	medsestra nesjot vypechku	VP	u	V Nacc
77	4 AE	oficiant prinjos lozhku	VP	u	V Nacc
78	4 AE	vilka prinjos ot baleriny	NP VP	a	N*nom V
79	5 AE	xorosho			
80	5 AE	gde on byl umerel?			
81	5 AE	kogda?			
82	5 AE	chto eto?			
83	5 AE	s nozhom s pistolet?	PP	om	P Ninst
83	5 AE	s nozhom s pistolet?	PP	∅	P N*nom
84	5 AE	kak on byl umeret?			
85	5 AE	skolko killera let?			
86	5 AE	otkuda killer?			
87	5 AE	kak killeru zavut?	NP VP	u	N*dat V
88	5 AE	ah mne nado			
89	5 AE	a chto eto kto eto chelovek?			
90	5 AE	chelovek kotoryj byl umeret			
91	5 AE	pomeshchik eto?			
92	5 AE	tebja			

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM2	STRUCTURE 2
1	INTRO	EL	menja zovut elisa						
2	INTRO	EL	mne dvadcat' let	QP	∅	Q Ngen			
3	INTRO	EL	ja znaju russkij jazyk . . . potomu chto ja uchus' v universitete						
4	INTRO	EL	9zdes' 9v 9verone						
5	INTRO	EL	ja znaju anglijskij jazyk 9nemeckij jazyk i nemnogo russkij jazyk i nemnogo 9ispanskij						
6	INTRO	EL	ja izuchaju eti eto						
7	INTRO	EL	anglijskij jazyk						
8	INTRO	EL	ital'janskij jazyk						
9	INTRO	EL	gde?						
10	INTRO	EL	ja uchula russkij jazyk v universitete						
11	INTRO	EL	dva dva goda	QP	a	Q Ngen			
12	INTRO	EL	net no ja xochesh' idti v moskve naprimer	VP		V *P	PP	e	P Nprep
13	INTRO	EL	potomu chto ja uchu izuchaju russkij jazyk v russia						
14	INTRO	EL	ja razgovaju russkij jazyk s moj drugej	PP	ej	P Ninst	NP	oj	A*nom Ninst
15	INTRO	EL	ona anna						
16	INTRO	EL	i obychno v universitete na lekcii	PP	i	P Nprep			
17	INTRO	EL	s moj tovarishche i s moim prepodavatelej	PP	e	P N*?	NP	oj	A*nom N*?
17	INTRO	EL	s moj tovarishche i s moim prepodavatelej	PP	ej	P Ninst	NP	im	Ainst Ninst
17	INTRO	EL	ja rabotaju v turistichecki galere	PP	e	P Nprep	NP	∅	A*nom Nprep
18	INTRO	EL	i ja						
19	INTRO	EL	turisticheskim v venecie	PP	e	P Nprep			
20	INTRO	EL	i ja uchu v universitete	PP	e	P Nprep			
21	INTRO	EL	i ja igraju v vollejbol						
22	INTRO	EL	ja mne nravitsja smotret' filmy						
23	INTRO	EL	i mne nravitsja xodit v centre s moimi druž'jami	PP	e	P Nprep			
23	INTRO	EL	i mne nravitsja xodit v centre s moimi druž'jami	PP	ami	P Ninst	NP	imi	Ainst Ninst
24	INTRO	EL	i mne nravitsja idti v vyst na vystavke	PP	e	P Nprep			
25	INTRO	EL	krasnaja 9shapochka i ejo mama						
26	1	EL	ona ejo mama ehm dast 9dat' xleb ehm ej						
27	1	EL	mama dumaet o babushke	PP	e	P Nprep			
28	1	EL	mama skazat ejo doch	VP	∅	V N*nom			
28	1	EL	chto ona dolzhna idti k babushku	VP		V P	PP	u	P N*acc
29	1	EL	i chto ona ne mozhet idti v les v lese	VP		V P	PP	e	P N*e
30	1	EL	no ona ne slushaet						
31	1	EL	ona xodit v lesu v les						
32	1	EL	ona vstret vstre incontra 9vstrechat'sja volk	VP	∅	V N*nom			
33	1	EL	i volk naverno skazat chtolibo						
34	1	EL	ona sk skazat chto ona mozhet idti k babushku	VP		V P	PP	u	P N*acc
35	1	EL	volk smotrit ona	VP	PR ona	V N*nom			
36	1	EL	ona videt krasivye 9cvety						
37	1	EL	i volk idti						
38	1	EL	volk vxodi v dom babushki	NP	i	N Ngen			
39	1	EL	i babushka smotret volk	VP	∅	V N*nom			
40	1	EL	ona prixodit i videt volk	VP	∅	V N*nom			
41	1	EL	i dumaet chto volk babushka						
42	1	EL	ona videt chto babushka ne net babushka						
43	1	EL	potomu chto ona ver v						
44	1	EL	bol'shoj glaza bol'shoj uchi bol'shoj nos						
45	1	EL	i 9sprosit pochemu ona bol'shoj nos bol'shoj glaza						
46	1	EL	on est ona	VP	PR ona	V N*nom			

47	1 EL	9oxotniki pojti v domoj	VP		V P	PP	oj	P Nacc
48	1 EL	i 9ubit' volka	VP	a	V Nacc			
49	1 EL	s nozhom	PP	om	P Ninst			
50	1 EL	i 9nakonec eto sem'ja i sono felici e contenti						
51	1 EL	eto blondinka i eto net						
52	2 EL	v eto vtoraja kartinka tri kartiny i						
53	2 EL	v pervoj kartinke dva kartiny	PP	e	P Nprep	NP	oj	Aprep Nprep
54	2 EL	ona bljuzka						
55	2 EL	eto krasnaja bljuzka i eto sinij bljuzka						
56	2 EL	eto zeljonyj jubka i eto sinij jubka sinaja jubka						
57	2 EL	eto zeljonaja ruchka i eto sinaja ruchka						
58	2 EL	dva zeljonye knigi i odin zhjoltyj						
59	2 EL	zdes' dva zeljonye knigi i odin zhjoltyj						
60	2 EL	sapogi eto krasnye sapogi i eto eti chjornye sapogi						
61	2 EL	. . ehm ona est						
62	3 EL	ehm ej nnavitsja grusha						
63	3 EL	ona zamjorzla						
64	3 EL	ona zanimaetsja igral igrat' muzyku	VP	u	V Nacc			
65	3 EL	ona ha paura strashno						
66	3 EL	ona ljubit koshka ko koshku	VP	u	V Nacc			
67	3 EL	ona xochet stat' balerinom balerinoj	VP	om	V Ninst			
68	3 EL	butylka prenjos medsestra	NP VP	a	N*nom V			
69	4 EL	muzykant prinjos truba	VP	a	V N*nom			
70	4 EL	gitara prinjos balerina	NP VP	a	N*nom V			
71	4 EL	vrach prinjos kartoshka kartoshku	VP	u	V Nacc			
72	4 EL	grusha prinjos prepodavatel'nica	NP VP	a	N*nom V			
73	4 EL	medsestra prinjos vypechku	VP	u	V Nacc			
74	4 EL	oficiant prinjos lozhku	VP	u	V Nacc			
75	4 EL	vilka prinjos balerina	NP VP	a	N*nom V			
76	4 EL	mesto gde. . Ubijstvo?						
77	5 EL	gde 9mesto 9ubijstva?						
78	5 EL	kogda ubijstvo?						
79	5 EL	s kem kto-libo delat ubijstvo?	PP	PR kem	P Ninst			
80	5 EL	skol'ko let . .killer killery?						
81	5 EL	otkuda killer?						
82	5 EL	killer imja?						
83	5 EL	mozhet byt' . . mozhet byt' aljosha ili tanja ili anna?						
84	5 EL	ja skazu aljosha						
85	5 EL	my ne znaju chto kto on						

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INTRO	CR	menja zavut Carlotta						
2	INTRO	CR	mne dvadcat dva let						
3	INTRO	CR	ja znaju russkij jazyk ot						
4	INTRO	CR	ah otkuda?						
5	INTRO	CR	ja uchus' russkij jazyk v universitete						
6	INTRO	CR	izvini						
7	INTRO	CR	ja znaju anglijskij jazyk francuzskij jazyk i nemnogo nemeckij jazyk						
8	INTRO	CR	moj rodnoj jazyk ital'janskij						
9	INTRO	CR	uja uchilas' ja uchus' russkij jazyk v universitete v verone						
10	INTRO	CR	ja nachila tri goda nazad	QP	a	Q Ngen			
11	INTRO	CR	escho net						
12	INTRO	CR	v julie ja poedu v sankt peterburge	PP	e	P Nprep			
12	INTRO	CR	v julie ja poedu v sankt peterburge	VP		V P	PP	e	P N*prep
13	INTRO	CR	9mesjac						
14	INTRO	CR	rasgovoryvaju na russkom s dvux russkix družja	PP	om	P Aprep			
14	INTRO	CR	rasgovoryvaju na russkom s dvux russkix družja	PP	a	P N*nom	NP	ux ix	A*gen A*gen N*nom
15	INTRO	CR	ja poznamomilas' s nim zdes' v universitete	PP	PR im	P Ninst			
15	INTRO	CR	ja poznamomilas' s nim zdes' v universitete	PP	e	P Nprep			
16	INTRO	CR	kogda ja vstrechu oni	VP	PR oni	V N*nom			
17	INTRO	CR	my govorem po russki						
18	INTRO	CR	s prepodavatelnicami net	PP	ami	P Ninst			
19	INTRO	CR	net ja uchus'						
20	INTRO	CR	xobby?da						
21	INTRO	CR	mne nraivtsja risovat'						
22	INTRO	CR	ja mnogo guljaju guljaju mnogo						
23	INTRO	CR	mne nraivtsja idi begat bezhit						
24	INTRO	CR	i tozhe xodit na loshadi	VP		V *P	PP	i	P Nprep
25	INTRO	CR	no u menja net vremeni	QP	i	Q Ngen			
26	INTRO	CR	poetomu ja ne idu ne chasto						
27		1 CR	mama dajot krasnuju shapochku xleb i ovoshi i	VP	u Ø i	V N*acc N N	NP	ju	Aacc Nacc
28		1 CR	i skazala ej	VP	PR ej	V Ndat			
29		1 CR	idti k babushke	VP		V P	PP	e	P Ndat
30		1 CR	ona obesnit ej put' .	VP	PR ej Ø	V Ndat N			
31		1 CR	krasnaja shapochka ne slyshaet						
32		1 CR	ona idjot v lesu						
33		1 CR	i vstrechaetsja volk	VP	Ø	V N*nom			
34		1 CR	i ona skazala im no ego	VP	PR ego	V N*acc			
35		1 CR	chto ona idjot k babushke	VP		V P	PP	e	P Ndat
36		1 CR	Ona . Ona idjot						
37		1 CR	no volk seguire						
38		1 CR	on tozhe idjot s nej	PP	PR ej	P Ninst			
39		1 CR	ona videla cvetoj						
40		1 CR	kogda ona smotrela cvetoj						
41		1 CR	volk shol k babushke	VP		V P	PP	e	P Ndat
42		1 CR	kogda krasnaja shapochka pridjot k babushke	VP		V P	PP	e	P Ndat
43		1 CR	volk v kovjor net v krovat babushki	PP	Ø	P N*nom	NP	i	N Ngen
44		1 CR	krasnaja shapochka sprasila volka	VP	a	V N*acc			
45		1 CR	potomu chto u nego tak bolshoj uxi bolshoj glaza bolshie glaza dlennyj nos i bolshaja bolshoj rot						
46		1 CR	volk ehm el xotel est' krasnuju shapochku	VP	u	V Nacc	NP	ju	Aacc Nacc
47		1 CR	9oxotniki uslyshali svuk						
48		1 CR	i shli spat' krasnuju shapochku	VP	u	V Nacc	NP	ju	Aacc Nacc
49		1 CR	s nozhem oni razrezali volka	PP	em	P Ninst			
49		1 CR	s nozhem oni razrezali volka	VP	a	V Nacc			
50		1 CR	i oni spasali babushku i krasnuju shapochku	VP	u u	V Nacc Nacc	NP	ju	Aacc Nacc
51		2 CR	v pervoj kartinke devushka s chjornimi volosami	PP	e	P Nprep	NP	oj	Aprep Nprep

51	2 CR	v prvoj kartinke devushka s chjornimi volosami	PP	ami	P Ninst	NP	imi	Ainst Ninst
52	2 CR	v vtoroj kartinke devushka s . ona blondinka	PP	e	P Nprep	NP	oj	Aprep Nprep
53	2 CR	ejo brjutniki 9sapogi v prvoj kartinke chjorny	PP	e	P Nprep	NP	oj	Aprep Nprep
54	2 CR	a v vtoroj krasny	PP	oj	P Aprep			
55	2 CR	knigi ehm v prvoj kartinke						
55	2 CR	knigi ehm v prvoj kartinke	PP	e	P Nprep	NP	oj	Aprep Nprep
56	2 CR	odna kniga . Zholyt?						
57	2 CR	ja zabyla						
58	2 CR	odna kniga zhjoltaja						
59	2 CR	dva knigi						
60	2 CR	dve knigi zeljony						
61	2 CR	a v vtoroj kartine dve knigi ah tozhe!	PP	e	P Nprep	NP	oj	Aprep Nprep
62	2 CR	v vtoroj kartinke dve malenki zeljony knigi	PP	e	P Nprep	NP	oj	Aprep Nprep
62	2 CR	v vtoroj kartinke dve malenki zeljony knigi						
63	2 CR	odin odna bolshaja zholtaja kniga						
64	2 CR	v prvoj dva kartiny	PP	oj	P Aprep			
65	2 CR	v vtoroj tri kartiny	PP	oj	P Aprep			
66	2 CR	rushka v prvoj zel	PP	oj	P Aprep			
67	2 CR	net potomu chto ja xotela skazat' zolotoj a eto zeljonny						
68	2 CR	eto v prvoj kartinke zeljannaja ruchka	PP	e	P Nprep	NP	oj	Aprep Nprep
69	2 CR	a v vtoroj kartinke sinjaja rushka	PP	e	P Nprep	NP	oj	Aprep Nprep
70	3 CR	krasnoj shapochke nnavitsja grusha	NP VP	e	Ndat V	NP	oj	Adat Ndat
71	3 CR	krasnoj shapochke xolodno	NP	oj e	Adat Ndat			
72	3 CR	krasnaja shapochka zanmaetsja muzyku	VP	u	V N*acc			
73	3 CR	krasnaja shapochka boitsja						
74	3 CR	krasnaja shapochka ljubit' koshka koshku	VP	u	V Nacc			
75	3 CR	krasnaja shapochka xochet stat' balerina balerinoj	VP	oj	V Ninst			
76	4 CR	butylka prinjos medsestra	NP VP	a	N*nom V			
77	4 CR	muzykant prinjos trubu	VP	u	V Nacc			
78	4 CR	gitaru prinjos balerina	NP VP	u	Nacc V			
79	4 CR	vrach prinjos kartoshku	VP	u	V Nacc			
80	4 CR	grushu prinjos prepodavatel'nica	NP VP	u	Nacc V			
81	4 CR	medsestra prinjos vypechku	VP	u	V Nacc			
82	4 CR	oficiant prinjos lozhku	VP	u	V Nacc			
83	4 CR	vilku prinjos balerina	NP VP	u	Nacc V			
84	5 CR	kakoj mesto 9ubijstva?						
85	5 CR	kogda chelovek umer?						
86	5 CR	kakie orudie nashli?						
87	5 CR	kto killer?						
88	5 CR	skolko emu let?						
89	5 CR	proisxozdhenija ja ne ponimaju						
90	5 CR	otkuda on priexal?						
91	5 CR	my ne znaem kogo aljoshu ubil	NP VP	PR kogo	Nacc V			

45	2 MT	eta rubashka tozhe . Krasnaja v pervom i sinaja na vtorom	PP	om	P Aprep			
45	2 MT	eta rubashka tozhe . Krasnaja v pervom i sinaja na vtorom	PP	om	P Aprep			
46	2 MT	stolik na vtoroj chjornyj i v pervyj bronzovyj	PP	oj	P Aprep			
46	2 MT	stolik na vtoroj chjornyj i v pervyj bronzovyj	PP	∅	P A*nom			
47	2 MT	jubka tozhe jubka zdes' zeljonnaja i tam sinaja						
48	2 MT	krasnoj shapochke nravitsja pjera . . grusha	NP VP	e	Ndat V	NP	oj	Adat Ndat
49	3 MT	ej xolodno						
50	3 MT	krasnaja shapochka zanimaetsja muzykoj	VP	oj	V Ninst			
51	3 MT	ona ispugaetsja						
52	3 MT	ona ljubit koshek	VP	∅	V Nacc			
53	3 MT	ona xochet stat' balerinoj	VP	oj	V Ninst			
54	3 MT	shar						
55	4 MT	ah vseгда? Pervyj prinjos vtoroj						
56	4 MT	vseгда chelovek prinjos chto-to						
57	4 MT	medsestra prinjos vodu butylku	VP	u u	V Nacc Nacc			
58	4 MT	butylku medsestra						
59	4 MT	muzykant prinjos trubu	VP	u	V Nacc			
60	4 MT	gitaru prinjos balerina	NP VP	u	Nacc V			
61	4 MT	vrach' prinjos kartushku	VP	u	V Nacc			
62	4 MT	grushu prinjos prepodavatel'nica	NP VP	u	Nacc V			
63	4 MT	medsestra prinjos vypechku	VP	u	V Nacc			
64	4 MT	oficant prinjos vilku no lozhku	VP	u u	V Nacc Nacc			
65	4 MT	vilku prinjos balerina	NP VP	u	Nacc V			
66	4 MT	gde eto proizoshlo?						
67	5 MT	v kakom vremja dnja?	NP	a	N Ngen			
67	5 MT	utra ili vechera?						
68	5 MT	chem killer ubil cheloveka?	VP	a	V Nacc			
69	5 MT	skol'ko let killeru?						
70	5 MT	otkuda killer?						
71	5 MT	kak ego zavut?						
72	5 MT	pochemu?						
73	5 MT	kto umer?						
74	5 MT	mozhet byt' ego zhena?						
75	5 MT	skol'ko emu let ili ej?						
76	5 MT	i otkuda on?						
77	5 MT	eto on ili ona?						
78	5 MT	pochemu on byl ubil?						
79	5 MT	gde on byl?						
80	5 MT	gde butylka ? Nevazhno						
81	5 MT	kto on ubil?	NP VP	PR kto	N*nom V			

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2	EMB 3	FORM 3	STRUCTURE 3
1	INTRO	AN	privet menja zovut annamaria									
2	INTRO	AN	mne dvadcat tri goda	QP	a	Q Ngen						
3	INTRO	AN	ja uchus ruskij jazkyk v universitete									
4	INTRO	AN	piat let	QP	∅	Q Ngen						
5	INTRO	AN	ja byla v Rossii	PP	i	P Nprep						
6	INTRO	AN	ja byla v moskve	PP	e	P Nprep						
7	INTRO	AN	na mesjac									
8	INTRO	AN	ochen ponravilas									
9	INTRO	AN	ja znaju anglijskij francuzskij chut chut nemeckij i ispanskij jazkyk									
10	INTRO	AN	moj radnoj jazkyk italjanskij									
11	INTRO	AN	da									
12	INTRO	AN	mne nravitsja risovat' chitat puteshestvovat i xodit v kino									
13	INTRO	AN	pozhalujsta									
14		1 AN	da ja znaju									
15		1 AN	xorosho									
16		1 AN	mama xochet chtoby krasnaja shapochka xodit u babushki	VP		V *P	PP	i	P Ngen			
17		1 AN	i nosit edu	VP	u	V Nacc						
18		1 AN	na primer vino xleb markovki i eshe drugie veshi ja ne znaju									
19		1 AN	potomu chto babushka ochen bolezna									
20		1 AN	no puteshestvovat ochen trudno									
21		1 AN	potomu chto krasnaja dolzhna vybirat mezhdum dvumja dorogami	PP	ami	P Ninst	NP	mja	Ainst Ninst			
22		1 AN	est xoroshaja doroga i ploxaja doroga									
23		1 AN	no ona nelzja xodit po zloj doroge	VP		V P	PP	e	P Ndat	NP	oj	Adat Ndat
24		1 AN	ona xorosho ne slushaet konechno									
25		1 AN	i ona konechno edet po dorogu	VP		V P	PP	u	P N*acc			
26		1 AN	i vstrechatsja s volkom	VP		V P	PP	om	P Ninst			
27		1 AN	volk ej sprashivaet	NP VP	PR ej	Ndat VP						
28		1 AN	chto ona delaet i ona govorit									
29		1 AN	chto ona dolzhna xodit u babushki	VP		V *P	PP	i	P Ngen			
30		1 AN	i volk idjot za ejo	VP		V P	PP	PR ejo	P Nacc			
31		1 AN	kogda krasnaja shapochka ostanovitsja									
32		1 AN	chtoby posmotret cvety									
33		1 AN	volk xodit po dorogu i	VP		V *P	PP	u	P N*acc			
34		1 AN	on vyxodit v dom babushki	NP	i	N Ngen						
35		1 AN	i babushka oche ochen ispugaetsja									
36		1 AN	i volk est babushku	VP	u	V Nacc						
37		1 AN	i kogda krasnaja shapochka vyxodit v dom									
38		1 AN	on v kravate i	PP	e	P Nprep						
39		1 AN	ona videt chto									
40		1 AN	eto ochen ochen strannaja babushka									
41		1 AN	potomu chto u nejo est ochen dlinnye ushi									
42		1 AN	ochen bolshe glaza									
43		1 AN	ochen dlinnyj nos i									
44		1 AN	ochen bolshoj rot									
45		1 AN	i vdruk krasnaja shapochka vidit									
46		1 AN	chto eto ne babushka a volk									
47		1 AN	i volk xochet ejo est	NP VP	PR ejo	Nacc VP						
48		1 AN	no po dorogu xodjat oxotniki	PP	u	P N*acc						
49		1 AN	i oni slushajut chto sluchitsja v dome	PP	e	P Ndat						
50		1 AN	i oni vidjat chto volk el i babushku i krasnuju shapochku	VP	u u	V Nacc Nacc	NP	ju	Aacc Nacc			
51		1 AN	i oni reshajut razrezat zhivot volka	NP	a	N Ngen						
52		1 AN	i s nozhom	PP	om	P Ninst						
53		1 AN	i vot volk umer									
54		1 AN	i krasnaja shapochka vstrechaetsja s babushkoj	VP		V P	PP	oj	P Ninst			
55		1 AN	i oni oni zhivot schastlivy na vsegda									
56		2 AN	na primer na pervoj kartinke est dve dva kartiny	PP	e	P Nprep	NP	oj	Aprep Nprep			
57		2 AN	i vo vtoroj kartinke est tri kartinki	PP	e	P Nprep	NP	oj	Aprep Nprep			
58		2 AN	potom u devoshki pervoj kartinke est tjomnye volosy	PP	i	P Ngen	NP	i	N Ngen	NP	oj	Agen Ngen

59	2 AN	drugaja devushka blondinka						
60	2 AN	potom rubashka da						
61	2 AN	v pervoj kartinke rubashka krasnaja i	PP	e	P Nprep	NP	oj	Aprep Nprep
62	2 AN	vo vtoroj kartinke rubashka sinaja	PP	e	P Nprep	NP	oj	Aprep Nprep
63	2 AN	u pervoj devochki est zelenaja ruchka	PP	i	P Ngen	NP	oj	Agen Ngen
64	2 AN	u vtoroj devochki est sinaja ruchki	PP	i	P Ngen	NP	oj	Agen Ngen
65	2 AN	u pervoj devochki est dve zelennye knigi	PP	i	P Ngen	NP	oj	Agen Ngen
66	2 AN	i odna zhjoltaja kniga tozhe						
67	2 AN	no bolschaja kniga zhjoltaja i						
68	2 AN	malenkie knigi zeljonye						
69	3 AN	krasnoj shapochke nnavitsja grusha	NP VP	e	Ndat VP	NP	oj	Adat Ndat
70	3 AN	ej xolodno						
71	3 AN	krasnaja shapochka zanimaetsja gitarom i truboj	VP	om oj	V Ninst Ninst			
72	3 AN	zanimatsja muzykoj	VP	oj	V Ninst			
73	3 AN	ona ochen ochen ispugaetsja						
74	3 AN	krasnaja shapochka ljubit koshku	VP	u	V Nacc			
75	3 AN	krasnaja shapochka xochet stat balerinoj	VP	oj	V Ninst			
76	4 AN	butylku prinesla medsestra	NP VP	u	Nacc VP			
77	4 AN	muzykant prinjos trubku	VP	u	V Nacc			
78	4 AN	gitaru prinjos balerina	NP VP	u	Nacc VP			
79	4 AN	vrach prinjos kartoshki						
80	4 AN	grushu prinesla prepodavatel'nica	NP VP	u	Nacc VP			
81	4 AN	medsestra prinesla vypechku	VP	u	V Nacc			
82	4 AN	oficiant prinjos lozhku	VP	u	V Nacc			
83	4 AN	vilku prinesla balerina	NP VP	u	Nacc VP			
84	5 AN	no vy personazh?						
85	5 AN	kakoj byl mestom ubijstva?						
86	5 AN	i kakaja byla vremja ubijstva?						
87	5 AN	vo skolko?						
88	5 AN	kakoje orudie byl ispolzovanno dlja ubijstva?	PP	a	P Ngen			
89	5 AN	skolko let killere?						
90	5 AN	minutuchku						
91	5 AN	i dolzhna podumat						
92	5 AN	odkuda on?						
93	5 AN	i kak ego zavut?						
94	5 AN	pochemu?						
95	5 AN	kto umer?						

N	TASK	LEARNER	UTTERANCE						
1	INTRO	MU	menja zovut Mustafa						
2	INTRO	MU	dvadcat dva						
3	INTRO	MU	em						
4	INTRO	MU	ne ponimaju						
5	INTRO	MU	ne ponimaju						
6	INTRO	MU	turkiskij?						
7		1 MU	mm						
8		1 MU	net						
9		1 MU	I can't						
10		1 MU	ne ponimaju						
11		1 MU	net						
12		1 MU	i can't man i don't know how to say						

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2	EMB 3	FORM 3	STRUCTURE 3
1		DN										
2	1	DN	ee mat' daet karzinu	VP	u	V Nacc						
3	1	DN	chtoby ona ushla k svoej babushke	VP		V P	PP	e	P Ndat	NP	ej	Adat Ndat
4	1	DN	zdes' ee mat' skazhet ej	VP	PR ej	V Ndat						
5	1	DN	chto svoja babushka sebja ploxo chuvstuet									
6	1	DN	i vot ona daet ej xleb, pirozhki	VP	PR ej	V Ndat N N						
7	1	DN	i ona idet k svoej babushke	VP		V P	PP	e	P Ndat	NP	ej	Adat Ndat
8	1	DN	zdes' svoja mama skazhet... skazala ee doroga	VP	PR ejo a	V N*acc N*nom						
9	1	DN	ona skazala ee	VP	PR ejo	V N*acc						
10	1	DN	chto ona dolzhna xodit' po etoj doroge , ne po etoj	VP		V P	PP	e	P Ndat	NP	oj	Adat Ndat
11	1	DN	chto ona dolzhna xodit' po etoj doroge, ne po etoj	PP		P Ndat						
12	1	DN	potomu chto zdes' zloj volk									
13	1	DN	zdes' krasnaja shapochka ochen' schastlivaja									
14	1	DN	v lesu ona idet k svoej babushke	VP		V P	PP	e	P Ndat	NP	ej	Adat Ndat
15	1	DN	zdes' zloj volk									
16	1	DN	ona videla ego	VP	PR ego	V Nacc						
17	1	DN	i boitsja									
18	1	DN	potom ona skazala ego	VP	PR ego	V N*acc						
19	1	DN	chto ona idet k svoej babushke	VP		V P	PP	e	P Ndat	NP	ej	Adat Ndat
20	1	DN	potomu chto ona bol'na									
21	1	DN	on xochet est'									
22	1	DN	vizhu									
23	1	DN	chto ona derzhit korzinu	VP	u	V Nacc						
24	1	DN	i on idet za nej	VP		V *P	PP	PR ej	P Ninst			
25	1	DN	potom ona uvidela cvety									
26	1	DN	vot i ona xochet vzjat' cvety dlja svoej babushke	PP	e	P N*dat	NP	ej	Adat Ndat			
27	1	DN	i ostavila korzinu rjedom s nej	VP	u	V Nacc						
28	1	DN	i ostavila korzinu rjedom s nej	PP	PR ej	P Ninst						
29	1	DN	no po-moemu ona ne videla chto volk za nej	PP	PR ej	P Ninst						
30	1	DN	potom volk ushel po doroge	VP		V P	PP	e	P Ndat			
31	1	DN	on ran'she prishel k svoej babushke	VP		V P	PP	e	P Ndat	NP	ej	Adat Ndat
32	1	DN	svoja babushka ochen' opuganna									
33	1	DN	zdes' krasnaka shapochka uzhe prishla k svoej babushke	VP		V P	PP	e	P Ndat	NP	ej	Adat Ndat
34	1	DN	volk sidet na kravate na meste babushki	VP		V P	PP	e	P Nprep			
35	1	DN	volk sidet na kravate na meste babushki	PP	e	P Nprep	NP	i	N Ngen			
36	1	DN	zdes' po-moemu krasnaka shapochka ponimaet, chto eto ne svoja babushka									
37	1	DN	potomu chto videt rot, ushchi, zuby									
38	1	DN	ona pomnit									
39	1	DN	chto eto volk									
40	1	DN	ona napugalas'									
41	1	DN	zdes' volk xochet kushat' krasnuju shapochku	VP	u	V Nacc	NP	ju	Aacc Nacc			
42	1	DN	potom oxotniki slushali shum									
43	1	DN	i oni prixodili k svoemu domu	VP		V P	PP	u	P Ndat	NP	emu	Adat Ndat
44	1	DN	oni xotjat rezat' zhivot									
45	1	DN	zdes' volk umer									
46	1	DN	i oni vse schastlivy									
47		DN										
48	3	DN	krasnaja shapochka nnavitsja grusha									
49	3	DN	u krasnuju shapochku xolodno	PP	u	P N*acc	NP	ju	Aacc Nacc			
50	3	DN	dveri otkryvajutsja									
51	3	DN	saxar rastvoritsja									
52	3	DN	krasnaja shapochka interesovana muzyku	VP	u	V Nacc						
53	3	DN	krasnaja shapochka daet knigu svoej mame	VP	u e	V Nacc Ndat	NP	ej	Adat Ndat			
54	3	DN	krasnaja shapochka strashno									
55	3	DN	krasnaja shapochka ljubit koshka	VP	a	V N*nom						
56	3	DN	muzh podaril rozy svoej zhene	VP	e	V N Ndat	NP	ej	Adat Ndat			
57	3	DN	krasnaja shapochka nnavitsja knigi									
58	3	DN	urok nachinaetsja v devjat' chasov	QP	ov	Q Ngen						

59	DN								
60	4 DN	butylka kupil medsestra	NP VP	a	N*nom V				
61	4 DN	muzykant kupil trubu	VP	u	V Nacc				
62	4 DN	gitara kupil balerinu	VP	u	V Nacc				
63	4 DN	vrach kupil kartoshki							
64	4 DN	grushi kupili uchitel'nica							
65	4 DN	medsestra kupila vypechku	VP	u	V Nacc				
66	4 DN	oficiant kupil lozhku	VP	u	V Nacc				
67	4 DN	gitara kupil muzykant	NP VP	a	N*nom V				
68	4 DN	butylka kupil vrach	NP VP	a	N*nom V				
69	4 DN	medsestry kupili trubu	VP	u	V Nacc				
70	4 DN	grusha kupila oficianty	NP VP	a	N*nom V				
71	4 DN	lozhka kupili baleriny	NP VP	a	N*nom V				
72	DN								
73	5 DN	gde vy naxodilis' kogda etot chelovek byl ubit?							
74	5 DN	na skol'ko vremja vy byli v kuxnju?	VP		V *P	PP	u	P Nacc	
75	5 DN	gde vy naxodilis' v devjat' chasov?							
76	5 DN	est' kto-to to mozhet skazat' chto vy byli na kuxne?	PP	e	P Nprep				
77	5 DN	s kakoj orudie on byl ubit?	PP	Ø	P N*nom				
78	5 DN	on byl p'janyj?							
79	5 DN	skol'ko let u killera?	PP	a	P Ngen				
80	5 DN	gde on byl ubit?							
81	5 DN	kak ego nazyvaetsja?							
82	5 DN	kto ubil ego?	VP	PR ego	V Nacc				

83 5 LK vy znaete kak on byl ubit'? S s chjom s pomoschiu?
83 5 LK vy znaete kak on byl ubit'? S s chjom s pomoschiu?
84 5 LK a kak vy думаete?
85 5 LK kto ubil?
86 5 LK kak vy думаete skol'ko let u killera?
87 5 LK a mesto proisxozhdenija vy znaete?
88 5 LK a imja?
89 5 LK znaete? Kakaja?
90 5 LK xoroshe
91 5 LK a pochemu vy думаete chto eto aljoshja?
92 5 LK kto ubit?
93 5 LK a vy znali ubitogo?
94 5 LK skol'ko emu let?
95 5 LK u vas est' kakie ta mnenija za chem aljoshja ubil to##
96 5 LK a vy byli znakomy s nem s ubitogo
96 5 LK a vy byli znakomy s nem s ubitogo
97 5 LK a gde vy byli?
98 5 LK a vy uslyshali krika ili kak vy ob etom usnali?
99 5 LK chto byl na nego?
100 5 LK cheloveka da?
101 5 LK Kt kogo ubil?
102 5 LK ne za chto

PP PR chjom P Ninst
PP u P Ninst

PP a P Ngen

VP oao V Aacc

PP PR nem P Ninst
PP oao P A'acc

69	3	BD	tam butylku prinjos medsestra	NP VP	u	Nacc V
70	4	BD	muzykanty prinesli trubu	VP	u	V Nacc
71	4	BD	gitaru prinesla balerina	NP VP	u	Nacc V
72	4	BD	vrach prinjos kartoshka	VP	a	V N ⁿ nom
73	4	BD	grushu prinesla prepodavatel'nica	NP VP	u	Nacc V
74	4	BD	medsestra prinesla vypechku	VP	u	V Nacc
75	4	BD	oficiant prinesla lozhku	VP	u	V Nacc
76	4	BD	viku prinesla balerina	NP VP	u	Nacc V
77	4	BD	gde bylo ubito etot chelovek?			
78	5	BD	a kogda bylo ubito etot chelovek?			
79	5	BD	a oruzhie ubijstva kakoj oruzhie ubijstva?			
80	5	BD	a s chem chjom chem bylo ubito etot chelovek? Razbitoj butylkoj?	PP	PR chem	P Ninst
80	5	BD	a s chem chjom chem bylo ubito etot chelovek? Razbitoj butylkoj?	NP	oj oj	Ainst Ninst
81	5	BD	skolko ejo let ili emu let?			
82	5	BD	a kakaja ego mesto 9proisxozhdenija?			
83	5	BD	a kak ego zavut?			
84	5	BD	my eshjo ne znaem			
85	5	BD	kto byl ubit?			

56	1 CH	potom volk						
57	1 CH	oxotniki slyshat slux						
58	1 CH	oni lezut volka zhivot						
58	1 CH	oni lezut volka zhivot	NP	a	N*gen N			
59	1 CH	ottuda krasnaja shapochka i ejo babushka						
60	1 CH	kak skazat na russkij?	PP	∅	P A*nom			
61	1 CH	ottuda vyshli						
62	1 CH	oni schastlivy						
63	2 CH	v pervoj kartinke devochka chjorna volosa	PP	i	P Nprep	NP	oj	Aprep Nprep
64	2 CH	na vtorom zholтого volosa	PP	om	P Aprep			
64	2 CH	a vtorom zholтого volosa	NP	ogo a	Agen Ngen			
65	2 CH	v pervoj kartinke devochki sinjaja a zeljonaja ruchka	PP	oj	P Aprep			
66	2 CH	a v vtoroj kartinke sinjaja ruchka	PP	i	P Nprep	NP	oj	Aprep Nprep
67	2 CH	v pervoj kartinke odna kniga zhjolta	PP	i	P Nprep	NP	oj	Aprep Nprep
68	2 CH	a v vtoroj kartinke pervaja kniga zeljonaja	PP	i	P Nprep	NP	oj	Aprep Nprep
69	2 CH	v pervoj kartinke devochki sapogi chjornye a v vtorom krasnye	PP	i	P Nprep	NP	oj	Aprep Nprep
69	2 CH	v pervoj kartinke devochki sapogi chjornye a v vtorom krasnye	PP	om	P Aprep			
70	2 CH	v pervoj kartinke devochki ejo puga sinija a v vtorom zeljonaja	PP	i	P Nprep	NP	oj	Aprep Nprep
70	2 CH	v pervoj kartinke devochki ejo puga sinija a v vtorom zeljonaja	PP	om	P Aprep			
71	2 CH	v pervoj kartinke kniga poslednaja kniga zeljonaja	PP	i	P Nprep	NP	oj	Aprep Nprep
72	2 CH	a v vtorom poslednaja kniga zhjoltaja	PP	om	P Aprep			
73	3 CH	krasnoj shapochke nravitsja grusha	NP VP	e	Ndat V	NP	oj	Adat Ndat
74	3 CH	krasnaja shapochka ej xolodno, da?						
75	3 CH	krasnaja shapochka zanimaetsja gitaroj i truboj						
76	3 CH	krasnaja shapochka na chto boitsja						
77	3 CH	krasnaja shapochka ljubit kot?	VP	∅	V N*nom			
78	3 CH	krasnoj shapochki est' kot	NP	oj i	Agen Ngen			
79	3 CH	ljubit kot kota	VP	a	V Nacc			
80	3 CH	krasnaja shapochka svoego kota ljubit	NP VP	a	Nacc V	NP	ego	Aacc Nacc
81	3 CH	krasnaja shapochka xochet stat' balerinoj	VP	oj	V Ninst			
82	4 CH	butylku prinjos medsestra	NP VP	u	Nacc V			
83	4 CH	muzykant prinjos trubu	VP	u	V Nacc			
84	4 CH	gitaru prinjos balerina	NP VP	u	Nacc V			
85	4 CH	vrach prinjos kartoshku	VP	u	V Nacc			
86	4 CH	grushu prinjos prepodavatelnica	NP VP	u	Nacc V			
87	4 CH	medsestra prinjos prinesla vypechku	VP	u	V Nacc			
88	4 CH	oficiant prinesla prinjos lozhku	VP	u	V Nacc			
89	4 CH	vilku prinesla balerina	NP VP	u	Nacc V			
90	5 CH	gde mesto 9ubijstva?						
91	5 CH	mesto 9ubijstva gde byla?						
92	5 CH	vremja 9ubijstva kogda byla?						
93	5 CH	orudie 9ubijstva kogda byla orudie 9ubijstva?						
94	5 CH	kto chto?						
95	5 CH	ja xorosho ne znaju na russkij						
96	5 CH	kto chem ubil cheloveka?						
97	5 CH	a kijller chto takoj?						
98	5 CH	chto takoj killer?						
99	5 CH	kto-to ubil drugogo cheloveka?	VP	a	V Nacc	NP	ogo	Aacc Nacc
100	5 CH	kto ubil drugogo cheloveka?	VP	a	V Nacc	NP	ogo	Aacc Nacc
101	5 CH	skolko let emu?						
102	5 CH	otkuda mne znat'?						
103	5 CH	mesto 9proisxozhdenija gde byl?						
104	5 CH	kakom . Ne znaju						
105	5 CH	imja 9cheloveka?						
106	5 CH	aljosa razbitoj butylkoj kogo-to ubil	NP	oj oj	Ainst Ninst			
106	5 CH	aljosa razbitoj butylkoj kogo-to ubil	NP VP	PR kogo	Nacc V			
107	5 CH	cheloveka kto aljosa ubil	NP VP	a	Nacc V			
108	5 CH	etogo cheloveka my ne znaem	NP VP	a	Nacc V	NP	ogo	Aacc Nacc

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2	EMB 3	FORM 3	STRUCTURE 3
1	INTRO	NA	menja zovut natalja									
2	INTRO	NA	ja znaju russkij jazyk									
3	INTRO	NA	potomu chto ja rodilas v moldave	VP		V P	PP	e	P Nprep			
4	INTRO	NA	a tam russkij jazyk tozhe									
5	INTRO	NA	tam govoritsja na russkom jazyk	PP	∅	P N*nom	NP	om	Aprep N*nom			
6	INTRO	NA	moj rodnoj jazyk rumenskij									
7	INTRO	NA	ja znaju russkij rumenskij anglijskij italjanskij francuzkij i ispanskij									
8	INTRO	NA	ja uchilas v moldave sem let	VP		V P	PP	e	P Nprep			
9	INTRO	NA	ja uchilas v moldave sem let	QP	∅	Q Ngen						
10	INTRO	NA	potom v italii eshjo sem let	PP	i	P Nprep						
11	INTRO	NA	potom v italii eshjo sem let	QP	∅	Q Ngen						
12	INTRO	NA	ja byla v moskve sejchas v fevrale	PP	e	P Nprep						
13	INTRO	NA	ja byla v moskve sejchas v fevrale	PP	e	P Nprep						
14	INTRO	NA	i rodilas tam v sibere	VP		V P	PP	e	P Nprep			
15	INTRO	NA	ja razgovorivaju na russkom v universitete na uroka	PP	om	P Nprep						
16	INTRO	NA	ja razgovorivaju na russkom v universitete na uroka	PP	e	P Nprep						
17	INTRO	NA	ja razgovorivaju na russkom v universitete na uroka	PP	a	P N*gen						
18	INTRO	NA	i doma s roditeljami	PP	ami	P Ninst						
19	INTRO	NA	i s druz'jami	PP	ami	P Ninst						
20	INTRO	NA	so vsemi	PP	emi	P Ninst						
21	INTRO	NA	ja uchus v universitete v verone	VP		V P	PP	e	P Nprep			
22	INTRO	NA	ja uchus v universitete v verone	VP		V P	PP	e	P Nprep			
23	INTRO	NA	xobby net									
24	INTRO	NA	prosto mne ochen npravitsja plavat									
25	INTRO	NA	i mne ochen npravitsja koty									
26	1	NA	mama krasnoj shapochki prosila ejo	NP	i	N Ngen	NP	oj	Agen Ngen			
27	1	NA	mama krasnoj shapochki prosila ejo	VP	PR ejo	V Nacc						
28	1	NA	pojti v babushke navesit ejo	VP		V *P	PP	e	P Nprep			
29	1	NA	pojti v babushke navesit ejo	VP	PR ejo	V Nacc						
30	1	NA	i prinesi ej xlebushek i chtoto pokushat	VP	PR ej	V Ndat						
31	1	NA	ona ej skazala	NP VP	PR ej	Ndat V						
32	1	NA	chto babushka bolna									
33	1	NA	i ne mozhetsja xodit									
34	1	NA	i ogovorila ejo	VP	PR ejo	V Nacc						
35	1	NA	pojti k babushke	VP		V P	PP	e	P Ndat			
36	1	NA	navesti ejo	VP	PR ejo	V Nacc						
37	1	NA	mama objasnila krasnoj shapochke	VP	e	V Ndat	NP	oj	Adat Ndat			
38	1	NA	chto ona dolzhna pojti po lesu	PP	u	P Ndat						
39	1	NA	byt ostarozhnoj									
40	1	NA	i zaderguj dorozhku	VP	u	V Nacc						
41	1	NA	kotoraja bolee zapatnaja									
42	1	NA	kot xotel pojti s nej	PP	PR ej	P Ninst						
43	1	NA	krasnaja shapochka poshla v babushku									
44	1	NA	vstretila volka v lesu	VP	a	V Nacc						
45	1	NA	vstretila volka v lesu	PP	u	P Nprep						
46	1	NA	ona objasnila									
47	1	NA	cho ona edila k babushke	VP		V P	PP	e	P Ndat			
48	1	NA	potomu chto ona bolna									
49	1	NA	i volk dumal									
50	1	NA	chto babushka ochen vkusnaja									
51	1	NA	volk stal . Poshjol za krasnoj shapochkoj	VP		V *P	PP	oj	P Ninst	NP	oj	Ainst Ninst
52	1	NA	krasnaja shapochka uvidela pole s cvetami	PP	ami	P Ninst						
53	1	NA	ostanovilas tam									
54	1	NA	i sobirat cvetochki									
55	1	NA	volk poshjol k babushke	VP		V P	PP	e	P Ndat			
56	1	NA	poka krasnaja shapochka tam									
57	1	NA	xotel ejo sest	NP VP	PR ejo	Nacc V						
58	1	NA	volk sel babushku	VP	u	V Nacc						

59	1 NA	i poshjol v krovat							
60	1 NA	i krasnaja shapochka sprasila babushku	VP	u	V Nacc				
61	1 NA	kotoraja ne byla babushka							
62	1 NA	no byla volkom							
63	1 NA	i sprosil pro ushi pro glaza slyshkom bolshe pro nos pro zuby							
64	1 NA	ona ponjala chto eto volk							
65	1 NA	i volk xotel ejo sest	NP VP	PR ejo	Nacc V				
66	1 NA	i sel naverno ne pomnju							
67	1 NA	te takoj muzhi slyshali shum							
68	1 NA	i poshli v dom							
69	1 NA	volk spal							
70	1 NA	i oni otrezili ego zhivotik nozhom	N	om	Ninst				
71	1 NA	i tam vyshla babushka vyshla shapochka i vsjo							
72	1 NA	volk umer							
73	1 NA	ego ubili	NP VP	PR ego	Nacc V				
74	1 NA	vse schastlivy							
75	2 NA	v pervoj kartinka devushka brunetka	PP	a	P N*nom	NP	oj	Aprep N*nom	
76	2 NA	a vo vtoroj blondinka	PP	oj	P Aprep				
77	2 NA	v pervoj dve knizhki zeljonye i odna zhjoltaja	PP	oj	P Aprep				
78	2 NA	v pervoj dve knizhki zeljonye i odna zhjoltaja	QP	i	Q Ngen				
79	2 NA	vo vtoroj tozhe zeljonye i odna zhjoltaja	PP	oj	P Aprep				
80	2 NA	no zhjoltaja bolshe							
81	2 NA	drugaja menshie							
82	2 NA	potom nosochki							
83	2 NA	nosochki u odnoj rozovye	PP	oj	P Agen				
84	2 NA	i u pervoj chjornye	PP	oj	P Agen				
85	2 NA	ruchka u pervoj zeljonaja	PP	oj	P Agen				
86	2 NA	u vtoroj sinjaja	PP	oj	P Agen				
87	2 NA	eto chto kartinki?							
88	2 NA	v pervoj dve kartinki	PP	oj	P Aprep				
89	2 NA	v pervoj dve kartinki	QP	i	Q Ngen				
90	2 NA	vo vtoroj tri							
91	2 NA	odezhda tozhe							
92	2 NA	jubka v pervoj sinjaja	PP	oj	P Aprep				
93	2 NA	i bljuzka krasnaja vo vtoroj	PP	oj	P Aprep				
94	2 NA	jubka zeljonaja							
95	2 NA	i bljuzka sinjaja							
96	2 NA	stol s etim	PP	im	P Ainst				
97	2 NA	v pervoj korichnevyj	PP	oj	P Aprep				
98	2 NA	vo vtorom chjornyj	PP	om	P Aprep				
99	3 NA	krasnoj shapochke npravitsja grusha	NP VP	e	Ndat V	NP	oj	Adat Ndat	
100	3 NA	krasnaja shapochka zamjorzaet							
101	3 NA	krasnaja shapochka zanimaetsja muzykoj	VP	oj	V Ninst				
102	3 NA	krasnaja shapochka strashno							
103	3 NA	krasnaja shapochka ljubit kotikov	VP	ov	V Nacc				
104	3 NA	krasnaja shapochka stala balerinoj	VP	oj	V Ninst				
105	4 NA	butylku prinesla medsestra	NP VP	u	Nacc V				
106	4 NA	muzykant prinjos trubu	VP	u	V Nacc				
107	4 NA	gitaru prinesla balerina	NP VP	u	Nacc V				
108	4 NA	vrach prinjos kartoshku	VP	u	V Nacc				
109	4 NA	grushu prinesla prepodavatelnica	NP VP	u	Nacc V				
110	4 NA	medsestra prinesla tort							
111	4 NA	oficiant prinjos lozhku	VP	u	V Nacc				
112	4 NA	vilku prinesla medsestra	NP VP	u	Nacc V				
113	5 NA	gde proizoshlo ubijstvo?							
114	5 NA	vo skolkoprojzoshlo ubijstvo?							
115	5 NA	vecherom ili utrom?							
116	5 NA	kakim orudim byl ubit chelovekom?	NP	im im	Ainst Ninst				
117	5 NA	skolko let ubijc?							

118	5 NA	gde proizoshlo ubijstvo?
119	5 NA	kak zovut ubijc?
120	5 NA	kto byl ubit?

BB

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM : STRUCTURE 2	EMB 3	FORM 3	STRUCTURE 3
1	INTRO	BB	menja zavut Abbas zdravstvujte								
2	INTRO	BB	dvadcat' odin budet skoro								
3	INTRO	BB	ja russkij jazyk izuchal iz destva	PP	a	P Ngen					
4	INTRO	BB	v moej sem'e vse govorjat na russkom	PP	e	P Nprep	NP	ej	Aprep	Nprep	
5	INTRO	BB	v moej sem'e vse govorjat na russkom								
6	INTRO	BB	v moej sem'e vse govorjat na russkom	PP	om	P Aprep					
7	INTRO	BB	krome russkogo ja znaju svoj radnoj jazyk azerbajdzhanskij ital'janskij anglijskij i tureckij	PP	ogo	P Agen					
8	INTRO	BB	chemu?								
9	INTRO	BB	azerbajdzhanskij doma v shkole	PP	e	P Nprep					
10	INTRO	BB	anglijskij v shkole i za granicej			P Nprep					
11	INTRO	BB	anglijskij v shkole i za granicej	PP	ej	P Ninst					
12	INTRO	BB	a tureckij my znaem vot tak kak blizhe k nashemu jazyku								
13	INTRO	BB	a tureckij my znaem vot tak kak blizhe nashemu jazyku	AP	u	A Ndat	NP	emu	Adat	Ndat	
14	INTRO	BB	A ital'janskij ja izuchal v universitete a takzhe v italii	PP	e	P Nprep					
15	INTRO	BB	A ital'janskij ja izuchal v universitete a takzhe v italii	PP	i	P Nprep					
16	INTRO	BB	v shkole da	PP	e	P Nprep					
17	INTRO	BB	s pervyx let kak ja poshel v shkolu u nas est urok russkogo jazyka	PP	Ø	P Ngen	NP	yx	Agem	Ngen	
18	INTRO	BB	s pervyx let kak ja poshel v shkolu u nas est urok russkogo jazyka	VP		V P	PP	u	P Nacc		
19	INTRO	BB	s pervyx let kak ja poshel v shkolu u nas est urok russkogo jazyka	PP	PR nas	P Ngen					
20	INTRO	BB	s pervyx let kak ja poshel v shkolu u nas est urok russkogo jazyka	NP	a	N Ngen	NP	ogo	Agem	Ngen	
21	INTRO	BB	s mamoj s papoj i so vsem družjami	PP	oj	P Ninst					
22	INTRO	BB	s mamoj s papoj i so vsem družjami	PP	oj	P Ninst					
23	INTRO	BB	s mamoj s papoj i so vsem družjami	PP	ami	P Ninst	NP	em	Ainst	Ninst	
24	INTRO	BB	nedavno net ja ne rabotaju								
25	INTRO	BB	da est'								
26	INTRO	BB	ja ljublju chitat' gazety na russkom	PP	om	P Aprep					
27	INTRO	BB	a potom slushat' russkuju muzyku	VP	u	V Nacc	NP	ju	Aacc	Nacc	
28	1	BB	da znaju								
29	1	BB	a u nejo nebylo koshki								
30	1	BB	chto rasskazat'?								
31	1	BB	Krasnaja shapochka vdruk videt mamu s korzinkoj	VP	u	V Nacc					
32	1	BB	Krasnaja shapochka vdruk videt mamu s korzinkoj	PP	oj	P Ninst					
33	1	BB	ona prigotovila markovki xleb pirozhki i maslo								
34	1	BB	chto podnesti k babushke	PP	e	P Ndat					
35	1	BB	vot ona govorit								
36	1	BB	krasnaja shapochka nesi k babushke korzinku	PP	e	P Ndat					
37	1	BB	krasnaja shapochka nesi k babushke korzinku	VP	u	V Nacc					
38	1	BB	oni rasskazyvajut								
39	1	BB	kak pojti								
40	1	BB	kak pravilno pojti po kakoj doroge k babushe	PP	e	P Ndat	NP	oj	Adat	Ndat	
41	1	BB	kak pravilno pojti po kakoj doroge k babushe	PP	e	P Ndat					
42	1	BB	no koshka ej meshaet	VP	PR ej	V Ndat					
43	1	BB	krasnaja shapochka pojot i idjot k babushke	VP		V P	PP	e	P Ndat		
44	1	BB	vdruk ona vstrechaet volka	VP	a	V Nacc					
45	1	BB	a volk vspominaet babushku	VP	u	V Nacc					
46	1	BB	net eta krasnaja shapochka vspominaet babushku	VP	u	V Nacc					
47	1	BB	Da ona govorit								
48	1	BB	chto ona dolzna pojti k babushke	VP		V P	PP	e	P Ndat		
49	1	BB	i nesti pirozhki i markovki								
50	1	BB	vot ona idjot k babushke tolko po dlinoj doroge	VP		V P	PP	e	P Ndat		
51	1	BB	vot ona idjot k babushke tolko po dlinoj doroge	PP	e	P Ndat	NP	oj	Adat	Ndat	
52	1	BB	volk ejo obmanyaet	NP VP	PR ejo	Nacc V					
53	1	BB	i vdruk ona uvidela cvety								
54	1	BB	i reshila crvat' dlja babushki	PP	i	P Ngen					
55	1	BB	volk zaxodil v babushki								

			BB								
115	3	BB	krasnaja shapochka	ljubit	koshku	VP	u	V Nacc			
116	3	BB	krasnaja shapochka	xochet stat'	balerinoj	VP	oj	V Ninst			
117	3	BB	krasnaja shapochka	ljubit	muzyku	VP	u	V Nacc			
118	3	BB	xochet	zanimatsja	muzykoj	VP	oj	V Ninst			
119	3	BB	i	igrat'	na gitare	VP		V P	PP	e	P Nprep
120	3	BB	i	na	saksophone	VP		V P	PP	e	P Nprep
121	3	BB	ej	xolodno							
122	4	BB	butyiku	prinesla	medsistru	NP VP	u	Nacc V			
123	4	BB	trubu	prinjos	muzykant	NP VP	u	Nacc V			
124	4	BB	gitaru	prinesla	balerina	NP VP	u	Nacc V			
125	4	BB	kartoshku	prinjos	vrach	NP VP	u	Nacc V			
126	4	BB	vrach	prinjos	kartoshku	VP	u	V Nacc			
127	4	BB	grushu	prinesla	prepodavatelnica	NP VP	u	Nacc V			
128	4	BB	medsistra	prinesla	tort vypechku	VP	u	V Nacc			
129	4	BB	oficiant	prinjos	lozhku	VP	u	V Nacc			
130	4	BB	vilku	prinesla	balerina	NP VP	u	Nacc V			
131	5	BB	mesto ubijstva	eto gde byla	kvartira ubitogo?	NP	ogo	N Agen			
132	5	BB	gde bylo mesto	9ubijstva							
133	5	BB	vremja	9ubijstva	kogda bylo?						
134	5	BB	utra?								
135	5	BB	orudie	9ubijstva?							
136	5	BB	kakie bylo	uridija	9ubijstva?						
137	5	BB	killer emu	skolko bylo	let?						
138	5	BB	ili	ej?							
139	5	BB	mesto	9proisxozhdenija	kakoe?						
140	5	BB	imja	kakoe u nas	u killera?	PP	a	P Ngen			
141	5	BB	pochemu	ubili	ego?	VP	PR ego	V Nacc			
142	5	BB	kto	eto?							
143	5	BB	kto	ubitij?							
144	5	BB	on	kogo	ubil?	NP VP	PR kogo	Nacc V			
145	5	BB	pochemu?								
146	5	BB	ne	za	chto						

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INTRO	JO	menja zovut jovana						
2	INTRO	JO	dvadcat' dva						
3	INTRO	JO	ja uchus' russkij jazyk v universitete						
4	INTRO	JO	ja znaju ital'janskij jazyk anglijskij jazyk ehm 9ispanskij i serpskij						
5	INTRO	JO	net eto ehm						
6	INTRO	JO	russkij i serpskij net 9poxozhi						
7	INTRO	JO	ja govorim serpskij i 9slova 9poxozhi alcuni						
8	INTRO	JO	v universitete						
9	INTRO	JO	eto vtoraja goda						
10	INTRO	JO	net						
11	INTRO	JO	ja xochu v avguste	PP	e	P Nprep			
12	INTRO	JO	v moskve	PP	e	P Nprep			
13	INTRO	JO	s mojom uchitel'nicej	PP	ej	P Ninst	NP	jom	Ainst Ninst
14	INTRO	JO	ja rabotaju i ja studentka						
15	INTRO	JO	ja ljublju chitat' slushat' muzyku i vsjo	VP	u	V Nacc			
16	1	JO	mama ehm dala ehm devojchike xleb i botylku i devushka devochka idet u babushki	VP	e ø u	V Ndat N Nacc			
16	1	JO	mama ehm dala ehm devojchiki xleb i botylku i devushka devochka idet u babushki	VP		V *P	PP	i	P Ngen
17	1	JO	mama skazala ejo ne govorit' s . .	VP	PR ejo	V N*acc			
18	1	JO	ona ehm idet						
19	1	JO	Ona . Ona ne . 9Slushaet mamu	VP	u	V Nacc			
20	1	JO	ona xodit i videt volka	VP	a	V Nacc			
21	1	JO	ona ehm myslyt'						
22	1	JO	Ona . Ejo babushka bolnaja						
23	1	JO	i ona idet u babushki	VP		V *P	PP	i	P Ngen
24	1	JO	volk idet k nej	VP		V P	PP	PR ej	P Ndat
25	1	JO	ona videt cvetoki						
26	1	JO	volk andiamo avanti						
27	1	JO	ona uvidet babushku	VP	u	V Nacc			
28	1	JO	ona myslyt' eta babushka						
29	1	JO	i voprosit						
30	1	JO	pochemu u tebjaja eta bol'shaja glaza nos 9zuby?						
31	1	JO	l . volk ehm xachet ejo . 9Est'	VP	PR ejo	V Nacc			
32	1	JO	9oxotniki slushajut ehm						
33	1	JO	oni ehm 9ubit volka s nozhej	VP	a	V Nacc			
33	1	JO	oni ehm 9ubit volka s nozhej	PP	ej	P Ninst			
34	1	JO	i babushka ehm xorosho!						
35	2	JO	devushka						
36	2	JO	u devushki ehm ona blondinka i u nejo est tamnye volosy	PP	i	P Ngen			
36	2	JO	u devushki ehm ona blondinka i u nejo est tamnye volosy						
37	2	JO	karandash sinij i u nejo zeljonyj						
38	2	JO	9Bljuzka krasnaja i sinaja						
39	2	JO	9jubka sinaja i zeljonaja						
40	2	JO	i u nejo dve zeljonye knigi i odin zlutyj						
41	2	JO	dva zeljony i odin zhjolty						
42	2	JO	u blondinki tri kartiny i stul u nejo est karichevyj stul i chjomnyj	PP	i	P Ngen			
43	3	JO	grushka?						
44	3	JO	grusha nraivitsja devochke	VP	e	V Ndat			
45	3	JO	ona ehm nej xolodno						
46	3	JO	ona zanimaetsja muzyku	VP	u	V N*acc			
47	3	JO	ona ehm						

48 3 JO ona ljubit koshku
 49 3 JO ona xochet stat' balerinu
 50 4 JO butylka prinjol medsestra
 51 4 JO muzykant prinjol trubu
 52 4 JO balerina prinjos gitaru
 53 4 JO vrach prinjos kartoshki
 54 4 JO grusha prinjos uchitelnicu
 55 4 JO medsestra prinjos vypechku
 56 4 JO oficiant prinjos lozhku
 57 4 JO vylka prinjos balerinu
 58 5 JO gde ehm gde chelovek kotoryj mertvyj?
 59 5 JO kogda ehm kogda 9ubili 9cheloveka?
 60 5 JO s chjom oni ubili cheloveka?
 60 5 JO s chjom oni ubili cheloveka?
 61 5 JO skolko emu let?
 62 5 JO otkuda ehm killer?
 63 5 JO kak ego zovut?
 64 5 JO ehm ne znaju
 65 5 JO pochemu?
 66 5 JO Ah . Kto ubil Aljoshu?

VP u V Nacc
 VP u V N*acc
 NP VP a N*nom V
 VP u V Nacc
 VP u V Nacc
 NP VP a N*nom V
 VP u V Nacc
 VP u V Nacc
 NP VP a N*nom V

 PP PR chjom P Ninst
 VP a V Nacc

 NP VP PR kto N*nom V

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INTRO	MR	privet						
2	INTRO	MR	marija						
3	INTRO	MR	mne tridcat pet						
4	INTRO	MR	ja izuchila						
5	INTRO	MR	kogda edila na velosipede	PP	e	P Nprep			
6	INTRO	MR	a tak izuzhala						
7	INTRO	MR	ja na velosipede exala tri godini	PP	e	P Nprep			
7	INTRO	MR	ja na velosipede exala tri godini	QP	i	Q N*nom			
8	INTRO	MR	ja znaju anglizkij slovinskij malo nemeckij i to						
9	INTRO	MR	chut chut ruskij						
10	INTRO	MR	u meni da hobby						
11	INTRO	MR	ja ochen rada velosiped						
12	INTRO	MR	i ja tak vse						
13	1	MR	ja ne znala						
14	1	MR	tak malenka u nejo chervena kapuchka						
15	1	MR	i ona xtela u gosti prixodit k babushke	PP	i	P Ngen			
15	1	MR	i ona xtela u gosti prixodit k babushke	VP		V P	PP	e	P Ndat
16	1	MR	ona ne znala otkuda						
17	1	MR	ona ne znala kak						
18	1	MR	i ona so soboj prinesla darchek	PP	oj	P Ninst			
19	1	MR	i kogda ona prishla tama						
20	1	MR	tam ne byla babushka i byl zloj volk						
21	1	MR	na kartinke jedna mama	PP	e	P Nprep			
22	1	MR	ona devushka nej skazala kak bylo tam	NP VP	PR ej	Ndat V			
23	1	MR	i mama mamu						
24	1	MR	mama skazala devoshki kuda ide bud	VP	i	V N*gen			
25	1	MR	i tam mala jedna mala krasna shapochka						
26	1	MR	devushka otishla na put						
27	1	MR	i ona byla radovolna						
28	1	MR	i tam na putu ona byla ona videla groznu vulka	PP	u	P Nprep			
28	1	MR	i tam na putu ona byla ona videla groznu vulka	VP	a	V Nacc	NP	u	A*? Nacc
29	1	MR	i stra to be afraid						
30	1	MR	devushka spitala skazala volku kuda ona idjot	VP	u	V Ndat			
31	1	MR	i volk zainteresiruiljsja						
32	1	MR	i tak devushka ishla na preg i volk za nejo	PP	PR ejo	P Nacc			
33	1	MR	na putu devushka pobrala some cveta ruzhe	PP	u	P Nprep			
34	1	MR	pri dev devushka prishla do babushke	VP		V P	PP	e	P N*dat
35	1	MR	volk posvetil babushku i	VP	u	V Nacc			
36	1	MR	i babushka vse stra##						
37	1	MR	kogda devushka uexala u izbu	VP		V *P	PP	u	P N*acc
38	1	MR	tam net bylo babushke	QP	e	Q N*dat			

39	1	MR	tam bylo volk						
40	1	MR	i devushka posmatrila volka	VP	a	V Nacc			
41	1	MR	i ne znala i don't know how to describe this						
42	1	MR	tamo taki chudny uchi chudny ochi						
43	1	MR	tam tolki nos i taki chudny zuby						
44	1	MR	kad ona dumala volk sel i want attack						
45	1	MR	tam byli ljudi koj su slishali zvuk						
46	1	MR	ne bylo normalnye obychnami						
47	1	MR	kad ljudi odshli u izbu	VP		V *P	PP	u	P N*acc
48	1	MR	oni videli zloznego vulka i	VP	a	V Nacc	NP	ego	Aacc Nacc
49	1	MR	raskozli ja ne znaju						
50	1	MR	tak oni reshili devushku	VP	u	V Nacc			
51	2	MR	zdes tri znakovy	QP	y	Q N*nom			
52	2	MR	a cerna cherna vlozy te byely bukvy kniga drugache						
53	2	MR	i don't know the words						
54	2	MR	ruchka plava modra zelena?						
55	2	MR	tjomnye i chierny?						
56	2	MR	sinjaja rubchka i chervena rubachka						
57	2	MR	zelena julka i sinaja julka						
58	2	MR	cherny stul i i dont know						
59	3	MR	tak devushku mozhno isti						
60	3	MR	i don't understand						
61	3	MR	devushka ponravitsja est grushku	VP	u	V Nacc			
62	3	MR	devushki ochen xolodno zima						
63	3	MR	devushka zanimaetsja igrat gitaru muzyku	VP	u	V Nacc Nacc			
64	3	MR	devushka us afraid ispugatsja?						
65	3	MR	devushka volit koshku	VP	u	V Nacc			
66	3	MR	volit tvoju koshku	VP	u	V Nacc	NP	ju	Aacc Nacc
67	3	MR	devushka stanet zanimaetsja baletom	VP	om	V Ninst			
68	3	MR	devushka xochet stat balerina balet	VP	a	V N*nom			
69	4	MR	plastinku prinesla medichinska sestra	NP VP	u	Nacc V			
70	4	MR	muzikant prinesu trubu	VP	u	V Nacc			
71	4	MR	gitaru prinesla balerina	NP VP	u	Nacc V			
72	4	MR	vrach prinesu kartuchku	VP	u	V Nacc			
73	4	MR	grushku prinesla predovatelnica	NP VP	u	Nacc V			
74	4	MR	medsistru prinesla tortushku	VP	u	V Nacc			
75	4	MR	oficiant prines luzhka	VP	a	V N*nom			
76	4	MR	vilka prinesla balerina	NP VP	a	N*nom V			
77	5	MR	tak ja togo						
78	5	MR	tak ja trebola ispitati?						
79	5	MR	sprosit						
80	5	MR	kuda bylo mesto bojstva?						
81	5	MR	gde? Ne kada oni ubojstuju?						

82	5 MR	kaki orudie oni treboli za bojstvo?			
83	5 MR	i kak nazvatsja?			
84	5 MR	kolko nemu byli let?			
85	5 MR	i mesto gde nela proisxozhdenija?			
86	5 MR	gde otkuda on prixal?			
87	5 MR	dobre			
88	5 MR	i kak ego imja?			
89	5 MR	na znamu kuda			
90	5 MR	ne zname ime cheloveka	NP	a	N Ngen

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INTRO	BE	menja zovut beata						
2	INTRO	BE	mne dvadcat let						
3	INTRO	BE	russskij jazyk ja znaju z film	PP	∅	P N*nom			
4	INTRO	BE	ja uchu odin let odin god						
5	INTRO	BE	s uchitelnicej	PP	ej	P Ninst			
6	INTRO	BE	s druzjam iz slovakii	PP	jam	P N*dat			
7	INTRO	BE	s druzjam iz slovakii	PP	∅	P Ngen			
8	INTRO	BE	ne chasto						
9	INTRO	BE	ja govorju po anglijski po vengerski po slovacki						
10	INTRO	BE	ja chitaju mnogo						
11	INTRO	BE	ja chasto slushu muzyku	VP	u	V Nacc			
12	INTRO	BE	i tancevaju						
13	1	BE	net						
14	1	BE	ja znaju						
15	1	BE	ja skazhu skazku?	VP	u	V Nacc			
16	1	BE	zdes krasnaja shapochka s ejo mamoj i s ejo koshkoj i ovoshi	PP	oj	P Ninst			
17	1	BE	zdes krasnaja shapochka s ejo mamoj i s ejo koshkoj i ovoshi	PP	oj i	P Ninst N*nom			
18	1	BE	ejo babushka zaboleta						
19	1	BE	ja ne znaju eto slovo						
20	1	BE	i ona xotela						
21	1	BE	ejo zabrat ovoshi						
22	1	BE	darozhka k babushke byla	PP	e	P Ndat			
23	1	BE	neviem cho na obrazu	PP	u	P Nprep (trans)			
24	1	BE	ona dolzhna idti cherez les						
25	1	BE	i ona videt les						
26	1	BE	ona shla i pela						
27	1	BE	i vstrechala volka v lesu	VP	a	V Nacc			
28	1	BE	ona emu skazala	NP VP	PR emu	Ndat V			
29	1	BE	chto babushka v krovate lezhit	PP	e	P Nprep			
30	1	BE	i on shol za babushkoj	VP		V *P	PP	oj	P Ninst
31	1	BE	krasnaja shaposhka						
32	1	BE	cvety						
33	1	BE	i volk shjol za babushkoj i	VP		V *P	PP	oj	P Ninst
34	1	BE	i sest ejo	VP	PR ejo	V Nacc			
35	1	BE	vdruk uvidela krasnaja shapochka						
36	1	BE	chto babushka ne babushka						
37	1	BE	volk byl babushka						
38	1	BE	on bolsjoj neviem chas						
39	1	BE	i glaza bolsjoj bolschie						
40	1	BE	nos i zuby						
41	1	BE	i vdruk on xotel ejo sest	NP VP	PR ejo	Nacc V			
42	1	BE	oxotniki vybegali						
43	1	BE	i smotrit dom babushki	NP	i	N Ngen			
44	1	BE	a ego zabit ubit	NP VP	PR ego	Nacc V			

45	1 BE	ego zarezali			
46	1 BE	eto nozh u oxotnika	NP VP	PR ego	Nacc V
47	1 BE	vsjo konchaetsja xorosho	PP	a	P Ngen
48	2 BE	eta devushka u ejo chjornye vlasjy			
49	2 BE	i u ejo zhjoltye			
50	2 BE	zdes dve kartiny			
51	2 BE	zdes tri			
52	2 BE	chjornye batinki			
53	2 BE	krasnye batinki			
54	2 BE	knigi naverxu zeljonye knigi			
55	2 BE	zhjoltaja kniga naverxu			
56	2 BE	i zdes vnizu zhjoltaja kniga			
57	2 BE	rubashka naverxu krasnaja rubashka			
58	2 BE	a vnizu sinjaja			
59	3 BE	krasnaja shapochka nraivsja grusha			
60	3 BE	ejo xladny			
61	3 BE	shapochka zanimaetsja muzykoj	VP	oj	V Ninst
62	3 BE	ona je strashnovala			
63	3 BE	krasnaja shapochka ljubit koshku	VP	u	V Nacc
64	3 BE	ona xotit stat balerinoj	VP	oj	V Ninst
65	4 BE	butylku prinesla medsestra	NP VP	u	Nacc V
66	4 BE	muzykant prinjos trubu	VP	u	V Nacc
67	4 BE	gitaru prinjosla balerina	NP VP	u	Nacc V
68	4 BE	vrach prinjos kartoshku	VP	u	V Nacc
69	4 BE	grushu prinesla učitelnica	NP VP	u	Nacc V
70	4 BE	mjodsestra prinesla tort vypechku	VP	ø u	V N Nacc
71	4 BE	oficiant prinjos lozhku	VP	u	V Nacc
72	4 BE	vilku prinesla balerina	NP VP	u	Nacc V
73	5 BE	gde stalo ubijstvo?			
74	5 BE	kakoj vremja stalo ubijstvo?			
75	5 BE	kakie aridie milicija nashla?			
76	5 BE	skolko let byl ubitu?			
77	5 BE	skolko let byl u nego?			
78	5 BE	i kak ego zavut?			
79	5 BE	kak byl po nacionalnosti aljoshu?	PP	i	P Ndat
80	5 BE	kogo on ubil?	NP VP	PR kogo	Nacc V
81	5 BE	kem?			
82	5 BE	chto eto?			

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INFO	KA	menja zovut katja						
2	INFO	KA	mne dvadcat let	QP	∅	Q Ngen			
3	INFO	KA	ja uchilas russkij jazyk na shkole	VP		V P	PP	e	P Nprep
4	INFO	KA	shest mesjacev tolko	QP	ev	Q Ngen			
5	INFO	KA	ja tozhe govorju po anglijski i po francuzki i nemnogo po ispanski i ochen ploxo po russki						
6	INFO	KA	slovenski						
7	INFO	KA	net						
8	INFO	KA	da						
9	INFO	KA	xochu						
10	INFO	KA	ne rozumem						
11	INFO	KA	ja ochen ljublju puteshestvovat						
12	INFO	KA	i chitat						
13	INFO	KA	i golo s sobakoj	PP	oj	P Ninst			
14	INFO	KA	govorit s prijatelnyh	PP	ym	P Ainst			
15	INFO	KA	mozno						
16	1	KA	skazat?						
17	1	KA	zhila odna devushka						
18	1	KA	i nej byla krasnaja shapochka						
19	1	KA	ja ne znaju						
20	1	KA	dve odnoj devushku i odna zhenshina						
21	1	KA	i tozhe govori						
22	1	KA	ja ne znaju kak zavut						
23	1	KA	ona dajot						
24	1	KA	mama govorit devushke o babushke	VP	e	V Ndat			
25	1	KA	mama govorit devushke o babushke	PP	e	P Nprep			
26	1	KA	i mama govorit devushke o lese i volku	VP	e	V Ndat			
27	1	KA	i mama govorit devushke o lese i volku	PP	e u	P Nprep N*acc			
28	1	KA	devushka puteshestuet						
29	1	KA	i ona vstrechaet volka	VP	a	V Nacc			
30	1	KA	ona govorit o babushke	PP	e	P Nprep			
31	1	KA	i volk eto						
32	1	KA	est						
33	1	KA	devushka idjot v lesom	VP		V P	PP	om	P N*inst
34	1	KA	i ona vidit kvety						
35	1	KA	vlk pridet k babushke	VP		V P	PP	e	P Ndat
36	1	KA	devushka pridet						
37	1	KA	i ona net babushki no volka	QP	i	Q Ngen			
38	1	KA	i ona skazh emu gde babushka	VP	PR emu	V Ndat			
39	1	KA	i ona pitatsja						
40	1	KA	pochemu u nejo tak velkaja ushi ochi nos i zuby						
41	1	KA	i volk						
42	1	KA	i ona znaet volk	VP	∅	V N*nom			
43	1	KA	xache est devushku	VP	u	V Nacc			
44	1	KA	nu tri muzhchiny pridut	QP	y	Q N*nom			
45	1	KA	i oni otvarjut volka	VP	a	V Nacc			
46	1	KA	oni rezaju volka	VP	a	V Nacc			
47	1	KA	i babushka i devushka zhivut						
48	2	KA	na pervoj dva kartinki	PP	oj	P Aprep			
49	2	KA	i na vtoroj tri	PP	oj	P Aprep			
50	2	KA	vlosy cumne ne rovne						

51	2	KA	na prvij kartinke	chjornye vlozy	PP	e	P Nprep	NP	Ø	A*nom Nprep
52	2	KA	na vtoroj	zhjoltyj	PP	oj	P Aprep			
53	2	KA	i prvaja kartnka	tri knigi						
54	2	KA	i odna	zhjolta						
55	2	KA	i na vtoroga kartinke	tozhe odna	PP	a	P N*nom	NP	oga	A*gen N*nom
56	2	KA	tozhe na vtoroj kartinke	nogi krasne	PP	e	P Nprep	NP	oj	Aprep Nprep
57	2	KA	i na prve	sine						
58	2	KA	rushka	zeljona i sina						
59	3	KA	devochka	nравitsja	VP	u	V Nacc			
60	3	KA	devushke	krasnoj shapochke	NP	oj e	Adat Ndat			
61	3	KA	krasnaja shapochka	zanimaetsja	VP	u	V N*acc			
62	3	KA	ne znaju							
63	3	KA	ona idjot k	babushke	VP		V P	PP	e	P Ndat
64	3	KA	krasnaja shapochka	ljubit	VP	u	V Nacc			
65	3	KA	ona xochet	stat tancichej	VP	ej	V Ninst			
66	4	KA	butylku	prinosa	NP VP	u	Nacc V			
67	4	KA	muzykant	prinjos	VP	u	V Nacc			
68	4	KA	gitaru	prinjosla	NP VP	u	Nacc V			
69	4	KA	vrach	prinjos	VP	u	V Nacc			
70	4	KA	grushku	prinjosla	NP VP	u	Nacc V			
71	4	KA	medsestra	prinjos	VP	u	V Nacc			
72	4	KA	oficiant	prinjos	VP	u	V Nacc			
73	4	KA	vlichku	prinjosla	NP VP	u	Nacc V			
74	5	KA	pozhalujsta	skazhi						
75	5	KA	gde kakoe mesto	9ubijstva?						
76	5	KA	i kogda?							
77	5	KA	i mozhte	opisat						
78	5	KA	i vy znaete	kakoe						
79	5	KA	mozhte	mne						
80	5	KA	i killer	skolko						
81	5	KA	cho eto ego	meso						
82	5	KA	kak ego	zovut?						
83	5	KA	kogo	zabyt?						
84	5	KA	eto vsjo?							

56	2 PA	i pervoj karti u devushki krasnaja . Rubashka	PP	i	P Nprep	NP	oj	Aprep Nprep
57	2 PA	i pervoj karti u devushki krasnaja . Rubashka	PP	i	P Ngen			
58	2 PA	i druga devushka u nejo goluboj						
59	2 PA	i ejo volosy blond i v pervoj karte ejo volosy cherny	PP	e	P Nprep	NP	oj	Aprep Nprep
60	2 PA	i v pervoj karti etot dva tozhe dva dve kartinki	PP	i	P Nprep	NP	oj	Aprep Nprep
61	2 PA	na drugoj karti tri kartinki	PP	i	P Nprep	NP	oj	Aprep Nprep
62	2 PA	v pervoj karti tri kingi	PP	i	P Nprep	NP	oj	Aprep Nprep
63	2 PA	no zholtaja kniga pervaja						
64	2 PA	i v drugoj karti zhjoltaja kniga tretij	PP	i	P Nprep	NP	oj	Aprep Nprep
65	3 PA	i chto?						
66	3 PA	etot slovami?						
67	3 PA	krasnaja shapochka nraivit grusha						
68	3 PA	krasnaja shapochka ej zima 9xolodno da						
69	3 PA	krasnaja shapochka zanimaetsja muzykoj	VP	oj	V Ninst			
70	3 PA	krasnaja shapochka boits u nej strax						
71	3 PA	krasnaja shapochka ljubit kota ili koshku	VP	a u	V Nacc Nacc			
72	3 PA	krasnaja shapozhka xotit stat' balerinoj	VP	oj	V Ninst			
73	4 PA	butylku prinjos medsestra	NP VP	u	Nacc V			
74	4 PA	muzykant prinjos tubu	VP	u	V Nacc			
75	4 PA	gitaru prinesla balerina	NP VP	u	Nacc V			
76	4 PA	vrach prinjos kartoshku	VP	u	V Nacc			
77	4 PA	grushu prinjosla uchitelnica	NP VP	u	Nacc V			
78	4 PA	medsestra prinjosla vypecku	VP	u	V Nacc			
79	4 PA	oficiant prinjos lozhku	VP	u	V Nacc			
80	4 PA	vytku prinjosla balerina	NP VP	u	Nacc V			
81	5 PA	ty znaesh mesto 9ubijstva?						
82	5 PA	eto kuchnja?						
83	5 PA	gde ubijstvo naxodit net naxodisja?						
84	5 PA	i vy znaete vremja 9ubijstvo?						
85	5 PA	i kogda eto sluchilos?						
86	5 PA	vecherom?						
87	5 PA	i vy znaete chto bylo uridie 9ubijstvo?						
88	5 PA	chto eto?						
89	5 PA	vy znaete skolko emu let?						
90	5 PA	i kak ego zovut?						
91	5 PA	otkuda von?						
92	5 PA	on rossijan						
93	5 PA	kak ego zavut?						
94	5 PA	za chto ego?						
95	5 PA	my ne znaem kto eto						
96	5 PA	kto byl ubitij?						
97	6 PA	ne za chto vsjo						

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2	EMB 3	FORM 3	STRUCTURE 3
1	INTRO	DA	xorosho									
2	INTRO	DA	manja zovut Daniela									
3	INTRO	DA	mne devjtnadcat let									
4	INTRO	DA	moja mama mne skazala neшто v ruskom jazyke	PP	e	P Nprep	NP	om	Aprep Nprep			
5	INTRO	DA	potom ja iskala neшто na internete	PP	e	P Nprep						
6	INTRO	DA	potom ja reshila učit etot jazyk									
7	INTRO	DA	net tolko ja nachala učitjsja etot jazyk v proshlom godu	PP	u	P Nprep	NP	om	Aprep Nprep			
8	INTRO	DA	ja znaju xorosho angljiskij jazyk									
9	INTRO	DA	potom očen nemnogo nemeckij									
10	INTRO	DA	a uchus odnoj god chorvatskij jazyk									
11	INTRO	DA	slovackij									
12	INTRO	DA	chego?									
13	INTRO	DA	ne znaju slovo									
14	INTRO	DA	da ja igraju na skripkax uzhe vosem let	VP		V P	PP	ax	P Nprep			
15	INTRO	DA	da ja igraju na skripkax uzhe vosem let	QP	ø	Q Ngen						
16	INTRO	DA	ja ljublju guljat s moimi družjami i s moim bratom	PP	ami	P Ninst	NP	imi	Ainst Ninst			
17	INTRO	DA	ja ljublju guljat s moimi družjami i s moim bratom	PP	om	P Ninst	NP	im	Ainst Ninst			
18	1	DA	da ja znaju v slovackom jazyke	PP	e	P Nprep	NP	om	Aprep Nprep			
19	1	DA	i charakteristiki?									
20	1	DA	znacit krasnaja šapochka est na kartinke	PP	e	P Nprep						
21	1	DA	ejo mama davait ejo xleb markov	VP	PR ejo ø ø	V N*acc N N						
22	1	DA	i za mamoj stojt koshka	PP	oj	P Ninst						
23	1	DA	mama dumaet o babushke	VP		V P	PP	e	P Nprep			
24	1	DA	i govorit šapochke	VP	e	V Ndat						
25	1	DA	čto ona dolzhna dat ejo	VP	PR ejo	V N*acc						
26	1	DA	ona govorit									
27	1	DA	čto ona dolzhna idti čerez les k domu babushka	VP		V P	PP	u	P Ndat	NP	a	N N*nom
28	1	DA	no koshka ejo ne xochet pustit'	NP VP	PR ejo	Nacc V						
29	1	DA	ona smejotsja									
30	1	DA	i idjot čerez les									
31	1	DA	no pri dereve smotrit na nejo volk	PP	e	P Nprep						
32	1	DA	no pri dereve smotrit na nejo volk	VP		V P	PP	PR ejo	P Nacc			
33	1	DA	on dumaet									
34	1	DA	on ili ona?									
35	1	DA	ona emu govorit	NP VP	PR emu	Ndat V						
36	1	DA	čto ona idjot za babushku	VP		V P	PP	u	P Nacc			
37	1	DA	ona nosit korzinka na golove	VP	a	V N*nom						
38	1	DA	ona nosit korzinka na golove	PP	e	P Nprep						
39	1	DA	ona xochet sobrat žhjoltyj cvet									
40	1	DA	volk vxodil v dom babushki	NP	i	N Ngen						
41	1	DA	a potom krasnaja šapochka tozhe vxodila v dom babushki	NP	i	N Ngen						
42	1	DA	i volk byl kak babushka									
43	1	DA	no ona sprosil ego	VP	PR ego	V Nacc						
44	1	DA	počemu on imeet takie glaza nos i zuby?									
45	1	DA	on vyskachil iz kravati	VP		V P	PP	i	P Ngen			
46	1	DA	ona ispugalas									
47	1	DA	na kartine ja vizhu trjox muzhchin	PP	e	P Nprep						
48	1	DA	na kartine ja vizhu trjox muzhchin	VP	ø	V Nacc	NP	jox	Aacc Nacc			
49	1	DA	oni oxitniki s oruzhami	PP	ami	P Ninst						
50	1	DA	on odin oxotnik derzhaet nozh									
51	1	DA	i xochet u volka rezat ego	PP	a	P Ngen						
52	1	DA	i xochet u volka rezat ego	VP	PR ego	V Nacc						
53	1	DA	i oni xotjat naiti babushku	VP	u	V Nacc						
54	1	DA	potom oni ubyli volka i	VP	a	V Nacc						
55	1	DA	odin oxotnik derzhaet butylku	VP	u	V Nacc						

56	1 DA	ja dumajut							
57	1 DA	i vse vesjolye							
58	1 DA	i odin oxotnik prinesjol cvet							
59	2 DA	na pervoj kartine devushka	PP	e	P Nprep	NP	oj	Aprep Nprep	
60	2 DA	devushka imeet krasnuju rubashku	VP	u	V Nacc	NP	ju	Aacc Nacc	
61	2 DA	i drugaja imeet golubuju	VP	ju	V Aacc				
62	2 DA	potom na kartine rjadom pervoj devushki dve kartinki	PP	e	P Nprep				
63	2 DA	potom na kartine rjadom pervoj devushki dve kartinki	PP	i	P N*gen	NP	oj	Agen Ngen	
64	2 DA	i na vtoroj kartine tri	PP	e	P Nprep	NP	oj	Aprep Nprep	
65	2 DA	potom odna imeet chjornye brjuxi							
66	2 DA	a drugaja krasnye							
67	2 DA	potom odna imeet chjornye volosy							
68	2 DA	a drugaja zhjoltye							
69	2 DA	potom uchebniki							
70	2 DA	odin ochebnik est zeljonyj a drugie zhjoltye							
71	2 DA	a potom dve zelonye na pervoj kartine i odna zhjoltaja	PP	e	P Nprep	NP	oj	Aprep Nprep	
72	2 DA	no to je ja ne znaju kak skazhu							
73	2 DA	odna est bolshaja							
74	2 DA	ah dobre							
75	3 DA	ejo nravistsja grusha							
76	3 DA	krasnoj shapochke nravitsja grusha	NP VP	e	Ndat V	NP	oj	Adat Ndat	
77	3 DA	krasnoj shapochke zima							
78	3 DA	krasnaja shapochka zanimaetsja muzykoj	VP	oj	V Ninst				
79	3 DA	ona ispugaetsja							
80	3 DA	potom krasnaja shapochka ljubit koshku	VP	u	V Nacc				
81	3 DA	ona xochet stat baletkoj	VP	oj	V Ninst				
82	4 DA	butylku prinjosla medsestra	NP VP	u	Nacc V				
83	4 DA	muzykant prinjos trubu	VP	u	V Nacc				
84	4 DA	gitaru prinesa balerina	NP VP	u	Nacc V				
85	4 DA	vrach prinjos kartoshku	VP	u	V Nacc				
86	4 DA	grushu prinesla uchitel'nica	NP VP	u	Nacc V				
87	4 DA	medsestra prinjos tort ili vypichku	VP	ø u	V N Nacc				
88	4 DA	oficiant prinjos lozhku	VP	u	V Nacc				
89	4 DA	vilku prinesla balerina	NP VP	u	Nacc V				
90	5 DA	gde ubili cheloveka?	VP	a	V Nacc				
91	5 DA	i kogda ego ubili?	NP VP	PR ego	Nacc V				
92	5 DA	i s chem ego ubili?							
93	5 DA	i s chem ego ubili?	NP VP	PR ego	Nacc V				
94	5 DA	i skolko killeru let?							
95	5 DA	i kakie est ego mesto 9proisxozhdenija?							
96	5 DA	gde on rodilsja ili ona rodilas?							
97	5 DA	i kak ego zavut?							
98	5 DA	my ne znaem imja ubitogo	NP	ogo	N Agen				
99	5 DA	kak zavut ubitogo?	VP	ogo	V Agen				
100	5 DA	chto eto znachit?							

N	TASK	LEARNER	UTTERANCE	EMB 1	FORM 1	STRUCTURE 1	EMB 2	FORM 2	STRUCTURE 2
1	INTRO	DO	privet						
2	INTRO	DO	menja zovut dominika						
3	INTRO	DO	a tebja?						
4	INTRO	DO	mne dvadcat dva goda						
5	INTRO	DO	a tebe?						
6	INTRO	DO	ja ne dolzhna sprashivat da?						
7	INTRO	DO	ja vyuchila na univere						
8	INTRO	DO	anglijskij francuzskij chorvatskij tureckij i nemeckij						
9	INTRO	DO	slovackij						
10	INTRO	DO	chetyre goda	QP	a	Q Ngen			
11	INTRO	DO	da ja byla v rossii						
12	INTRO	DO	v xobarovske	PP	e	P Nprep			
13	INTRO	DO	s russkimi s ukrajncami tozhe s prepodavateljami s odnokursikami	PP	imi	P Ainst			
14	INTRO	DO	s russkimi s ukrajncami tozhe s prepodavateljami s odnokursikami	PP	ami	P Ninst			
15	INTRO	DO	s russkimi s ukrajncami tozhe s prepodavateljami s odnokursikami	PP	ami	P Ninst			
16	INTRO	DO	s russkimi s ukrajncami tozhe s prepodavateljami s odnokursikami	PP	ami	P Ninst			
17	INTRO	DO	pytaju ezhennoe						
18	INTRO	DO	uchus v univere						
19	INTRO	DO	u menja ne xvataet vremeni zavesti nekakie hobby	VP	i	V Ngen			
20	1	DO	skazku pro krasnuju shapochku?	PP	u	P Nacc	NP	ju	Aacc Nacc
21	1	DO	zhila byla malenkaja devushka						
22	1	DO	i ona poshla v les iskat nekakie						
23	1	DO	chto?						
24	1	DO	mama ej predlagaet kakoj to butylku i xleb	NP VP	PR ej	Ndat V	VP	u ø	V Nacc N
25	1	DO	shapuchka pitaetsja otvechaet						
26	1	DO	i potom ponila chto eto dlja babushki	PP	i	P Ngen			
27	1	DO	tak chto eto vzjala						
28	1	DO	i mama objasnila dorogu	VP	u	V Nacc			
29	1	DO	kak dobratsja do babushki	VP		V P	PP	i	P Ngen
30	1	DO	nu tam koshka ejo pitala	NP VP	PR ejo	Nacc V			
31	1	DO	potomu chto ona xotela idti za nejo	VP		V P	PP	PR ejo	P Nacc
32	1	DO	shapochka poshla po lesu						
33	1	DO	i pela sebe pesenki						
34	1	DO	vstretil zloj volk						
35	1	DO	on podumal						
36	1	DO	chto xochet sozhrat ejo babushku	VP	u	V Nacc			
37	1	DO	nu shapochka nachala sbezhat						
38	1	DO	nashla krasivye zhjoltenki cvetochi						
39	1	DO	i pitalas ego otrvat	NP VP	PR ego	Nacc V			
40	1	DO	kak ona pitalas otrvat etot cvetochek						
41	1	DO	volk prishjol k babushke	VP		V P	PP	e	P Ndat
42	1	DO	i xotel ejo sozhrat	NP VP	PR ego	Nacc V			
43	1	DO	potom prishla k babushke shapochka	VP		V P	PP	e	P Ndat
44	1	DO	i nashla tam kakuju to strannuju	VP	u	V Nacc	NP	ju	Aacc Nacc

45	1 DO	sprosila ejo pro ushi pro glaza pro bolsjoj nos pro bolschie zuby	VP	PR ejo	V Nacc			
46	1 DO	no volk otvetil tak vsjo dovolno normalnoe						
47	1 DO	i potom prignul iz krovati	VP		V P	PP	i	P Ngen
48	1 DO	i xotel ejo otkusit	NP VP	PR ejo	Nacc V			
49	1 DO	to tam zhe pojavilis oxotniki						
50	1 DO	kotorye ushlisjali ejo krichat	VP	PR ejo	V Nacc			
51	1 DO	i nozhom razrezali zhivot no volku	N	om	Ninst			
52	1 DO	vse oxotniki						
53	1 DO	i nashli tam babushku i krasnuju shapochku	VP	u u	V Nacc Nacc	NP	ju	Aacc Nacc
54	1 DO	i vse byli schastlivy i vesjolye						
55	1 DO	tolko volk ne byl takoj vejoly						
56	2 DO	ja dolzhna nazvat eti razlichja						
57	2 DO	zdes tri kartinki tam dva						
58	2 DO	zdes ona v sinej bljuzke tam v krasnoj	PP	e	P Nprep	NP	ej	Aprep Nprep
59	2 DO	zdes ona v sinej bljuzke tam v krasnoj	PP	oj	P Aprep			
60	2 DO	zdes ona v sinej jubke zdes v zeljonej	PP	e	P Nprep	NP	ej	Aprep Nprep
61	2 DO	zdes ona v sinej jubke zdes v zeljonej	PP	ej	P Aprep			
62	2 DO	tozhe sapogi na odnoj kartinke chjornyje	PP	e	P Nprep	NP	oj	Aprep Nprep
63	2 DO	na drugom krasom	PP	om	P N*inst	NP	om	Aprep N*inst
64	2 DO	knigi tozhe na oborot						
65	2 DO	cvet i razmer knigi na oborot	NP	i	N Ngen			
66	2 DO	stul so stolom oni	PP	om	P Ninst			
67	2 DO	na vtorom kartinke	PP	e	P Nprep	NP	om	Aprep Nprep
68	2 DO	na pervom korichivoe	PP	om	P Aprep			
69	2 DO	volosy u nejo						
70	2 DO	ona blondinka						
71	2 DO	i ruchka tozhe vot tam zeljonogo cveta	NP	a	N Ngen	NP	ogo	Agen Ngen
72	2 DO	i na drugom kartinke sinego	PP	e	P Nprep	NP	om	Aprep Nprep
73	3 DO	na pervoj kartinke ulybaetsja shapochka	PP	e	P Nprep	NP	oj	Aprep Nprep
74	3 DO	krasnoj shapochke nravitsja grusha	NP VP	e	Ndat V	NP	oj	Adat Ndat
75	3 DO	krasnoj shapochke zima xolodno						
76	3 DO	krasnaja shapochka zanimaetsja igroj na gitaru i na trubku	VP	oj	V Ninst			
77	3 DO	krasnaja shapochka zanimaetsja igroj na gitaru i na trubku	PP	u	P Nacc			
78	3 DO	krasnaja shapochka zanimaetsja igroj na gitaru i na trubku	PP	u	P Nacc			
79	3 DO	zanimaetsja muzykoj	VP	oj	V Ninst			
80	3 DO	krasnaja shapochka ispugalas						
81	3 DO	krasnaja shapochka ljubit koshku	VP	u	V Nacc			
82	3 DO	krasnaja shapochka xochet stat balerinoj	VP	oj	V Ninst			
83	4 DO	butylku prinesla medsestra	NP VP	u	Nacc V			
84	4 DO	muzykant prinjos trubku	VP	u	V Nacc			
85	4 DO	gitaru prinesla balerina	NP VP	u	Nacc V			
86	4 DO	vrach prinjos kartoshku	VP	u	V Nacc			
87	4 DO	i grushu prinesla prepodavatelnica	NP VP	u	Nacc V			
88	4 DO	medsestra prinesla vypecku	VP	u	V Nacc			
89	4 DO	i oficiant prinjos lozhku	VP	u	V Nacc			
90	4 DO	i vylku tozhe prinesla balerina	NP VP	u	Nacc V			

91	5 DO	pozhalujsta pokazhite			
92	5 DO	gde nasholsja ubityj?			
93	5 DO	kogda eto sluchilos?			
94	5 DO	chto nashlos rjadom s ubitym?	PP	ym	P Ainst
95	5 DO	skolko let cheloveku kotorogo ego ubili?	NP VP	PR ego	Nacc V
96	5 DO	i otkuda on?			
97	5 DO	ego imja?			
98	5 DO	eto xorosho dlja vas	PP	PR vas	P Ngen
99	5 DO	kakoe ego imja?			
100	5 DO	kak ego zovut?			
101	5 DO	nu ty vsjo otvetil			
102	5 DO	za chem ja sherlok xolms?			
103	5 DO	kogo ubili?	NP VP	PR kogo	Nacc V