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Acquiring case marking in Russian as a second language: an exploratory study on subject and object

Daniele Artoni and Marco Magnani
University of Verona

1. Introduction

This chapter deals with the development of case in Russian as a second language. Case is an important morphological device for marking grammatical relations among constituents, and as such is of great interest for testing the interface between morphological and syntactic development proposed by Bettoni & Di Biase in the introductory chapter of this volume (ch. 1, § 4.3). Yet so far, few studies have specifically dealt with the L2 acquisition of case. Among the exceptions, some are notable. Baten's (2011, 2013) study on the acquisition of German case, and the study on Serbian case in chapter 6 of this volume are within the PT framework. Although they are different in design – the former being longitudinal on a variety of Dutch L1 learners of German L2, and the latter cross-sectional on learners of Serbian as a heritage language in Australia – they both show that learners begin to mark case first positionally in the clause (i.e., they assign NOM to preverbal SUBJ, and ACC to postverbal OBJ), and then functionally (i.e., regardless of position in c-structure). Without the PT framework, studies on the L2 acquisition of case are also scarce generally, and even more so with respect to Russian. One exception is Kempe & MacWhinney (1998), who investigate the acquisition of case marking in Russian in comparison to German. Their findings are interesting in so far as they show that, although the Russian case-marking system is more complex than the German one, it appears to be learned faster because its inflections are more reliable for sentence interpretation. However, their study deals with comprehension, and production remains unexplored.

In line with the PT framework proposed in this volume, in our chapter we explore the development of Russian case and hypothesise a developmental schedule interfacing morphology with syntax. More specifically, we focus on how case morphology is used to mark GFs, with particular attention to the two core GFs, namely, SUBJ and OBJ. Our hypotheses are then tested on cross-sectional data col-

lected among 8 learners of Russian L2. Results will show that learners progress from a first match between GFs and their default case markers in a fixed canonical word order frame to expressing GFs also with nondefault case markers as lexically required by V, and finally to marking full functional assignment by case independent of position. This allows learners to deploy more flexible word orders to express their discourse-pragmatic needs unambiguously.

2. Case in Russian

From a typological point of view, Russian is a language with a low degree of configurationality and a rich case morphology that set it among the dependent-marking languages (for an overview of this language, cf. Comrie 2011). A case system is a prominent characteristic of dependent-marking languages, traditionally defined, in a general way, as a system marking dependent nominals to the type of relation they bear to their heads in a phrase (Blake 1994). Case, then, is not a universal feature, as GFs can be identified by three different means: (a) case marking, which is the main means used by dependent-marking languages such as Russian, Japanese (cf. ch. 4, this volume), and Warlpiri (cf. (24), § 2.2, ch. 1); (b) agreement, which is very productive in Romance languages like Italian (cf. ch. 3) and Spanish (cf. ch. 7), where SUBJ and V must agree in person, number, and sometimes also gender; and (c) word order or position in phrase structure, used in configurational languages like English (cf. ch. 2). Natural languages can then obviously exploit more than one means to identify GFs. Russian and Latin, for instance, present both a rich case morphology and SUBJ-V agreement. This allows speakers to resort to different word orders and organise sentences according to the pragmatic requirements of the TOP-FOC structure of their sentences (cf. §§ 3.1, ch. 3 on Italian, and ch. 4 on Japanese).

Within the LFG framework, King (1995) discusses four types of case assignment in Russian: semantic, configurational, functional, and lexical. Semantic case assignment, as its label suggests, occurs when a particular case is associated with a particular semantic meaning at a-structure. Semantic cases are common across languages, but according to King (1995) the only candidate in Russian is the instrumental case for <instrument>, as shown in (1).

(1) ja   napisala pis'mo   karandašom
     I-NOM wrote   letter-ACC pencil-INST
     [I wrote a letter with a pencil]

Configurational case assignment occurs when a specific case is assigned to a N appearing in a certain position in phrase structure. In King's view, this occurs in

Russian when genitive in N is daughter of NP, as exemplified and formalised in (2). Notice that, unlike with semantic case, genitive is assigned only by position in c-structure because the genitive sister of N can mark different semantic roles, such as possessor, as well as agent as in (2).

(2)   a. otvet   učenika
         answer-NOM   pupil-GEN
         [(the) answer by (the) pupil]

      b. NP → N   (NP)
                      (($\downarrow$CASE) = GEN)

Crucially, to build up the sentence, case assignment can mark GFs. In Russian three GFs require their own default case, namely, nominative (NOM) for SUBJ, accusative (ACC) for OBJ, and dative (DAT) for OBL$_{GOAL}$, as exemplified and formalised in (3).

(3)   a. mal'čik   dal   Inne   knigu
         boy-NOM gave   Inna-DAT   book-ACC
         [the boy gave Inna a book]

      b. ($\uparrow$SUBJ CASE) = NOM
         ($\uparrow$OBJ CASE) = ACC
         ($\uparrow$OBL$_{GOAL}$ CASE) = DAT

Finally, lexical case assignment occurs when case is governed by a particular verb or preposition, as exemplified and formalised for verbs in (4) and for prepositions in (5) respectively. Note that the rule in (4) is not contradicted by those in (3) because specific lexical requirements can override defaultness.

(4)   a. upravljaet   biznesom
         manages   business-INST

      b. *upravljat'* 'manage'   V <SUBJ, OBJ>
                                 ($\uparrow$OBJ CASE) = INST

(5)   a. u   okon
         by   windows-GEN

      b. *u* 'at/near'   PREP <OBJ>
                         ($\uparrow$OBJ CASE) = GEN

In this study we will deal with GF case assignment and lexical case assignment by V.
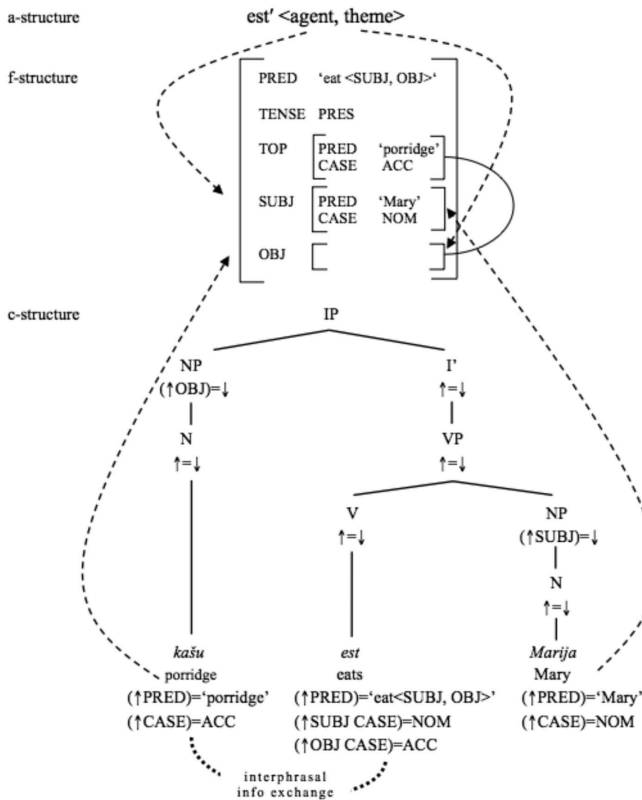
Russian canonical word order is SVO,[1] so SUBJ marked as NOM is the default TOP in preverbal position, and OBJ marked as ACC is the default FOC in postverbal position. However, because of Russian nonconfigurationality, SVO occurs only 47% of the time in native oral production (Timberlake 2004). This means that case-marked GFs are not positionally predictable. For discourse and pragmatic reasons, constituents can occur in different positions, allowing for all the six possible combinations of the three core elements, as shown in (6) – even though it is important to note that word orders in (6d-f) rely heavily on prosodic features and, being highly marked, are rarely used by Russian L1 speakers (Kallestinova 2007). In the examples below these six combinations are identified thanks to the feminine nominative –*a* marking SUBJ, and the feminine accusative –*u* marking OBJ.

(6) a. Marija   est   kašu
         Marija-NOM.SUBJ   eats-V   porridge-ACC.OBJ

     b. Marija   kašu   est
         Marija-NOM.SUBJ   porridge ACC.OBJ   eats

     c. kašu   est   Marija
         porridge-ACC.OBJ   eats-V   Marija-NOM.SUBJ]

     d. kašu   Marija   est
         porridge-ACC.OBJ   Marija-NOM.SUBJ   eats-V

     e. est   Marija   kašu
         eats-V   Marija-NOM.SUBJ   porridge-ACC.OBJ

     f. est   kašu   Marija
         eats-V   porridge-ACC.OBJ   Marija-NOM.SUBJ

What unites the sentences in (6) is that they all share the same f-structure. On the other hand, the most relevant difference in c-structure is that OBJ occurs within VP when it is postverbal, whereas it is set outside VP when it is displaced to TOP position (King 1995: 206), as shown in (7). This implies that when OBJ is preverbal, the value of the OBJ CASE feature of V must be checked interphrasally with the case value of NP_{OBJ}.

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1   For an alternative view on Russian word order, cf. King (1995), who suggests VSO as the unmarked, pragmatically neuter word order.

(7) Correspondences between a-structure, f-structure and c-structure for the sentence kašu est Marija *('the porridge Marija eats (it)')*

a-structure   est′ <agent, theme>

f-structure

$$
\begin{bmatrix}
\text{PRED} & \text{'eat <SUBJ, OBJ>'} \\
\text{TENSE} & \text{PRES} \\
\text{TOP} & \begin{bmatrix} \text{PRED} & \text{'porridge'} \\ \text{CASE} & \text{ACC} \end{bmatrix} \\
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{'Mary'} \\ \text{CASE} & \text{NOM} \end{bmatrix} \\
\text{OBJ} & [\quad]
\end{bmatrix}
$$

c-structure

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                              IP
                        _____|_____
                       NP            I'
                    (↑OBJ)=↓        ↑=↓
                       |             |
                       N            VP
                      ↑=↓           ↑=↓
                       |         ____|____
                       |        V         NP
                       |       ↑=↓      (↑SUBJ)=↓
                       |        |          |
                       |        |          N
                       |        |         ↑=↓
                       |        |          |
                     kašu      est       Marija
                   porridge    eats       Mary
             (↑PRED)='porridge'  (↑PRED)='eat<SUBJ,OBJ>'   (↑PRED)='Mary'
             (↑CASE)=ACC         (↑SUBJ CASE)=NOM           (↑CASE)=NOM
                                 (↑OBJ CASE)=ACC
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interphrasal
info exchange

Readers will appreciate that for learners of Russian L2 case is a complex feature to acquire. Yet the complexity of its functional deployment is well matched by the complexity of its formal characteristics. There are six cases in Russian: nominative, genitive, dative, accusative, instrumental, prepositional (locative and ablative), which are fusionally enmeshed with other nominal features such as number (singular or plural), gender (masculine, feminine or neuter), animacy, and class. In (8) and (9) we show the full case-marking paradigm for Ns and pronouns respectively. As we can see, the many-to-many relations between cases and markers are noteworthy. In particular, with regard to SUBJ and OBJ, the two cases of interest in this chapter, neuter and masculine inanimate Ns share the same marking strategies for NOM and ACC. For this reason, we will consider only feminine and masculine animate Ns for matching SUBJ to NOM, and OBJ to ACC. On the other hand, with regard to pronouns, no ambiguity between markers is found in the NOM and ACC declension.

(8) Russian case-marking paradigm: nouns (after Kempe & MacWhinney 1998)

	SINGULAR				
	MASCULINE		NEUTER	FEMININE	
	ANIMATE	INANIMATE		1ST CLASS	2ND CLASS
NOM	-ø	-ø	-o/-e	-a/-ja	-'ø
GEN	-a/-ja	-a/-ja	-a/-ja	-y/-i	-i
DAT	-u/-ju	-u/-ju	-u/-ju	-e	-i
ACC	-a/-ja	-ø	-o/-e	-u/-ju	-'ø
INST	-om/-em	-om/-em	-om/-em	-oj/-ej	-'ju
PREP	-e	-e	-e	-e	-i

	PLURAL				
	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	-ø/-ej	-ø/-ej	-ø/-ej
DAT	-am/-jam	-am/-jam	-am/-jam	-am/-jam	-am/-jam
ACC	-ov/-ev/-ej	-y/-i	-a/-ja	-ø/-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 -*o* and -*a* are not stressed, they are both pronounced /ə/

(9) Russian case-marking paradigm: pronouns (after Kempe & MacWhinney 1998)

	PERS	SINGULAR					PLURAL		
		1ST	2ND	3RD			1ST	2ND	3RD
				MASC.	NEU.	FEM.			
NOM		ja	ty	on	ono	ona	my	vy	oni
GEN		menja	tebja	ego	ego	eë	nas	vas	ich
DAT		mne	tebe	emu	emu	ej	nam	vam	im
ACC		menja	tebja	ego	ego	eë	nas	vas	ich
INST		mnoj	toboj	im	im	ej	nami	vami	imi
PREP		mne	tebe	něm	něm	nej	nas	vas	nich

Pronouns beginning with a vowel may be preceded by an epenthetic -*n*

3. Developmental Hypotheses

In (10) we show our developmental hypotheses for Russian case relative to the GFs SUBJ and OBJ. As we have noted in the introduction to this chapter, case is particularly interesting for PT because the two schedules for morphological and syntactic development interface in a crucial way. So, contrary to other chapters in this volume (e.g., chh. 1-4), we include both morphological and syntactic development

in a single table. We should also mention that our Prominence Hypothesis deals with declarative sentences, leaving interrogatives to future work.

(10) Developmental stages hypothesised for Russian case

	STAGE	STRUCTURE	MORPHO-SYNTACTIC OUTCOME	EXAMPLE
SYNTAX	NONCANONICAL WORD ORDER	OVS, OSV, etc.	OBJ_{ACC} V $SUBJ_{NOM}$	*knigu čitaet mama* [book-ACC reads mum-NOM]
MORPHOLOGY	SENTENCE PROCEDURE	TOP_{OBJ} & V unification SUBJ & V agreement		
SYNTAX	XP_{DF} CANONICAL WORD ORDER	TOP_{ADJ} SVO	ADJ $SUBJ_{NOM}$ V OBJ_{ACC}	*sejčas Oleg smotrit televisor* [now Oleg-NOM watches television-ACC]
MORPHOLOGY	PHRASAL PROCEDURE	V & OBJ unification	V $OBJ_{ACC/INST/...}$	*upravljaet biznesom* [manages business-INST]
SYNTAX	CANONICAL WORD ORDER	SVO	$SUBJ_{NOM}$ V $OBJ_{non-NOM}$	*devočka est' kašu* [girl-NOM eat porridge-ACC]
MORPHOLOGY	CATEGORY PROCEDURE	case marking on N: NOM vs non-NOM		
LEMMA ACCESS		single words formulas		*net urok [no lesson]* *menja zovut Sergej* [my name is Sergej]

After the single-word and formulaic stage, as soon as the category procedure becomes operative for morphology, learners are able to distinguish categorially between Ns and Vs. Formal marking of Ns, then, begins to emerge. With regard to the case feature specifically, at this stage learners begin to distinguish between the NOM form and a general non-NOM form bearing any inflectional ending other than NOM (e.g., *kaša* 'porridge-NOM' vs. *kašu/kaše/kaši* 'porridge-non-NOM'). This initial opposition between NOM and non-NOM (cf. Jakobson 1971), although minimal and restricted within the word, is sufficient to distinguish formally between SUBJ and non-SUBJ GFs in syntax. However, because at this stage GFs are identified positionally rather than functionally (cf. ch. 1, § 4.2.1), learners will deploy this minimal form variation onto a minimally specified SVO sequence – that is, they will produce canonical strings with a preverbal N_{NOM} and a postverbal $N_{non-NOM}$, as shown in (11).

(11) ochotniki   ubit   volke
     hunters-NOM kills   wolf-non-NOM
     [the hunters kill the wolf]

At the next stage, with regard to morphological development, learners are able to exchange information within a phrase. In Russian this phrasal procedure stage involves a variety of structures, such as agreement between noun and adjective within NP and government by the preposition within PP. The relevant structure for our study is V-OBJ unification when learners are able to exchange information within the VP between the value of the case feature of NP_{OBJ} and the value of the feature OBJ CASE required by V. If OBJ is marked by its default ACC case in its default postverbal position, the evidence of intraphrasal exchange of information remains equivocal. We prefer to consider unequivocal evidence of progress to this stage OBJs marked with cases other than ACC (e.g., INST)[2], as exemplified above in (4), § 2, and further formalised in a full sentence in (12). Needless to say, this does not imply that all nondefault cases required by V will be learned soon. Being required lexically, they will have to be learned individually V by V.

(12) Annotated c-structure for the sentence Oleg upravljaet biznesom *('Oleg manages business')*

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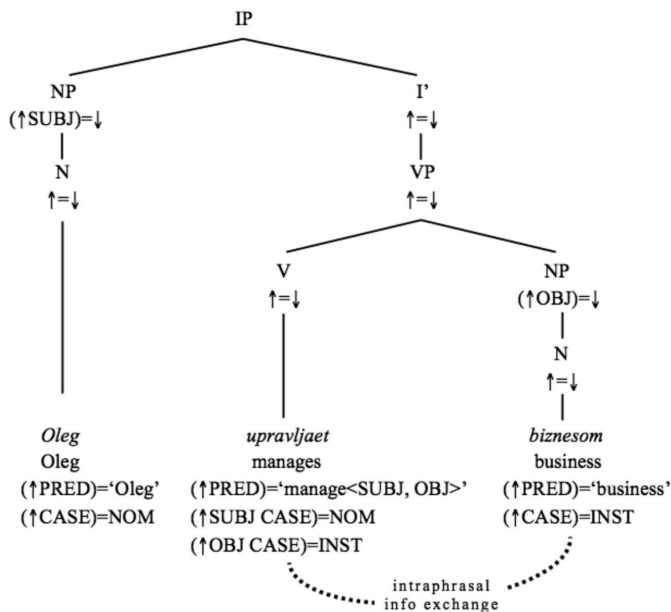
2   Also OBJ_{INST} could randomly appear as $OBJ_{non-NOM}$ at the category procedure stage. What provides unequivocal evidence for online information exchange within the VP is a variety of cases with different lexical Vs.

      With regard to syntax, we hypothesise that at this stage learners will be able to place an element other than SUBJ (typically ADJ) in the prominent first position as in (13). This addition will bring about a differentiation between SUBJ$_{NOM}$ and the topical first constituent in the clause.

(13) na kartinke   devuška   est   jabloko
      in picture   girl-NOM   eats   apple-ACC
      [in the picture the girl eats an apple]

At the last stage of their morpho-syntactic development, learners will be able to assign GFs irrespectively of position. As we have seen, this requires two morphological resources in Russian: a head-marking strategy, namely SUBJ-V agreement for the identification of SUBJ; and a dependent-marking strategy, namely case-marking for identifying the three main argument functions – that is, SUBJ, OBJ and OBL$_{GOAL}$. With regard to the former strategy, with the activation of the S-procedure, learners can now produce the agreement between the SUBJ features (number and gender) and the predicate, as shown in (14). Although SUBJ-V agreement is not the focus of this study, in (14) we show the unification of SUBJ with a nonverbal predicate rather than with a lexical V because in Russian, as well as in other null-SUBJ languages,[3] both SUBJ and V need to retrieve their features from the conceptual structure independently (cf. ch. 3, § 2.1 on Italian L2 for a discussion on this point).

(14) pogoda   byla   chorošaja
      weather-SG.FEM   was-SG.FEM   good-SG.FEM
      [the weather was good]

Thanks again to the activation of the S-procedure, information exchange between V and its complements can now occur across phrases. Hence learners will be able to case-mark the topicalised OBJ with ACC as a result of the exchange of information between VP and the external NP, and produce sentences like (15).

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3 Russian, however, is not universally recognised as a null-SUBJ language. For instance, Avrutin & Rohrbacher (1997) argue that Russian is not a null-SUBJ language, and ascribe the rare instances of null SUBJ to contextually licensed ellipsis. On the other hand, Müller (1988) and Pearlmutter & Moore (2002) support the null-SUBJ thesis, and justify the contextual limits on the basis of discourse conditions that "make it much less common than pro-drop in Italian or Spanish".

(15) knigu   čitaet   mama
      book-ACC   reads   mum-NOM
      [the book mum reads (it)]

At this last stage, then, the interplay between morphology and syntax in the devel-
opment of case is clear. On the one hand, morphology feeds syntax in the sense
that only when the S-procedure is firmly in place can learners case-mark con-
stituents unambiguously regardless of word order constraints. On the other hand,
along the path for morphological development, when learners are able to free up
the rigidity of the canonical word order frame – crucially, by choosing to topicalise
the core function OBJ – they provide convincing evidence that case is assigned via
interphrasal information exchange.

4. The study

The evidence we bring to test our PT-based hypotheses discussed in § 3 comes
from a cross-sectional study of 8 learners of L2 Russian (2 males and 6 females), all
adults at different proficiency levels. As the table in (16) shows, they are all instruct-
ed learners, who have studied Russian at university for one to five years. Two of
them (AB and LI) have also acquired and practised the language in a Russian
speaking environment. Their L2 proficiency levels vary from A2 to C1 as measured
on the general CEFR (2001) scales. Their L1 backgrounds are also varied, includ-
ing Italian for the majority of them, Serbian (JO) and Georgian (LI). It is howev-
er important to note that, although some of the variables in (16) – particularly the
L1 background – can contribute in speeding up progress along the developmental
path, they will not affect the sequence in which stages are reached (cf. the
Developmentally Moderated Transfer Hypothesis in Pienemann, Di Biase,
Kawaguchi & Håkansson 2005).

(16) The learners

LEARNER	AGE	GENDER	L1	L2 INSTRUCTION	L2 IMMERSION	L2 PROFICIENCY
AB	24	M	Italian	5 years	5 months	C1
AL	25	F	Italian	3 years		B2
CA	26	F	Italian	3 years		B1
EL	20	F	Italian	2 years		B1
JO	22	F	Serbian	2 years		B1
LI	25	F	Georgian	4 years	24 months	C1
MA	20	F	Italian	1 years		A2
MT	22	M	Italian	3 years		B2

We used five tasks to elicit the structures listed in (10). The first task, *Znakomstvo* ('Introduction'), is a conversation aimed to get to know and relax the learners, and targeting general structures. The next two tasks, *Krasnaja Šapočka* ('Red Riding Hood') and *Najdite različija* ('Spot the differences'), are respectively a story telling and spot-the-difference task targeting canonical word order and ADJ topicalisation. In the fourth task, *Eščë Krasnaja Šapočka* ('Red Riding Hood Again'), two cards showing a person and an object were introduced together with a V in its infinitive form, and the learner was asked to create a sentence with the three given items. This task targets the use of OBJ with cases other than ACC which are lexically required by V, such as *upravljat'* ('manage') and *zanimat'sja* ('do/practice'), both requiring OBJ to be marked by INST. The last task, *Večerinka* ('The party'), targets OBJ topicalisation, and is an adaptation to Russian L2 of the task used first by Di Biase & Kawaguchi (2002) and then by Bettoni & Di Biase (2011) for eliciting Italian L2 structures (cf. § 2.2, ch. 3, this volume). Di Biase's 'animal dinner' task becomes a 'party' to which various participants must contribute something. When two picture cards appear on the computer screen, learners are encouraged to tell the researcher who is bringing what by starting with the card on the left. Since this card shows sometimes the person/agent, other times the object/theme, SVO sentences should alternate with OVS ones. The communicative context of all the five tasks and the use of several distractors scattered among the targeted structures aim to enhance learners' online production, and exclude a focus on declarative knowledge.

Our analysis comprises a total of 476 case-marked structures included in 333 main declarative sentences with lexical Vs – thus excluding copular and presentative sentences, which are 'nonverbal predicates' (Kroeger 2005: ch. 10). In (17) we illustrate the distributional analysis of the case markers on SUBJ and OBJ among learners, structures and stages. The table is organised as set out in this volume (cf. (48a-c), § 5, ch. 1), but four further points must be clarified. First, most structures in the first column are repeated twice because when both GFs are case-marked in a sentence, the figures for case refer only to the GF in bold, and the brackets around the other GF mean either that its case is not considered in that row or that the GF is absent from the string (there being a null SUBJ or an intransitive V). This then explains why in the table the total number of case-marked GFs (476) is higher than the number of analysed clauses (333). Secondly, given the relatively high degree of case syncretism in the Russian case system, in our analysis we consider only unambiguously case-marked Ns. So, with regard to the marking of NOM and ACC, as we have anticipated in § 2, for evidence of acquisition of ACC we only look at case marking on feminine nouns (e.g., *ručka* 'pen-NOM' vs. *ručku* 'pen-ACC') and masculine animate nouns (e.g., *student* 'student-NOM' vs. *studenta* 'student-ACC'), and thus exclude masculine inanimate and neuter nouns, where NOM and ACC are equal-

ly marked. With regard to the marking of INST for lexical case assignment, there being no ambiguity with other case marks, we consider all nouns, provided that the structure is produced online in a nonformulaic way. Thirdly, as evidence of acquisition of V-OBJ unification through lexical case assignment, we do not consider the occurrences of OBJs marked by the default ACC instead of the non-default INST, because the use of the default ACC here may be due to the lack of annotation of the OBJ CASE feature in the verbal lexicon. Thus, among the figures for OBJ$_{INST}$, the minus always indicates that OBJ is marked by NOM – an unequivocal example of lack of information exchange with V. Fourthly, following Pienemann (1998: 159), in this analysis we factor in the case feature only, and consequently factor out number and gender. This means that, for example, in the case of OBJ marked by INST, the use of the INST masculine ending *–om* in **babuškom* ('grandmother-INST') instead of the correct feminine one *–oj* is considered as safe evidence of acquisition of the structure.

(17) Cross-sectional study of the development of Russian case

STRUCTURES	AL	MA	JO	EL	CA	LI	AB	MT
OBJ$_{ACC}$ V (SUBJ)	-4	-4	-3	-4	-4	-5	+4	+4
(OBJ) V **SUBJ**$_{NOM}$	(+3)	(+1 -3)	(+1 -2)	(+4)	(+4)	(+4)	(+4)	(+4)
ADJ (SUBJ) V **OBJ**$_{ACC}$					-1	+4	+4	+2 -1
ADJ **SUBJ**$_{NOM}$ V (OBJ)					+3	+6	+9	+6
(SUBJ) V **OBJ**$_{INST}$	-1	-1		+1	+1 -1	+2	+2	+2
(SUBJ) V **OBJ**$_{non-NOM}$	+8 -9	+7 -2	+15	+6 -8	+3 -2	+14 -2	+9 -8	+12 -3
SUBJ$_{NOM}$ V (OBJ)	+26	+32	+31	+40	+25	+32	+45	+28

Numbers in brackets are irrelevant for determining learners' progress; cf. the analysis

All our learners can produce sentences of preverbal Ns marked as NOM and postverbal Ns marked as non-NOM, as in (18). Their numbers are convincing, and we can thus safely say that they have all reached the category procedure stage for morphology and the canonical word order stage for syntax.

(18) AL   videla volke
            saw   wolf-non-NOM

However, a finer analysis reveals interesting differences in how OBJ is marked. On the one hand, the overall average for the use of the incorrect NOM marker is 31.48%. All learners but one (JO) use it, even the more proficient ones, as shown by the minus figures for AB (9 out of 17) and exemplified in (19). On the other

hand, when OBJ is marked by a case other than NOM, the overall average for the correct ACC *–u/–ju* marker is 93.24%, as exemplified in (20). All learners but one (AL) use ACC all the time, whereas AL, the least proficient, alternates between the ACC marker and the PREP case *–e* marker, as in (18) above.

(19) AB ochotniki   našli   volk
         hunters-NOM found-PL wolf-NOM
         [the hunters found the wolf]

(20) LI oni   uvideli volka
         they-NOM   saw-PL   wolf-ACC
         [they saw the wolf]

Four of our learners, CA, LI, AB and MT, show evidence of having reached the next stage, which for morphology involves VP unification between V and OBJ. As we have mentioned in § 3, uncontroversial evidence of this unification can be captured when V requires OBJ marked by a case other than ACC, such as INST in (21). However, only one such instance by EL does not satisfy our emergence criterion for morphology (cf. § 5, ch. 1, this volume).

(21) MT ona   zanimaetsja muzykoj
         she-NOM   does   music-INST
         [she practices music]

These four learners also use structures that topicalise ADJ, as in (22). Notice that evidence of progress at this stage is determined by the syntactic position of SUBJ$_{NOM}$, which is no longer the default (initial) one, rather than by its case marker, which is the default NOM.

(22) LI potom ona   posmotrela babušku
         later she-NOM   saw   grandmother-ACC
         [then she saw her grandmother]

Two learners, AB and MT, have also reached the last stage of development in so far as they are able to use case to mark GFs irrespectively of their position in the clause. Hence, they can produce sentences like (23), where OBJ marked as ACC is in pre-verbal position.

(23) MT vilku   prinesla balerina
         fork-ACC   brought   dancer-NOM
         [the fork, the dancer brought it]

As we have remarked earlier, OBJ topicalisation in these constructions was deliberately prompted by our fifth task. What happens, then, when learners who have not yet acquired the morphological resources of the last stage are asked to perform this task? The most common solution is to use NOM on both Ns in the OVS structure, as shown in (24). Although here postverbal NOM is correct, we cannot take it as evidence of progress to this noncanonical word order stage because, as we have remarked above, NOM is the default case – hence the brackets in the table.

(24) AL   vilka   prinës   balerina
          fork-NOM   brought   dancer-NOM
          [? the fork brought the dancer/the dancer brought the fork]

One could argue that lack of case marking in (24) may be motivated by the fact that AL's L1 is Italian, a language which never marks Ns by case. However, we can safely say that this is not an issue of L1 transfer, as ACC is never marked on topicalised OBJs even by JO and LI, whose L1s are Serbian and Georgian respectively – two heavily morphologised languages with a rich case system. In this regard, we note that in two out of three of these topicalised declaratives, the Serbian learner JO marks preverbal OBJ by the default NOM, and postverbal SUBJ by ACC, as shown in (23).

(23) JO   vilka   prinës   balerinu
          fork-NOM   brought   dancer-ACC
          [the fork brought the dancer]

This is a common solution for learners who are at the earlier developmental stage. MA, for example, marks 3 out of 4 postverbal SUBJs as ACC. So it would seem that for 6 of our learners syntactic position still leads the way for marking case, even in the context of an L1 background which is typologically very similar to Russian.

5. Discussion and conclusion

In this chapter we hypothesised a developmental hierarchy for case in Russian L2 considering the interface between PT's schedules for morphology and syntax. We have seen how case presents an intriguing challenge for testing such an interface, and how Russian offers an ideal testing ground for several reasons – chiefly among them its rich morphological system and its high nonconfigurationality, allowing for permutations of the core elements in the clause.

Results of our cross-sectional study confirm our PT-based hypotheses, in so far as on both the morphological and the syntactic schedules there is no learner who produces structures at a higher stage without producing also at least some at the previous stage. Results also support the interface between morphological and syntactic development suggested by Bettoni & Di Biase in chapter 1, § 4.3. In particular, the interface is clear at the lowest and the highest grammatical stages. That is, first, when the category procedure becomes operative in morphology, learners begin to distinguish between NOM and a general non-NOM form, but can only deploy this minimal form variation within the fixed frame of the SVO canonical word order; and then last, only when learners can activate the morphological resources of the S-procedure can they free up the rigidity of canonical word order constraints, and assign case to GFs irrespectively of position. On the other hand, in the intermediate stages, that is, when the phrasal procedure stage is supposed to interface with the XP_{DF} canonical word order stage, the interface between the learners' ability to produce V-OBJ unification in morphology and to topicalise an ADJ in first position seems less clear, as also hypothesised by Bettoni and Di Biase in chapter 1, § 4.3.

A closer look at learners' production of pragmatically-driven OVS sentences can further contribute in explaining the path from case assignment based on position towards case assignment irrespectively of position. Three main outcomes are used by learners in our data: (i) both NPs are marked by the default NOM; (ii) both NPs are marked positionally, that is, TOP_{OBJ} by NOM and postverbal SUBJ by ACC; and (iii) like in target Russian, both NPs are case-marked functionally regardless of position, that is, TOP_{OBJ} by ACC and postverbal SUBJ by NOM. Such outcomes are not randomly distributed across learners, and may be interpreted as subsequent stages along the developmental path. More specifically, overextension of NOM on both NPs tends to occur both at the beginning of the interlanguage path (AL) as in (24), and at intermediate stages (EL, CA and LI) as in (25).

(24) AL gitara   prinës   balerina
         guitar-.SG.FEM   brought-SG.MASC   dancer-NOM.SG.FEM
         [? the guitar brought the dancer / the dancer brought the guitar]

(25) LI gruša   prinesla   prepodavatel'nica
         pear-NOM.SG.FEM   brought-SG.FEM   teacher-NOM.SG.FEM
         [? the pear brought the teacher / the teacher brought the pear]

In (25), however, there is more accuracy in V morphology than in (24), in so far as V is correctly inflected as SG and FEM – even though it is impossible to tell whether it agrees with preverbal N or with postverbal N. Moreover, although

both beginner and intermediate learners overextend NOM in some sentences with canonical word order as well, we have seen that intermediate learners are more accurate in using ACC for OBJ than AL, who uses a variety of non-NOM markers for OBJ. Thus, whereas AL's overextension of NOM can be seen as a general default solution, for intermediate learners it seems to be an indicator for their inability to use NOM and ACC in ways other than positionally. A longitudinal study would confirm this whole sequence for case, as well as for SUBJ-V agreement in all learners.

Our study also shows that typological similarities between the L1 and the target L2 do not allow learners to skip stages along the developmental sequence. In fact, our Serbian learner (JO) also marks constituents by case according to their position and is thus at the earlier developmental stage. On the other hand, our analysis suggests that such similarities can play an important role in increasing accuracy within a stage. In fact, JO is the only one who marks postverbal OBJs always accurately with ACC rather than with a non-NOM case.

Finally, using King's (1995) terms for case assignment, we have resorted to evidence of lexical case assignment for proving V-OBJ unification at the phrasal procedure stage, and to grammatical case assignment for proving TOP_{OBJ}-V unification at the S-procedure stage. This of course does not entail that lexical case markers are acquired before structural ones generally. This study makes no predictions as to the point of emergence of the different lexical case markers – a thorny issue which needs to be worked out at the interface with the Lexical Mapping Hypothesis. It only uses them when they are found in the data as evidence for the activation of the interphrasal precedure in order to rule out the possibility that default ACC is assigned simply because of the N position.

In conclusion, this study has shown that marking SUBJ and OBJ by case in Russian is no mean feat for L2 learners. Although minimal variation between NOM and non-NOM is sufficient for distinguishing between SUBJ and OBJ in the fixed canonical word order frame, trouble begins when V lexically requires a nondefault match between GF and case, and when discourse-pragmatic requirements place GFs other than SUBJ in the prominent first position. Indeed, only intermediate learners will start marking OBJ by the nondefault INST case, and only the most proficient ones can mark the GFs morphologically even when sentences display noncanonical word order. PT can explain why this is so by tracing the learner's developmental path from case marking based on position towards case assignment independently of position. On the other hand, our study only scratches the surface of the acquisition of case in a highly nonconfigurational language such as Russian. Further investigation is needed in several directions, as well as more substantial evidence on more diverse structures in a wider corpus. Future work, for example, should include the third case-

marked argument GF, namely the dative OBL$_{GOAL}$; interrogative sentences as well as the interface between PT's Prominence Hypothesis and Lexical Mapping Hypothesis with regard to syntax; and King's (1995) semantic and configurational case assignments with regard to morphology. These are unexplored areas in Russian L2.