

Chapter 9

Transfer (or lack thereof) and the accusative case in L2 Polish

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This paper discusses the role of transfer in the L2 acquisition of the Polish accusative case by speakers of closely related languages (as L1 or L2). Although Slavic languages have been somewhat neglected so far in terms of empirical SLA research, the majority of L2 Polish learners in present-day Poland are indeed speakers of Slavic languages, which makes this language family a privileged research ground for matters related to transfer. Following a review of the theoretical approaches deemed most relevant for the analysis (mainly Processability Theory and the Learner Variety Approach), the paper presents three empirical studies conducted by the author. The discussion will compare transfer-based accounts of the interlanguage structure to explanations relying on universal acquisition principles.

1 Introduction: Genesis and rationale of the study

My *hommage* to Daniel Véronique is a discussion on transfer in the acquisition of L2 Polish by speakers of other Slavic languages, either as L1 or L2. With the partial exception of Russian, Slavic languages have been somewhat neglected by SLA research so far. Nevertheless, they are now likely to receive greater attention thanks to the notable role of L2 Polish in two recent, large-scale historical events. The first is the massive influx of job-seekers that entered Poland from the neighbouring Slavic-speaking countries following the country's accession to the European Union in 2004, which in turn produced rapid economic growth over the subsequent two decades. The second event is the 2022 invasion of Ukraine. Along with other countries, Poland welcomed a great number of refugees, most of whom were speakers of East Slavic languages, i.e. Belarusian, Russian, and



Ukrainian. Even before the invasion, East Slavic Speakers (ESSs from now on) represented the vast majority of foreigners in Poland (Główny Urząd Statystyczny 2020a,b, 2021). Both job seekers and refugees are likely to remain in the country for at least some time, and will thus need to integrate into Polish society and acquire the local language. This situation offers SLA research the opportunity to study an acquisition process that concerns a great number of learners and is at the same time remarkably uniform and rather peculiar due to the proximity of the newcomers' L1s to the target language. Conversely, it is to be hoped that the insights of SLA research may facilitate the refugees' integration into the host country through more effective language teaching.

The paper is organised as follows. §2 presents an overview of research on transfer. In §3, four Polish grammatical structures are described in detail and compared to their East Slavic counterparts in order to provide the necessary background information. The available literature on the acquisition of Slavic L2s is then reviewed. §4 summarises three published studies conducted by the author on the acquisition of L2 Polish by learners with knowledge of Russian. After a description of the shared methodological points, the specificities of each study are presented along with the main results. The discussion in section 4 summarises, compares and comments on the findings of the three studies in light of general reflections on language transfer.

2 Theoretical foundations: From contrastive analysis to universal acquisition paths

In order to outline the theoretical background of the chapter, the present section will provide a general overview of the debate opposing transfer-based accounts of interlanguage structure to research on near-universal acquisition sequences. The focus is on Polish nominal morphology, with particular regard to the accusative case, a notoriously difficult structure to acquire across languages (Artoni 2020, Baten & Verbeke 2020, Magnani 2020, Saturno 2020b). For reasons of space, it will not be possible to discuss general theoretical models.¹

With no claim to exhaustiveness or chronological accuracy, the starting point of this discussion is the notion of *contrastive analysis*, traditionally attributed to Lado (1957), although its origin arguably dates back to earlier work (see Odlin 2016). In the behaviourist view (Skinner 1957), language acquisition is seen as the result of the transfer of L1 “habits” into the target language. Differences and

¹Interested readers are referred to Bardel (2019).

similarities between the L1 and the L2 are believed to respectively hamper and facilitate acquisition. Contrastive analysis aimed to identify potentially problematic points, based on the assumption that “those elements which are similar to [the learner’s] native language will be simple for him, and those elements that are different will be difficult” (Lado 1957: 2). However, it soon became clear that predicted errors did not always occur in empirical data, while at the same time other types occurred that were not predicted. Most importantly, the same errors were made by learners irrespective of their L1. The *morpheme studies* of the 1970s (see Dulay et al. 1982 for a synthesis) focussed on this last point. Investigating the acquisition of inflectional morphemes in L2 English, Dulay & Burt (1973: 256) concluded that there seemed to be “a common order of acquisition for certain structures” independently of the learner’s L1 (Figure 1).

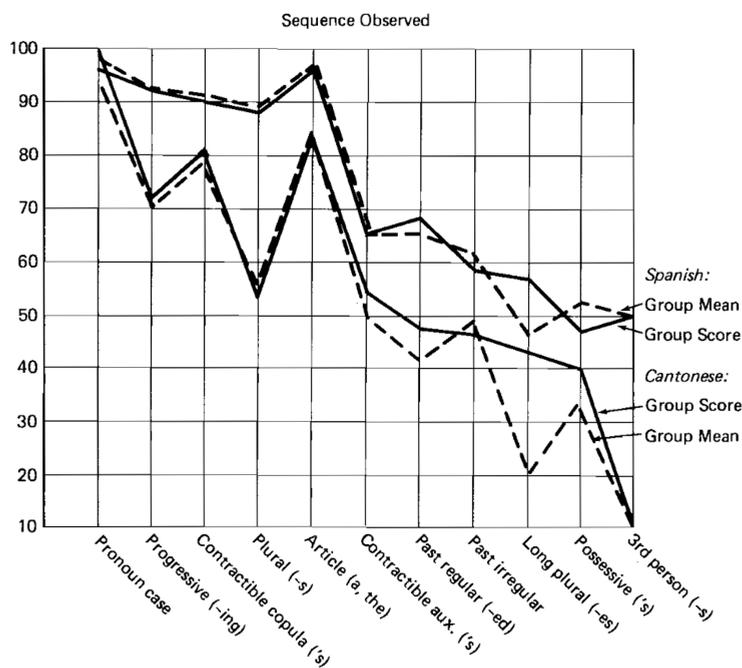


Figure 1: Acquisition sequences for Spanish- and Cantonese-speaking learners of L2 English (Dulay & Burt 1974, cited in Dulay et al. 1982: 206)

Over time, various attempts have been made to reconcile and integrate the positions insisting on the role of language transfer with those emphasizing the common features of the acquisition process. To exemplify, it has been shown that

in general, learners initially process content words before anything else (VanPatten 2004). Nonetheless, the L1 may lead them to rely more heavily on cues that are particularly important in their L1. In a set of studies on the acquisition of temporal reference, Ellis & Sagarra (2010a,b, 2011) and Sagarra & Ellis (2013) found that speakers of morphologically poor languages such as Chinese and English tended to rely more heavily on lexical cues than did speakers of morphologically more complex languages, such as Spanish, Russian, or Romanian.

Contrastive analysis is still a popular prism to analyse language errors, especially when the learners' L1 is closely related to the target language. Most research on the acquisition of L2 Polish by speakers of Slavic languages indeed adopts this perspective (cf. Saturno 2022a for a review), attributing most errors to the influence of the L1, whereas some may in fact have an alternative explanation involving universal acquisition tendencies.

A further debated topic in the approaches that admit a role for transfer is whether it can originate exclusively from the L1 or from other L2s as well. The latter position is supported by a growing body of research (see Bardel 2019 for a synthesis). In a study on the placement of negation in L3 Italian by learners with and without knowledge of other Romance languages, Bardel (2006) demonstrated that the highest performance was achieved by learners with knowledge of L2 Spanish, whose negation system is closest to that of Italian. Rothman & Cabrelli Amaro (2010) found evidence of transfer from the L2 in the acquisition of L3 Italian and L3 French null subjects by L1 English learners with knowledge of L2 Spanish. Some go so far as to claim that even within the same language family, L2 influence dominates over L1 influence (Bohnacker 2006, Bardel & Falk 2007).

The next section will narrow down this general discussion on transfer in L2 acquisition to the case of the Slavic language family.

3 Acquisition of Slavic languages

This section presents a selection of the available literature on the acquisition of Slavic languages by learners with and without knowledge of related languages. Before turning to the review, however, it seems worthwhile to first highlight the main similarities between the members of this language family that are directly relevant for the present discussion, in order to illustrate in what respects the acquisition process may be supposed to benefit from transfer.

3.1 Proximity among Slavic languages

Polish and East Slavic languages belong to the same Slavic branch of Indo-European languages, although to different subgroups, Polish being a West Slavic language. A substantial proportion of words and structures can be regarded as mutually intelligible even by speakers without linguistic expertise.

The proximity of Polish to East Slavic is illustrated in (2), where the Russian and Ukrainian translation of the Polish sentence in (1) are presented. Since the texts in (2) are perfectly parallel, the morphological glosses and the translations are presented only once.

(1) W lat-ach pięćdziesiąt-ych lata-li-śmy nad Europ-ą.²
 in year-LOC.PL fiftieth-LOC.PL.NONVIR fly-PST.VIR-1PL over Europe-INS.SG
 ‘In the 1950s we were flying over Europe.’³ (L1 Polish)

(2) V p’jatydesjat-ych god-ach my lete-li nad Evrop-oj.⁴
 U p’jatydesjat-ych rok-ach my lita-ly nad Jevrop-oju.⁵
 in fiftieth-LOC.PL.INANIM year-LOC.PL we:NOM fly-PST. 1PL over
 ‘In the 1950s we were flying over Europe.’⁶
 (L1 Russian and L1 Ukrainian, in this order)

Some words are identical in the three languages in terms of meaning, phonology and use. To exemplify, *nad* is pronounced /nad/, means ‘over’ and is followed by the instrumental case in all the languages considered. Further, intricate relations at times involve words that within a given text may not appear to be directly related, but may be intelligible in light of the whole L1 system. For speakers of Russian, the lexical morpheme in Ukrainian *rok-ach* ‘year-LOC.PL’ may not be recognizable or correctly interpretable. In contrast – despite the fact that it is not related to its direct Russian counterpart *god-ach* ‘year-LOC.PL’ – the Polish form *lat-ach* ‘year-LOC.PL’ will probably cause no particular difficulty thanks to the existence in Russian of the form *let* ‘year:GEN.PL’, an allomorph of the lexeme *god* ‘year’ comprised in the text. As demonstrated by *-ach* ‘LOC.PL’ in the preceding examples, an inflectional ending may well be recognizable even if the lexical morpheme is not. Finally, identifiable lexemes may be marked by opaque inflectional endings, like Pol. *-q* in *Europq* ‘Europe-INS.SG’ for speakers of East Slavic.

²<https://www.lot.com/pl/pl/odkrywaj/o-lot/historia-lotu>

³<https://www.lot.com/pl/en/explore/about-lot/lot-history>

⁴<https://www.lot.com/ru/ru/explore/about-lot/lot-history>

⁵<https://www.lot.com/ua/uk/explore/about-lot/lot-history>

⁶<https://www.lot.com/pl/en/explore/about-lot/lot-history>

In fact, grammatical meaning is often deducible from other clearly recognisable elements, like the preposition *nad* ‘over’.

3.2 Comparative descriptions of a few structures of interest

This section presents a comparative description of the accusative case in Polish (the target language of the studies presented in §4) and East Slavic languages (the learners’ L1), here illustrated using Russian.⁷ The target structure is of interest because of its slightly different realization in the languages considered. As will be shown in greater detail in §3.2, the Polish structure differs from its East Slavic counterpart either in the morph instantiating the accusative morpheme (-ę vs. -u in the ACC.SG) or in the Differential Object Marking pattern triggered by the noun semantics (ACC.PL = NOM.PL vs. ACC.PL = GEN.PL).

Before moving further, the choice of Russian as the representative of East Slavic languages requires clarification, since the most numerous group of L2 Polish learners in Poland is represented by citizens of Ukraine. First, Russian is a widely studied foreign language and functioned as the vehicular language of central Asia and Eastern Europe, where it is still widely represented in popular culture and the media. Since the studies presented in this paper were designed to address not only Ukrainian speakers, but also non-Slavic learners of L2 Russian, this language seemed the natural choice. Second, Ukrainians have a varied language repertoire. In the last official census, 67.5% of respondents declared themselves speakers of Ukrainian, 29.6% of Russian (State Statistics Committee of Ukraine 2001). In a more recent survey, Ukrainian and Russian were indicated as their mother tongue by respectively 63% and 35% of respondents (Kantar 2019), with significant variation by communicative context, respondent age and area of residence, which may suggest a situation of bilingualism, or even diglossia. As a general note, survey data should be handled with care, since some responses may in fact result from national self-identification rather than actual language use. Finally, there exists a continuum of Russian-Ukrainian and Russian-Belarusian mixed varieties, respectively known as *surżyk* (Bilaniuk 2004, Danylenko 2016, Del Gaudio 2018) and *trasjanka* (Woolhiser 2014, Hentschel 2017, Del Gaudio 2018).

3.2.1 Morphological expression of subject and object

With the exception of Bulgarian and Macedonian, Slavic languages share a rich system of nominal inflectional morphology, expressing the categories of gen-

⁷This section only presents the information that is deemed relevant for the present discussion. For more detailed information on the languages in question, see Comrie (2003).

der, number, and case. Although SVO is the predominant word order in Polish (Siewierska 1993, Dryer 2013), the rich morphological system of this language in principle makes it possible to freely manipulate word order for pragmatic purposes.

All the studies presented in section 3 are to some extent concerned with the opposition between the markers of the subject and object functions within the paradigm of feminine nouns ending in *-a*, e.g. *Anna* in (3).⁸ In Polish, the subject is expressed by the nominative case, instantiated by the ending *-a* (/a/); the object function is expressed either by the accusative case in *-ę* (/e/), if the verb is not negated, or by the genitive case in *-y* or *-i* (/i/, /i/),⁹ obligatory within the scope of negation (Przepiórkowski 2000).

- (3) a. Ann-a lubi ryb-ę.
 Anna-NOM likes fish-ACC.SG
 ‘Anna likes fish.’ (L1 Polish)
- b. Ann-a nie lubi ryb-y.
 Anna-NOM not likes fish-GEN.SG
 ‘Anna does not like fish.’ (L1 Polish)

The morphological marking of the direct object in Russian differs in a few details. First, the accusative singular of feminine nouns in *-a* ends in *-u*, rather than *-ę* (4a); second, the accusative case may be used within the scope of negation (4b), although the genitive is also possible (4c) depending on various factors, such as the semantics of the noun in question (Harves 2013). The morpheme encoding the genitive singular is phonologically identical in Russian and Polish.

- (4) a. Ann-a ljubit ryb-u.
 Anna-NOM likes fish-ACC.SG
 ‘Anna likes fish.’ (L1 Russian)
- b. Ann-a nie ljubit ryb-u.
 Anna-NOM not likes fish-ACC.SG
 ‘Anna does not like fish.’ (L1 Russian)
- c. Ann-a nie ljubit ryb-y.
 Anna-NOM not likes fish-GEN.SG
 ‘Anna does not like fish.’ (L1 Russian)

⁸Proper nouns inflect like common nouns in the Slavic languages considered in the paper.

⁹The choice of the allomorph depends on whether or not the final consonant of the stem is palatalised.

Table 1: Gender system, plural. Agreement patterns exemplified with Rus. *etot*, Pol. *ten* ‘this’

male, adult (virile)		+	–			
human		+		–		
animate		+			–	
NOM	Rus	<i>eti rybak-i</i>	<i>eti mam-y</i>	<i>eti ryb-y</i>	<i>eti znak-i</i>	<i>eti okn-a</i>
	Pol	<i>ci rybac-y</i>	<i>te mam-y</i>	<i>te ryb-y</i>	<i>te znak-i</i>	<i>te okn-a</i>
GEN	Rus	<i>etich</i>	<i>etich</i>	<i>etich ryb-∅</i>	<i>etich</i>	<i>etich</i>
		<i>rybak-ov</i>	<i>mam-∅</i>		<i>znak-ov</i>	<i>okon-∅</i>
	Pol	<i>tych rybak-ów</i>	<i>tych</i>	<i>tych ryb-∅</i>	<i>tych</i>	<i>tych</i>
			<i>mam-∅</i>		<i>znak-ów</i>	<i>okien-∅</i>
ACC	Rus	= GEN	= GEN	= GEN	= NOM	= NOM
	Pol	= GEN	= NOM	= NOM	= NOM	= NOM
	Eng	‘fisherman’	‘mum’	‘fish’	‘sign’	‘window’

3.3 Acquisition of Slavic L2s in the absence of positive transfer

This section summarises a selection of the existing research on the acquisition of Slavic languages by speakers *without* knowledge of related languages, so as to establish a baseline to interpret the data presented in §3.4.

Research within the so-called *learner variety approach* (Perdue 1993) concluded that in the *Basic Variety* – the earliest stages of acquisition – “lexical items typically occur in one invariant form” (Klein & Perdue 1997: 311), called the *basic word form*. Grammatical and pragmatic meaning is expressed through word order (6).¹³

- (6) [Ar'tisk-a poz'dravja tu'maʃk-a].
 artist-NOM.SG cheers interpreter-NOM.SG

‘The artist says hello to the interpreter.’

(L2 Polish, Saturno & Watorek 2020: 51)

In addition to word order, semantic criteria such as animacy contrasts may also contribute to meaning disambiguation (7).

¹³Throughout this chapter, the morphological glosses of L2 examples only indicate the target language form that most closely resembles the learner-produced form. They do *not* imply that the interlanguage and native varieties share the same categories and organisational principles (e.g. case).

- (7) [Dʒulj-a 'lubi her'bat-e 'kol-a i tʃoko'lad-a].
Giulia-NOM likes tea-ACC.SG coke-NOM.SG and chocolate-NOM.SG
'Giulia likes tea, coke and chocolate.' (L2 Polish, Saturno 2019a: 131)

Since the universality of the acquisition process derives from the general cognitive processes that shape it, within the learner variety approach the role of the L1 is typically seen as limited to details of otherwise largely shared tendencies, such as the headedness of compounds if the target language allows for both head-initial and head-final constructions (Broeder et al. 1993).

From an entirely different point of view, Processability Theory (PT: Piennemann 1998, Bettoni & Di Biase 2015) postulates that the “difficulty” of grammatical structures – and thus, their place in an acquisition sequence – is accounted for and predicted by their cognitive accessibility. Following a *lemma access* stage in which words are produced in a single, invariant word form, typically (but not necessarily) modelled on the nominative singular, a sort of mini-paradigm (Bittner et al. 2000) arises, opposing the basic word-form to a marked, “non-nominative” one (8).

- (8) a. Videla volk-e.
saw:FEM wolf-NON_NOM
'(She) saw a wolf.' (L2 Russian, Artoni & Magnani 2015: 188)
- b. Su videli krevet-a.
AUX:3PL seen:PL bed-NON_NOM
'(They) saw a bed.' (heritage Serbian, Di Biase et al. 2015: 209)

Object case marking first emerges in its canonical post-verbal position. In Object-Subject structures, the accusative marking sometimes overextends to nouns performing the subject function, like *balerina* in (9). At this stage, pre-verbal nouns in the object function still appear in their basic word form, like *vilka*.

- (9) Vilk-a prinës balerin-u.
fork-NOM.SG bring:PST.SG.M dancer-ACC.SG
'It is the dancer that brought the fork.'
(L2 Russian, Artoni & Magnani 2015: 190)

Only at more advanced developmental stages do learners acquire the ability to case-mark the object in syntactically marked structures like OS, which in turn makes it possible to manipulate word order for pragmatic purposes (10).

- (10) *Vilk-u prinesla balerin-a.*
 fork-ACC.SG bring:PST.SG.F dancer-NOM.SG

‘It is the dancer that brought the fork.’

(L2 Russian, Artoni & Magnani 2015: 189)

Within PT, the L1 plays only a marginal role: even if a target language structure is already familiar to the learner from other known languages, transfer will only occur once the learner has reached the corresponding developmental stages (see §3.4.2).

3.4 Acquisition of Slavic languages by speakers of related languages

This section describes various aspects of the acquisition of Slavic L2s by speakers with knowledge of related languages, in order to highlight the differences that transfer may introduce compared to a situation in which the learner has no such knowledge (§3.3). Unless otherwise specified, the examples concern L2 Polish.

3.4.1 Transfer in reception

In the domain of comprehension, Saturno (2019b) showed that L1 Italian university students of L2 Russian were often able to make appropriate grammatical inferences about Polish, a language they had no experience of. The following examples were elicited in a translation task. In Figure 2, the unfamiliar ending *-u* in *bagaż-u* ‘luggage-GEN.SG’ is correctly interpreted based on the transparent *-ego* ending in *podręczn-ego* ‘hand(ADJ)-GEN.SG’, with which it agrees.

jedną sztukę bagażu podręcznego, nie większą niż 55

Figure 2: Target-like analysis of a grammatical structure through inter-comprehension

While in Russian the ending *-u* is not typically associated with the genitive case,¹⁴ but rather with the dative or accusative (11), *-ego* is one of the allomorphs of the masculine and neuter genitive singular morpheme, e.g. Rus. *choroś-ego* ‘good-GEN.SG’.

¹⁴There is a handful of lexical items that may be marked by a “genitive” case in *-u*, but that form is more accurately described as partitive, e.g. *nemnogo sachar-u* ‘a little sugar-PART’.

- (11) a. DAT.SG of masculine and neuter nouns, e.g. *transport-u*
 ‘transport(M)-DAT.SG’ (L1 Russian)
 b. ACC.SG of feminine nouns in *-a*, e.g. *transportirovk-u*
 ‘transportation(F)-ACC.SG’ (L1 Russian)

In other cases, however, the assumption that the same morphosyntactic patterns apply in the unknown L2 and in the known languages may lead to erroneous inferences. In the expression in (12), the reader is confronted with a grammatical structure that partially diverges between Polish and Russian (see §3.2.1). The masculine noun *transportu* here appears in the GEN.SG because it functions as direct object within the scope of negation, while in Russian it would probably occur in the ACC.SG form (although the genitive is also possible, theoretically).

- (12) Nie możemy zagwarantować transport-u bagaż-u.
 NEG can:1PL guarantee:INF transport-GEN.SG luggage-GEN.SG
 ‘We cannot guarantee that the luggage will be transported.’ (L1 Polish)

For a reader with knowledge of Russian, the form *transportu* is likely to be unexpected for at least two reasons. First, an obviously transitive verb (*zagwarantować* ‘guarantee’) is followed by a form that seems different from the expected accusative case, which in Russian is expressed by a zero morph (*transport*, identical to NOM.SG). Second, as shown in (11), in Russian the ending *-u* is associated with two meanings that both seem inappropriate in the present context. Thus, in addition to the correct explanation, the reader may choose among three possible accounts: a) *zagwarantować* does not govern the accusative case, b) *transportu* is the accusative form of a feminine noun, or c) *transportu* is the accusative form of a masculine noun despite its odd-looking ending. In Figure 3, the student opted

Z powodu ograniczonego miejsca na pokładzie nie możemy
 LIMITATO POSTO Gen.Sing AEREO
 zagwarantować transportu bagażu podręcznego w kabinie. W
 GARANTIRE IL TRASPORTO ↳ ACCUSATIVO CABINA
 (infinito)

Figure 3: Erroneous analysis of a grammatical structure through inter-comprehension

The same is true of object marking within the scope of negation, which often appears in the accusative rather than in the expected genitive. Moreover, said accusative in turn may be expressed by its Polish form in *-ę* (14a), or its East Slavic counterpart in *-u* (14b).

- (14) a. Nie przegap *szans-ę.
not miss:IMP.2SG opportunity-ACC.SG (Polish form)
'Don't miss the opportunity.' (L2 Polish, Izdebska-Długosz 2021a: 325)
- b. Nie lubię *herbat-u.
not like:1SG tea-ACC.SG (East Slavic form)
'I don't like tea.' (L2 Polish, Izdebska-Długosz 2021a: 224)

Concerning DOM, entities belonging to different grammatical genders in Polish and East Slavic ('women' and 'birds' in the examples 15a and 15b) are often case-marked according to the East Slavic pattern in the interlanguage, i.e. with an accusative form syncretic with the GEN.PL, rather than the NOM.PL required by the target language (15). The same is true of agreeing parts of speech, like the adjective *wysportowan-y* 'sporty-ACC.PL.VIR' (required *wysportowan-e* 'sporty-ACC.PL.NONVIR').

- (15) a. Wojtek lubi *wysportowan-y *kobiet-∅.
Wojtek:NOM like:3SG sporty-ACC.PL=GEN.PL woman-ACC.PL=GEN.PL
'Wojtek likes sporty women.' (L2 Polish, Izdebska-Długosz 2021a: 188)
- b. Dzieci karmią *ptak-ów.
child:NOM.PL feed:PRES.3PL bird-ACC.PL=GEN.PL
'The children feed the birds.' (L2 Polish, Dąbrowska et al. 2010: 77)

Transfer effects in the L2 acquisition of Slavic languages have also been investigated within PT (§3.3). Indeed, a component of the theory, the Developmentally Moderated Transfer Hypothesis (DMTH: Håkansson et al. 2002, Pienemann et al. 2016), predicts that the presence of a target language feature in another language already known by the learner cannot alter the universal acquisition path. At most, positive transfer can accelerate the systematic and accurate production of the structure in question, but only once it has emerged in the interlanguage. Magnani & Artoni (2021) investigated the development of the accusative case marking among three groups of L2 Russian learners, characterised by typologically differentiated L1s, i.e. a) Italian, with no case-marking at all; b) non-Slavic languages marking case morphologically, but through different strategies than Russian; c) other Slavic languages, exploiting the same case-marking mechanisms

in which the subject appeared on the left or on the right-hand side of a symbol (a heart) representing the verb *like*. This produced SO and OS structures, respectively (17). Target sentences were preceded by a question whose purpose was to topicalise the initial noun, i.e. the object in OS targets and the subject in SO targets. Referents appeared as drawings, in order not to suggest the target word-form in any way. The interrogative pronouns *kto* ‘who:NOM’, *kogo* ‘who:ACC’ and *co* ‘what:NOM/ACC’ were represented by question marks. A target-like example is presented in (17). Participants were required to “read” (i.e., produce) both turns.

- (17) Q. Kto lubi rzek-ę?
 who:NOM likes river-ACC.SG?
 ‘Who likes the river?’
A. Rzek-ę lubi lew-∅.
 river-ACC.SG likes lion-NOM
 ‘It is the lion who likes the river’

Target words belonged to the paradigm of feminine nouns in *-a* and were easily recognisable Slavic cognates. Before the task, participants were given sufficient time to familiarise themselves with these words using a specially prepared visual glossary.

4.1.2 The Elicited Imitation task

In the Elicited Imitation task (EIT) used in study 2 and study 3, learners were asked to listen to a stimulus sentence, perform a distracting task to inhibit phonological memory, and then repeat the stimulus as accurately as possible. The rationale of this procedure is that the EIT does not require learners to merely repeat the stimulus sentence as a string of potentially meaningless sounds, but to decode and re-encode its meaning based on the interlanguage grammar. The EIT has been shown to correlate well with semi-spontaneous speech (Isbell & Son 2022, Kostromitina & Plonsky 2022, Wu et al. 2022) and is widely used to study L2 implicit competence without the risk that the structures of interest might not emerge in spontaneous learner output.

Target items were embedded in carrier sentences of varying length (18).

- (18) Najlepsz-e przyjaciółk-i pozna-ł-a-m na
 best-ACC.PL.NONVIR girlfriend-ACC.PL meet-PST-F-1SG at
 uniwersyteci-e.
 university-LOC.SG
 ‘I met my best (female) friends at university.’

Additionally, the stimuli employed in Study 2 form a simple story (19; target items are morphologically glossed).

- (19) a. Jan jest studentem, a dzisiaj akurat ma lekcję.
Jan is student and today just has classes-ACC.SG
'Jan is a student, and today he just happens to have classes.'
- b. Ale Jana lekcja nie interesuje. Obok jest dziewczyna.
But Jan lesson-NOM.SG not interests. Next is girl-NOM.SG
'But Jan is not interested in the lesson. Next to him is a girl.'
- c. Nie lubisz lekcji? Dziewczynę pyta student.
Not like lesson-GEN.SG? girl-ACC.SG asks student
'Don't you like the lesson? The student asks the girl.'

The EIT was administered individually in a quiet room using a laptop computer equipped with headphones. Target sentences were embedded in a timed PowerPoint presentation.

4.2 Study 1: Speakers of non-related languages with knowledge of a related L2 (Saturno 2020a)

The purpose of this study was to verify whether minimal Polish input coupled with appropriate metalinguistic explanations would be sufficient to allow L1 Italian university students of L2 Russian to case-mark L3 Polish nouns in the object function. In the absence of transfer, one would expect learners to go through a phase characterised by the overextension of a single, invariable word-form. Conversely, the rapid development of the target structure after minimal exposure should probably be attributed to the positive influx of a known related language.

4.2.1 Methodology

The Polish input was represented by a specially designed 20-hour course in Slavic linguistics, focusing on a comparative analysis of Russian and Polish grammar. In the data collection phase, participants performed the Animal Dinner task described in §4.1.1. The procedure was first carried out in L3 Polish and then repeated in L2 Russian, in order to establish a benchmark for the learners' processing skills in the language from which transfer might originate. Participants were asked to perform the test as quickly and spontaneously as possible.

4.2.2 Participants

Twenty-two L1 Italian university students of L2 Russian took part in the experiment. Thirteen of them were enrolled in the second or third year of their BA, while nine were at the MA level. None were familiar with any Slavic language other than Russian.

4.2.3 Results

The data contain numerous instances of overextension of a basic, uninflected word form onto the expected accusative/genitive forms, like *rzek-a* [ˈʒeka] ‘river-NOM.SG’ in (20), cf. *rzek-ę* [ˈʒeke] ‘river-ACC.SG’. This pattern is consistent with the acquisition path of Slavic languages by speakers of non-related languages.

- (20) [Lev ˈlubi ˈlubi *ʒek-a]
 lion:NOM.SG likes likes river-NOM.SG
 ‘The lion likes the river.’ (L2 Polish)

However, other errors seem to reflect the influence of L2 Russian. In (21), the forms *ryb-u* [ˈribu] ‘fish-ACC.SG’ and *turyst-ek* [tuˈrystek] ‘female_tourists:ACC.PL’ are not instances of the basic word form, but are not target-like either. The accusative case is expressed by the morph that encodes it not in Polish, but in Russian, cf. expected *ryb-ę* [ˈribe], *turystk-i* [tuˈrystki]. Though incorrect, these examples point to the learner’s ability to productively manipulate inflectional morphology.

- (21) a. [ˈnjedved-∅ ˈlubi *ˈrib-u]
 bear-NOM.SG likes fish-ACC.SG (Russian morpheme)
 ‘The bear likes fish.’ (L2 Polish)
- b. [*tuˈryst-ek ˈlubi ˈnjedved-∅]
 tourist-ACC.PL=GEN.PL likes bear-NOM.SG
 ‘It is the bear that likes the tourists.’ (L2 Polish)

Finally, superficially target-like responses are often encountered. In (22), *turystk-i* [tuˈrystki] ‘tourist-ACC.PL=NOM.PL’ conforms to the Polish pattern. If transfer from East Slavic applied, one would expect a form syncretic with the genitive, like *turyst-ek* [tuˈrystek] ‘tourist-ACC.PL=GEN.PL’ in (21b).

- (22) [tuˈrystk-i ˈlubi nidzˈvjedz-∅]
 female_tourist-ACC.PL=NOM.PL likes bear-NOM.SG
 ‘It is the bear that likes the tourists.’ (L2 Polish)

From a quantitative point of view, if both the target-like Polish forms and those modelled on Russian (like [rɪbu] and [tu'rystek] in example 21) are considered correct ("Pol+Rus" bars in Figure 4), accuracy scores can be very high. This is especially evident in the case of plural animate nouns (third and fourth pairs of bars, respectively), with respect to which the DOM patterns of Polish and Russian diverge the most.

Grouping together the two types of forms seems legitimate in light of the fact that both imply the production of an inflected word-form, as opposed to the nominative overextension typically observed in initial learner varieties.

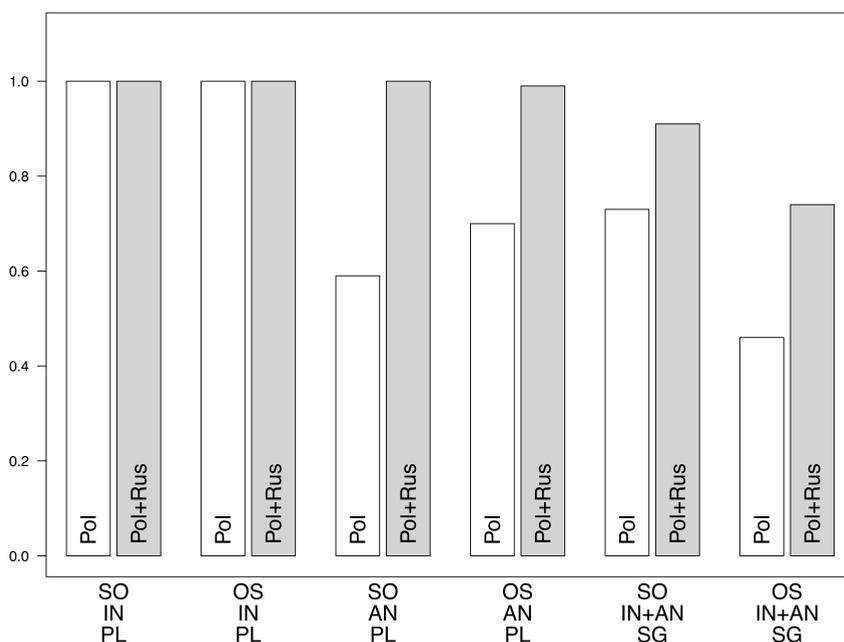


Figure 4: Accuracy by target structure (from Saturno 2020a: 10). Abbreviations: AN = animate nouns; IN = inanimate nouns; OS = Object-Subject word order; PL = plural; Pol = target-like Polish morphology; Pol+Rus = target-like Polish morphology and Russian morphemes; SG = singular; SO = Subject-Object word order.

4.3 Study 2: Speakers of a related L1 in an experimental setting (Saturno 2022b)

The VILLA NOVA¹⁵ project aimed to verify whether or not an exclusively communicative course could lead to the processing of inflectional morphology in the earliest stages of SLA.

4.3.1 Methodology

Participants were exposed to 4:30 hours of Polish communicative instruction (i.e. without any grammatical explanations) and took part in several communicative tasks aiming to elicit target structures in semi-spontaneous production. No written language or meta-language was used throughout the course: all referents and actions were illustrated by pictures. The EIT was administered at the end of the course.

4.3.2 Participants

Since the VILLA NOVA approach was designed to be applicable in a university context, the course was open to all participants eligible to enrol in first-year Polish classes. The only requirement was a lack of knowledge of Polish. The analysis of the enrolment forms makes it clear that only three students had knowledge of Russian as an L2 (self-assessed B1), while the rest were native speakers of it. In order to focus on the status of the potential source of transfer (L1 or L2), therefore, it was decided to compare the results of the three L1 German learners of L2 Russian with an equal number of randomly selected L1 Russian speakers. Considering only six participants is an obvious limitation for the quantitative analysis, but does not preclude the opportunity to make relevant qualitative observations.

4.3.3 Results

Errors most typically consist in the overextension of the nominative case in contexts expressing a syntactic function other than the subject, as in *Magd-a* ['magd-a] in (23).

- (23) [Jan-Ø za'praʃa 'magd-a]
 Jan-NOM.SG invites Magda-NOM.SG
 'Jan invites Magda.' (L2 Polish)

¹⁵Sincere thanks to Christine Dimroth, Roland Meyer and Dorota and Christian Hörrle for their invaluable contribution to the success of the experiment.

The required Polish morphemes are sometimes substituted with their Russian counterpart, appropriately selected in accordance with the syntactic context. In (24), for example, the required Polish accusative in *-ę* (*lekcj-ę* [lektsje] ‘lesson-ACC.SG’) is substituted with the Russian accusative form in *-u* (cfr. Russian *lekci-ju* [lʲektsʲju]).

- (24) [jan stu'dent i 'lektsj-u]
 Jan student:NOM.SG and classes-ACC.SG (Russian morpheme)
 ‘Jan is a student and today he has classes.’ (L2 Polish)

Overextensions of the basic word form occur in the output of all learners, independently of the status of Russian in their repertoire, while the overextension of *-u* was only observed among Russian native speakers.

From a quantitative point of view, errors do seem to be slightly more frequent in the case of the L2 Russian speakers due to the greater number of basic word-forms produced (Table 2). Nevertheless, the effect of the L1 did not prove statistically significant in a GLMM¹⁶ with Poisson error structure, although one should consider the paucity of the data (192 relevant responses).

Table 2: EIT output

L1	participant	errors	correct responses	omissions
Ger	P3	9	18	25
	P11	10	21	21
	P12	2	6	44
Rus	P1	1	3	48
	P10	6	16	30
	P13	3	25	24

4.4 Study 3: Speakers of a related L1 in an experimental setting (Saturno 2023)¹⁷

The primary objective of the study was to identify an acquisition order for a set of L2 Polish morphosyntactic structures. A crucial variable in this respect was the

¹⁶Generalised linear mixed model.

¹⁷The study was made possible thanks to the support of NAWA (*Narodowa Agencja Wymiany Akademickiej*).

participants' L1 (Slavic vs. non-Slavic). The secondary objective was to correlate the observed linguistic results with sociolinguistic information such as length of stay in Poland, frequency of use of Polish in everyday life, motivation to learn the language, etc.

4.4.1 Methodology

Participants were asked to fill in an online survey and then perform an EIT focussing on eleven morphosyntactic structures, identified as potentially problematic through a comparative analysis of Polish and Russian grammar. A group of L2 Polish teachers with experience in the teaching of East-Slavic Speakers was also consulted. Crucially, the set includes the two target structures considered so far.

4.4.2 Participants

The study considers the output of 161 participants enrolled in the L2 Polish courses offered by a Polish university. 131 of them were ESSs, while the remaining 30 had a non-Slavic L1 background and no knowledge of Slavic languages other than L2 Polish.¹⁸

Unlike the previous two studies, the data were collected in uncontrolled input conditions. Moreover, all participants had been taking L2 Polish classes for a period ranging from less than three months to over five years. The survey data indicate that while most non-ESS were still enrolled in A1 courses even after a long stay in Poland, most ESS were enrolled in B1 courses, which they tended to attain after a relatively short time (Table 3).

4.4.3 Results

The quantitative analysis shows that global accuracy scores are decidedly higher for ESSs compared to non-ESSs (Figure 5). Here and in the following graphs, shaded areas represent credibility intervals, while the red segment indicates the mean score, also reported in figures. Data points represent each participant's mean score. Note that because of the limited number of non-ESSs, the credibility interval for their mean is wider than in the case of the ESSs.

¹⁸These learners' L1s include the following: Amharic, Armenian, Azerbaijani, English, Estonian, Gujarati, Hindi, Italian, Kazakh, Kyrgyz, Latvian, Romanian, Shona, Spanish, Tajik, Turkish, Uzbek, Vietnamese. Some (e.g. Hindi, Romanian, Spanish) indeed exhibit DOM, but do so through patterns that cannot be compared to the Polish structure.

9 *Transfer (or lack thereof) and the accusative case in L2 Polish*

Table 3: Proportion of learners by L1, length of stay in Poland and proficiency level

L1	level	<3 months	<6 months	<1 year	<2 years	<5 years	other	total
non-ESS	A1	0.08	0.18	0.24	0.1	0.14	0.03	0.77
	A2	0.03	–	0.04	0.04	–	–	0.11
	B1	–	–	0.03	0.03	0.03	0.03	0.12
ESS	A1	0.01	0.01	0.02	–	0.02	0.02	0.08
	A2	0.04	0.08	0.09	0.02	–	–	0.23
	B1	0.03	0.13	0.24	0.17	0.06	0.06	0.69

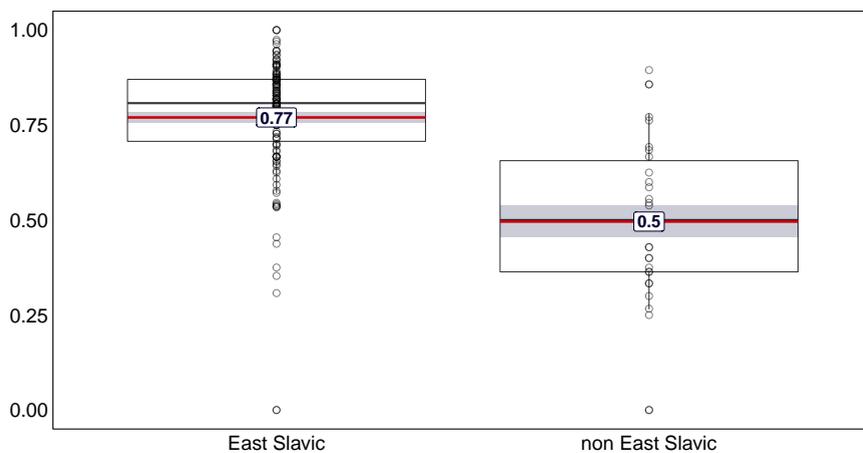


Figure 5: Mean scores by L1, all target structures

Turning to the goal of identifying an acquisition sequence, Figure 6 presents the mean scores obtained by ESS and non-ESS on the eleven target structures, ordered from top to bottom by decreasing accuracy within the East Slavic group.

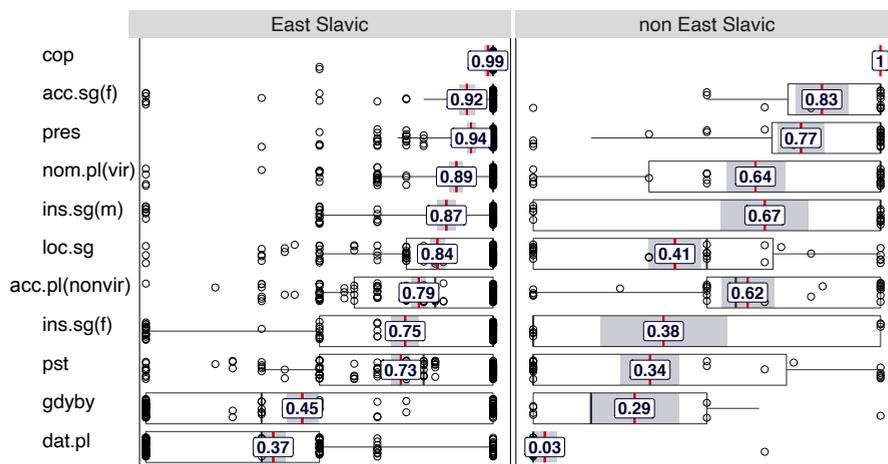


Figure 6: Mean scores by target structure and L1. Abbreviations: cop = copula verb in the present tense; acc.sg(f) = accusative singular of feminine nouns in *-a*; pres = present tense of a set of regular verbs; nom.pl(vir) = nominative plural of nouns belonging to the virile gender; ins.sg(m) = instrumental singular of masculine nouns; loc.sg = locative singular (in *-e*) of nouns; acc.pl(nonvir) = accusative plural of nouns belonging to the non-virile gender; ins.sg(f) = instrumental singular of feminine nouns; pst = past tense of verbs; gdyby = conditional mood; dat.pl = plural dative of nouns.

The acquisition order largely coincides in the two groups, with only minor exceptions. This observation lends empirical support to the view that the role of the L1 in L2 acquisition should not be overestimated. Nevertheless, ESS did achieve higher scores on all structures, a fact which does suggest a facilitating role for L1 proximity to the target language.

Regarding the accusative marking of non-virile nouns – “acc.pl(nonvir)” in Figure 6 – although the non-ESS’ mean score is lower than the ESS’, the difference (ESS = 0.79, non-ESS = 0.62) is not as great as in the case of many other structures. The accusative singular of feminine nouns – “acc.sg(f)” in Figure 6 – is the second easiest structure for both ESSs and non-ESSs.

DOM patterns consistent with the system of East Slavic but not Polish may be easily interpreted in terms of (negative) transfer, too. To start with, the learner-produced forms are obviously very close to the East Slavic model (ACC=GEN instead of ACC=NOM). Second, it is improbable that the instances of ACC=GEN may result from the overextension of a basic word form modelled on the genitive case, since the latter does not seem a likely model for the basic word form (although such a possibility cannot be excluded). Lastly, compared to the nominative case, the genitive case occurs in a more limited set of contexts and is less frequent in language use. In the plural of feminine and neuter nouns, moreover, it is expressed by a zero morph, which is an anomalous pattern both within the Polish system and typologically. Following the criteria proposed by Croft (1990: 72–91), it can thus be argued that the East Slavic pattern is more marked than its Polish counterpart, and consequently, that it could hardly overextend in the absence of L1 transfer.

The fact that both Slavic and non-Slavic learners of L2 Polish at times inflect nouns following the East Slavic model (in terms of inflectional endings or DOM patterns) is consistent with the suggestion that transfer may occur from a language other than the L1 (see §2). If one accepts that the learners had reached the appropriate developmental stage at the time of data collection, the Developmentally Moderated Transfer Hypothesis (§3.4.2) is not in contrast with these findings, either.

These observations suggest that what matters is not the L1 or L2 status of the language from which transfer originates, but the learner's familiarity with it. High competence is obviously implied if the language in question is a person's L1, but cannot be excluded in the case of advanced L2 learners, either. A promising goal for further research is the identification of objective criteria to determine at what stage a learner becomes sufficiently familiar with a language to trigger positive transfer from it.

5.1.2 Distribution by proficiency level

The language proficiency distribution of the participants in study 3 could be interpreted as the result of a cross-sectional investigation, in which the output of learners potentially characterised by varying proficiency levels is analysed synchronically in order to deduce an acquisition sequence. While Slavic learners quickly progress through proficiency levels, often reaching the B2 threshold within a few months from their arrival in Poland, non-Slavic learners often remain stuck at lower levels (A1–A2) for several years. It cannot be excluded that Ukrainian learners took L2 Polish classes in Ukraine, where this language is more

commonly taught than elsewhere; however, only a limited number of participants reported doing so. Thus, the rapidity of ESS' acquisition may be interpreted as additional evidence pointing to a facilitative effect of their L1. To this it could be added that given their numbers, Slavic learners are often grouped together in exclusively Slavic classes, in which an adequately trained teacher can exploit language teaching approaches and materials designed to maximise the potential of the learners' language repertoire. Indeed, L2 Polish language teaching resources specifically addressed at Slavic speakers have appeared over the last few years (Kołak et al. 2015, Izdebska-Długosz 2017, 2021b), although until recently teachers were reported to adopt general-purpose handbooks (Gębka-Wolak 2018).

5.2 Arguments against transfer

5.2.1 Universal sequences

Abstracting away from the obvious difference in mean scores – vastly superior in the case of ESSs – the acquisition sequences inferable from the distribution of accuracy scores in study 3 (Figure 6) are quite uniform regardless of the learners' L1. This conclusion is consistent with the findings of previous studies (§2). A direct comparison with the developmental sequence identified for similar languages (e.g. Artoni & Magnani 2015 on L2 Russian) is unfortunately impossible because of the different methodological choices made.

A closer investigation of the two structures (out of eleven) in which the ESS' and non-ESS' sequences diverge can be helpful to better illuminate the dynamics of transfer. The first is DOM, in which non-ESS' performance is inconsistently better than in the case of other structures. A possible explanation *not* involving transfer will be outlined in §5.2.2. The second structure concerns a set of consonant alternations occurring in the inflectional paradigm of numerous Polish nouns. The question is discussed in detail elsewhere (Saturno 2023); for the time being it will be sufficient to explain that such consonant alternations occur in East Slavic languages to a more limited extent than they do in Polish, so that it is questionable whether transfer may apply directly.

Particularly noteworthy is also that all the target structures in Study 3 were selected among those that in light of comparative grammar could be hypothesised to cause difficulties to ESSs due to *negative* transfer. Based on a strict evaluation of grammatical accuracy with respect to the target morphemes – that is, leaving aside fluency, vocabulary, etc. – one would thus expect ESSs to perform more poorly than their non-Slavic counterparts, who cannot suffer from negative transfer from other Slavic languages. Clearly, that was not the case. Two

hypotheses may be formulated to account for this observation. First, transfer may simply play no role in SLA. Alternatively, despite the impeding effect of discrepancies between the L1 and the target language, extensive proximity between the two systems may be beneficial in terms of overall L2 processing ease. ESSs might be able to devote fewer cognitive resources than non-ESSs to the processing of those aspects of Polish that are similar to their East Slavic counterparts (vocabulary, morphosyntactic elements, etc.). If said resources are readdressed to the processing of diverging aspects, these would probably be produced more accurately. This view is reminiscent of Skehan's (1998: 168) notion of *processing competence* and Van Moere's (2012: 325–326) *processing efficiency*, defined as “the speed and accuracy with which a learner orally processes familiar language”, which in turn tends to “near effortless processing of language”, or automaticity (DeKeyser 2001).

5.2.2 Overextensions, DOM, markedness, and morphological complexity

In study 3 the DOM of plural nouns was one of the two structures in which the acquisition sequences of ESS and non-ESS diverged. Two explanations may be proposed. First, the gap may be attributed to (negative) transfer affecting ESS, but not non-Slavic respondents. Alternatively, the anomalously higher scores of non-ESS may reflect a structurally non-target-like form, which however happens to coincide with the expected target. To exemplify on L2 French, learner-produced verbal (or verb-like: Klein & Perdue 1997: 312) forms ending in [e], instantiating the basic word form of these lexical items, are homophonous with a variety of target language forms, some of which may be acceptable in a given context, like *préparer* (infinitive), *j'ai préparé* (passé composé 1SG) and *préparais* (imperfect indicative 1SG and 2SG) for [prepare] in (25).

- (25) Je [prepare] le por [manʒe]
I prepare-? ART por (Spanish) eat-?
'I prepare/prepared something to eat.'

(L2 French, Benazzo & Watorek 2021: 146)

Turning back to the Polish data, in the early stages of acquisition the plural paradigm of a noun may oppose different values of number, but not case. The resulting “partially inflected” word form would probably be modelled on the nominative case due to its frequency and unmarkedness. Superficially target-like output like *studentki* may then be the result of either target-like inflection, representing the morphological expression of number and case (iii. in Table 4), or nominative overextension, with only number being morphologically marked (ii. in Table 4).

spontaneous speech, is not considered a valid source of data by several authors working within the theory (Pienemann 2015, Lantolf & Zhang 2015; discussion in Saturno 2019a). Others, however, have successfully used the task to identify developmental stages (Baten & Cornillie 2019). Altogether, it seems reasonable that because of the adopted methodology and the learners' background, metalinguistic knowledge may have played a role in study 1, in which the L2 Russian learners' performance was quite remarkable in light of the limited input received and the great typological distance between the target language and their mother tongue (Italian). In contrast, the involvement of metalinguistic knowledge seems less conspicuous in studies 2 and 3, although in both cases participants were university students with at least some recent language learning experience.

Further, in all three studies, the statistical sample is not particularly large. This is especially true of studies 1 and 2, in which the output of a class-sized group was analysed. Despite the much larger number of respondents (161), study 3 is not ideal for the purposes of statistical analysis either because of the disproportion between Slavic and non-Slavic learners.²⁰

Finally, one could hypothesise a role for input-related correlates of the learners' L1, such as opportunity to access native input, neighbourhood of residence, etc. (Flege 2009). However, since all participants in study 3 were university students enrolled at the same institution, they are probably characterised by a relatively uniform profile and input basis. In any case, the available data do not make it possible to further pursue this question, which remains open for further research.

6 Conclusion

The studies discussed in this chapter suggest that SLA is rich in universal trends to a large extent independent of the learner's L1. The same types of errors may be found in the output of Slavic and non-Slavic learners of L2 Polish. The most common pattern is the overextension of a basic, uninflected word-form to all accusative contexts, a tendency amply described in the literature on the acquisition of morphologically inflected languages. Further, Slavic and non-Slavic learners appear to share the same developmental path of Polish morphosyntax, again confirming a well-known acquisitional finding.

²⁰This limitation can be attributed to the relative unpopularity of Polish as a foreign language among non-Slavic (in particular, non-Ukrainian) students. This situation in turn is reflected by the modest number of students of Polish outside Poland (Miodunka et al. 2018), especially when compared to Russian, which is commonly taught at university and secondary school levels.

At the same time, a beneficial effect of L1/L2 proximity is hard to deny, at least in terms of acquisition rate and communicative success following limited exposure to the input. Accuracy scores as measured by an EIT were decidedly higher in the case of Slavic learners. Further, some accusative forms were produced along the lines of another known language, from which transfer can reasonably be hypothesised. Indeed, probably based on such evidence, it is a common opinion among L2 Polish teachers that L1/L2 proximity may actually be detrimental to acquisition due to negative transfer and the risk of fossilization, the latter paradoxically resulting from the partial mutual intelligibility of Polish and East Slavic languages. Errors involving gender and DOM in L2 Polish are perceived as “glaring” and “highly disqualifying the idiolect”²¹ (Kravčuk 2020: 148–149), but it seems that serious communicative disruptions can hardly occur because of them, if not perhaps in the domain of referent retrieval, given also the pro-drop character of Polish.²² Adapting Mauranen’s (2012: 144) statement on *English as a Lingua Franca*, one could describe the L2 produced by speakers of closely related languages as often “slightly wrong”, but also “approximately right”.

This text aimed to make a contribution to the long-standing debate on language transfer by analysing L2 Polish data in light of the learners’ previous knowledge of other Slavic languages, a family that has been somewhat neglected by SLA research so far. It is the author’s hope that these reflections will prove useful to those concerned with the learning and teaching of Polish, a language that in the last few years has found itself at the core of large-scale, sometimes dramatic migration phenomena.

Acknowledgements

It is a great pleasure for me to contribute to this volume in honour of Daniel Véronique. I am especially grateful to him for a few fruitful exchanges we had early on in my career. Over time they provided me with much food for thought for my subsequent work, including the studies discussed in this chapter.

²¹Orig. *błędy rażące i mocno dyskwalifikują idiolekt*.

²²Following Martinet (1967), Frajzyngier & Shay (2003: 174–176) argue that “efficiency of reference is indeed the main outcome of the presence of nominal classes” because of the “possibility to refer to a participant by means of an anaphora [including zero anaphora] instead of a full noun or a noun modified by one or more determiners”.

Abbreviations and definitions

ADJ	adjective
ANIM	animate
Blr	Belorussian
DAT	dative
DMTH	Developmentally Moderated Transfer Hypothesis
EIT	Elicited Imitation task
ESS	East Slavic speakers
GEN	genitive
Ger	German
IMP	imperative
INANIM	inanimate
INS	instrumental
L1	native language(s)
L2	any non-native language in a wide sense, independently of the acquisition order (thus L2, L3 etc. in a narrow sense), unless explicitly stated otherwise
LOC	locative
NOM	nominative
NONVIR	in Polish, non-virile gender (§3.2.2)
OBJ	object
OS	object-subject
PART	partitive
PL	plural
PST	past
Rus	Russian
SG	singular
SO	subject-object
SUBJ	subject
TL	target language
V	verb
Ukr	Ukrainian
V2	in Germanic languages, the placement of the finite verb in second position in declarative main clauses
VIR	in Polish, virile gender (§3.2.2)

References

- Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language & Linguistic Theory* 21(3). 435–483. DOI: 10.1023/A:1024109008573.
- Artoni, Daniele. 2020. *Case in Russian as a foreign language: Description, acquisition, teaching*. Zagreb: Filozofski Fakultet Press.
- Artoni, Daniele & Marco Magnani. 2015. Acquiring case marking in Russian as a second language: An exploratory study on subject and object. In Camilla Bettoni & Bruno Di Biase (eds.), *Grammatical development in second languages: Exploring the boundaries of processability theory*, 177–193. Amsterdam: EuroSLA.
- Bardel, Camilla. 2006. La connaissance d'une langue étrangère romane favorise-t-elle l'acquisition d'une autre langue romane? Influences translinguistiques dans la syntaxe d'une L3. *Acquisition et Interaction en Langue Étrangère* 24. 149–180.
- Bardel, Camilla. 2019. Syntactic transfer in L3 learning: What do models and results tell us about learning and teaching a third language? In M. Juncal Gutierrez-Mangado, María Martínez-Adrián & Francisco Gallardo-del-Puerto (eds.), *Cross-linguistic influence: from empirical evidence to classroom practice*, 101–120. Cham: Springer.
- Bardel, Camilla & Ylva Falk. 2007. The role of the second language in third language acquisition: The case of Germanic syntax. *Second Language Research* 23(4). 459–484. DOI: 10.1177/0267658307080557.
- Baten, Kristof & Frederik Cornillie. 2019. Elicited imitation as a window into developmental stages. *The European Second Language Association* 3(1). 23–34. DOI: 10.22599/jesla.56.
- Baten, Kristof & Saartje Verbeke. 2020. L'acquisition de systèmes casuels en L2: Des études à travers plusieurs théories et langues. *Language, Interaction and Acquisition* 11(1). 19–31. DOI: 10.1075/lia.00006.int.
- Benazzo, Sandra & Marzena Watorek. 2021. Transcription de corpus oraux d'apprenants débutants en français L2. In Giuliano Bernini, Ada Valentini, Jacopo Saturno & Lorenzo Spreafico (eds.), *Superare l'evanescenza del parlato: Un vademecum per il trattamento digitale di dati linguistici*, 127–166. Bergamo: Bergamo University Press. https://aisberg.unibg.it/retrieve/e40f7b8a-8719-afca-e053-6605fe0aeaf2/04_Benazzo.pdf.
- Bettoni, Camilla & Bruno Di Biase. 2011. Beyond canonical order: The acquisition of marked word orders in Italian as a second language. *EUROSLA Yearbook* 11. 244–272.

- Bettoni, Camilla & Bruno Di Biase (eds.). 2015. *Grammatical development in second languages: Exploring the boundaries of Processability Theory*. Amsterdam: The European Second Language Association.
- Bilaniuk, Laada. 2004. A typology of surzhyk: Mixed Ukrainian-Russian language. *International Journal of Bilingualism* 8(4). 409–425. DOI: 10.1177/13670069040080040101.
- Bittner, Dagmar, Wolfgang Dressler & Marianne Kilani-Schoch (eds.). 2000. *First verbs: On the way to mini-paradigms*. Berlin: ZAS.
- Bohnacker, Ute. 2006. When Swedes begin to learn German: From V2 to V2. *Second Language Research* 22(4). 443–486. DOI: 10.1191/0267658306sr275oa.
- Bossong, Georg. 1998. Le marquage différentiel de l'objet dans les langues d'Europe. In Jack Feuillet (ed.), *Eurotyp 2: Actance et valence dans les langues de l'Europe*, 193–258. Berlin: 10. DOI: 10.1515/9783110804485.193.
- Broeder, Peter, Guus Extra, Roeland van Hout & Kaarlo Voionmaa. 1993. Word formation processes in talking about entities. In Clive Perdue (ed.), *Adult language acquisition: Cross-linguistic perspectives*, vol. 2: Results, 41–72. Cambridge: Cambridge University Press.
- Brown, Dunstan. 1998. Defining 'subgender': Virile and devirilized nouns in Polish. *Lingua* 104(3–4). 187–233. DOI: 10.1016/S0024-3841(97)00028-4.
- Comrie, Bernard (ed.). 2003. *The Slavonic languages*. London: Routledge.
- Croft, William. 1990. *Typology and universals*. Cambridge: Cambridge University Press. DOI: 10.1017/CBO9780511840579.
- Dąbrowska, Anna, Urszula Dobesz & Małgorzata Pasięka. 2010. *Co warto wiedzieć: Poradnik metodyczny dla nauczycieli języka polskiego jako obcego na Wschodzie*. Warsaw: Ośrodek Rozwoju Edukacji.
- Danylenko, Andrii. 2016. Iazychie and surzhyk: Mixing languages and identities in the Ukrainian borderlands. In Tomasz Kamusella, Motoki Nomachi & Catherine Gibson (eds.), *The Palgrave handbook of Slavic languages, identities and borders*, 81–100. London: Palgrave Macmillan.
- DeKeyser, Robert. 2001. Automaticity and automatization. In Peter Robinson (ed.), *Cognition and second language instruction*, 125–151. Cambridge: Cambridge University Press.
- Del Gaudio, Salvatore. 2018. Between three languages, dialects and forms of mixed speech: Dialect and language contacts in Ukrainian-Belarusian transitional area. In Maria Chiara Ferro, Laura Salmon & Giorgio Ziffer (eds.), *Biblioteca di studi slavistici*, 1st edn., vol. 40, 79–93. Florence: Firenze University Press. DOI: 10.36253/978-88-6453-723-8.09.

- Di Biase, Bruno. 2007. *A processability approach to the acquisition of Italian as a second language: Theory and applications*. Canberra: Australian National University.
- Di Biase, Bruno, Camilla Bettoni & Lucija Medojević. 2015. The development of case: A study of Serbian in contact with Australian English. In Camilla Bettoni & Bruno Di Biase (eds.), *Grammatical development in second languages: Exploring the boundaries of Processability Theory*, 195–212. Amsterdam: The European Second Language Association.
- Di Biase, Bruno & Satomi Kawaguchi. 2002. Exploring the typological plausibility of Processability Theory: Language development in Italian second language and Japanese second language. *Second Language Research* 18(3). 274–302. DOI: 10.1191/0267658302sr204oa.
- Dryer, Matthew S. 2013. Order of subject, object and verb. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/81>.
- Dulay, Heidi & Marina Burt. 1973. Should we teach children syntax? *Language Learning* 23(2). 245–258. DOI: 10.1111/j.1467-1770.1973.tb00659.x.
- Dulay, Heidi & Marina Burt. 1974. Natural sequences in child second language acquisition. *Language Learning* 24(1). 37–53. DOI: 10.1111/j.1467-1770.1974.tb00234.x.
- Dulay, Heidi, Marina Burt & Stephen Krashen. 1982. *Language two*. New York: Oxford University Press.
- Ellis, Nick C. & Nuria Sagarra. 2010a. Learned attention effects in L2 temporal reference: The first hour and the next eight semesters. *Language Learning* 60. 85–108.
- Ellis, Nick C. & Nuria Sagarra. 2010b. The bounds of adult language acquisition. *Studies in Second Language Acquisition* 32(4). 553–580.
- Ellis, Nick C. & Nuria Sagarra. 2011. Learned attention in adult language acquisition: A replication and generalization study and meta-analysis. *Studies in Second Language Acquisition* 33(4). 589–624. DOI: 10.1017/S0272263111000325.
- Falk, Ylva, Christina Lindqvist & Camilla Bardel. 2015. The role of L1 explicit metalinguistic knowledge in L3 oral production at the initial state. *Bilingualism: Language and Cognition* 18(2). 227–235. DOI: 10.1017/S1366728913000552.
- Flege, James. 2009. Give input a chance! In Thorsten Piske & Martha Young-Scholten (eds.), *Input matters in SLA*, 175–190. Bristol: Multilingual Matters.
- Frajzyngier, Zygmunt & Erin Shay. 2003. *Explaining language structure through systems interaction*. Philadelphia, PA: John Benjamins.

- Gębka-Wolak, Małgorzata. 2018. Z jakich podręczników słowianie uczą się języka polskiego? Uwagi na podstawie badania ankietowego. In Alla Kravčuk & Vasil' Kmet' (eds.), *Polonistyka we Lwowie. 200 lat idei: Dzieje podręczników języka polskiego*, 72–78. Kyiv: INKOS.
- Główny Urząd Statystyczny. 2020a. *Populacja cudzoziemców w Polsce w czasie COVID-19*. <https://stat.gov.pl/statystyki-eksperymentalne/kapital-ludzki/populacja-cudzoziemcow-w-polsce-w-czasie-covid-19,12,1.html>.
- Główny Urząd Statystyczny. 2020b. *Sytuacja demograficzna Polski do roku 2019: Migracje zagraniczne ludności*. <https://stat.gov.pl/obszary-tematyczne/ludnosc/migracje-zagraniczne-ludnosc/sytuacja-demograficzna-polski-do-roku-2019-migracje-zagraniczne-ludnosc,16,1.html>.
- Główny Urząd Statystyczny. 2021. *Szkolnictwo wyższe w roku akademickim 2020/2021 (wyniki wstępne)*. <https://stat.gov.pl/obszary-tematyczne/edukacja/edukacja/szkolnictwo-wyzsze-w-roku-akademickim-20202021-wyniki-wstepne,8,7.html>.
- Górska, Agnieszka. 2015. Błędy studentów z Ukrainy: Zapobieganie i eliminacja w grupach o zróżnicowanych możliwościach (na podstawie doświadczeń Centrum Partnerstwa Wschodniego Uniwersytetu Opolskiego). *Acta Universitatis Lodzianensis: Kształcenie Polonistyczne Cudzoziemców* 22. 357–370. DOI: 10.18778/0860-6587.22.24.
- Håkansson, Gisela, Manfred Pienemann & Susan Sayehli. 2002. Transfer and typological proximity in the context of second language processing. *Second Language Research* 18(3). 250–273. DOI: 10.1191/0267658302sr2060a.
- Harves, Stephanie. 2013. The genitive of negation in Russian. *Language and Linguistics Compass* 7(12). 647–662. DOI: 10.1111/lnc3.12056.
- Hentschel, Gerd. 2017. Eleven questions and answers about Belarusian-Russian mixed speech ('Trasjanka'). *Russian Linguistics* 41(1). 17–42. DOI: 10.1007/s11185-016-9175-8.
- Isbell, Daniel R. & Young-A Son. 2022. Measurement properties of a standardized elicited imitation test: An integrative data analysis. *Studies in Second Language Acquisition* 44(3). 859–885. DOI: 10.1017/S0272263121000383.
- Izdebska-Długosz, Dominika. 2017. *Po polsku bez błędu: Zbiór ćwiczeń z gramatyki języka polskiego dla studentów ukraińskojęzycznych*. Rzeszów: Stowarzyszenie Społeczno-Ekonomiczne Absolwent Biały-ogród.pl.
- Izdebska-Długosz, Dominika. 2021a. *Błędy gramatyczne w polszczyźnie studentów ukraińskojęzycznych*. Kraków: Księgarnia Akademicka Publishing. DOI: 10.12797/9788381383462.
- Izdebska-Długosz, Dominika. 2021b. *Polski dla nas: Deklinacja i składnia kontrastywne dla Słowian wschodnich (A2–B2)*. Kraków: Progressja.

- Janda, Laura. 1999. Whence virility? The rise of a new gender distinction in the history of Slavic. In Margaret H. Mills (ed.), *Slavic gender linguistics*, 201–228. Amsterdam: John Benjamins.
- Kantar. 2019. *Doslidzhennja: Movna sytuatsija v Ukrajinii*. <https://tns-ua.com/news/doslidzhennya-movna-situatsiya-v-ukrayini>.
- Klein, Wolfgang & Clive Perdue. 1997. The Basic Variety (or: Couldn't natural languages be much simpler?) *Second Language Research* 13(4). 301–347. DOI: 10.1191/026765897666879396.
- Kołąk, Katarzyna, Małgorzata Malinowska, Anna Rabczuk, Dorota Zackiewicz, Piotr Kajak & Marta Zabłocka. 2015. *Raz, dwa, trzy i po polsku mówisz ty! Podręcznik do nauki języka polskiego dla dzieci na Ukrainie. t. 2 t. 2*. Warsaw: Wydawnictwo Uniwersytetu Warszawskiego.
- Kostromitina, Maria & Luke Plonsky. 2022. Elicited imitation tasks as a measure of L2 proficiency: A meta-analysis. *Studies in Second Language Acquisition* 44(3). 886–911. DOI: 10.1017/S0272263121000395.
- Kravčuk, Alla. 2020. Rodzaj gramatyczny w nauczaniu polszczyzny Ukraińców: Perspektywa z „wewnątrz” oraz z „zewnątrz” systemu języka polskiego. *Acta Universitatis Lodzianensis: Kształcenie Polonistyczne Cudzoziemców* 27. 133–154. DOI: 10.18778/0860-6587.27.07.
- Lado, Robert. 1957. *Linguistics across cultures: Applied linguistics for language teachers*. Ann Arbor: University of Michigan Press.
- Lantolf, James & Xian Zhang. 2015. Response to Pienemann's critique of Zhang and Lantolf. *Language Learning* 65(3). 752–760.
- Magnani, Marco. 2020. *Marked word orders in second languages: Learning syntax in L2 Russian and Italian*. Roma: Carocci.
- Magnani, Marco & Daniele Artoni. 2021. L'interferenza della prima lingua nell'apprendimento del caso in russo. *Linguistica e Filologia* 41. 87–110. DOI: 10.6092/LeF_41_p51.
- Martinet, André. 1967. Que faut-il entendre par « fonction des affixes de classe »? In Gabriel Manessy & Maurice Houis (eds.), 15–25. Paris: CNRS editions.
- Mauranen, Anna. 2012. *Exploring ELF: Academic English shaped by non-native speakers*. Cambridge: Cambridge University Press.
- Miodunka, Władysław, Jolanta Tambor, Aleksandra Achteлик, Romuald Cudak, Danuta Krzyżyk, Jan Mazur, Bernadeta Niesporek-Szamburska, Kazimierz Ożóg, Adam Pawłowski, Dorota Prasałowicz, Anna Seretny, Roman Szul, Agnieszka Tambor & Tadeusz Zgółka. 2018. *Nauczanie i promocja języka polskiego w świecie: Diagnoza, stan, perspektywy*. Katowice: Wydawnictwo Uniwersytetu Śląskiego.

- Odlin, Terence. 2016. Was there really ever a contrastive analysis hypothesis? In Rosa Alonso Alonso (ed.), *Multilingual matters*, 1–23. DOI: 10.21832/9781783094837-003.
- Ogden, C. K. & I. A. Richards. 1923. *The meaning of meaning: A study of the influence of language upon thought and of the science of symbolism*. New York: Harcourt, Brace & World.
- Pallotti, Gabriele. 2007. An operational definition of the emergence criterion. *Applied Linguistics* 28(3). 361–382.
- Paradis, Michel. 2009. *Declarative and procedural determinants of second languages* (Studies in Bilingualism 40). Amsterdam: John Benjamins. DOI: 10.1075/sibil.40.
- Perdue, Clive (ed.). 1993. *Adult language acquisition*. Cambridge: Cambridge University Press.
- Pienemann, Manfred. 1998. *Language processing and second language development: Processability Theory*. Amsterdam: John John Benjamins.
- Pienemann, Manfred. 2015. An outline of Processability Theory and its relationship to other approaches to SLA. *Language Learning* 65(1). 123–151. DOI: 10.1111/lang.12095.
- Pienemann, Manfred, Anke Lenzing & Jörg Kessler. 2016. Testing the developmentally moderated transfer hypothesis: The initial state and the role of the L2 in L3 acquisition. In Jörg Kessler, Anke Lenzing & Mathias Liebner (eds.), *Developing, modelling and assessing second languages*, 79–100. Amsterdam: John Benjamins.
- Przepiórkowski, Adam. 2000. Long distance genitive of negation in Polish. *Journal of Slavic Linguistics* 8(1/2). 119–158.
- Rothman, Jason & Jennifer Cabrelli Amaro. 2010. What variables condition syntactic transfer? A look at the L3 initial state. *Second Language Research* 26(2). 189–218.
- Rothstein, Robert. 2002. Polish. In Bernard Comrie & Greville G. Corbett (eds.), *The Slavonic languages*, 686–758. London; New York: Routledge.
- Sagarra, Nuria & Nick C. Ellis. 2013. From seeing adverbs to seeing verbal morphology. *Studies in Second Language Acquisition* 35(2). 261–290. DOI: 10.1017/S0272263112000885.
- Saturno, Jacopo. 2019a. Elicited imitation as a diagnostic tool of morphosyntactic processing. In Ragnar Arntzen, Gisela Håkansson, Arnstein Hjelde & Jörg-U. Kessler (eds.), *Teachability and learnability across languages*, 119–136. Amsterdam: John Benjamins.

- Saturno, Jacopo. 2019b. *Empirical bases for the intercomprehension-based teaching of additional Slavic languages*. Paper presented at the Multilingual and Multicultural Learning: Policies and Practices, Univerzita Karlova, Praha (CZ).
- Saturno, Jacopo. 2020a. Production of inflectional morphology in intercomprehension-based language teaching: The case of Slavic languages. *International Journal of Multilingualism* 19(3). 383–401. DOI: 10.1080/14790718.2020.1730379.
- Saturno, Jacopo. 2020b. *Utterance structure in initial l2 acquisition* (EuroSLA Studies 2). Berlin: Language Science Press. DOI: 10.5281/zenodo.3889998.
- Saturno, Jacopo. 2022a. East Slavic interference in L2 Polish: State of the art and future perspectives. *Applied Linguistics Papers* 4/2022(26). 84–97. DOI: 10.32612/uw.25449354.2022.4.pp.84-97.
- Saturno, Jacopo. 2022b. Effect of bridge language status in the intercomprehension-based learning of L2 Polish by speakers of Russian. In Zofia Chłopek & Przemysław Gębal (eds.), *Bi-/Multilingualism from various perspectives of applied linguistics*. Göttingen: V&R unipress.
- Saturno, Jacopo. 2023. L2 Polish developmental sequences in an intercomprehension context. *European Journal of Applied Linguistics*. DOI: 10.1515/eujal-2021-0027.
- Saturno, Jacopo & Marzena Watorek. 2020. The emergence of functional case marking in initial varieties of Polish L2. *LIA* 11(1). 32–67.
- Ščerba, Lev V. 1974. *Prepodavanja jazykov v srednej škole: Obščie voprosy metodiki*. 2nd edn. Moskva: Vysšaja škola. http://elib.gnpbu.ru/text/scherba_prepodovanie-inostrannyh-yazykov--shkole_1974/go,0;fs,1/?bookhl=%D0%B4%D1%83%D1%80%D0%B0.
- Siewierska, Anna. 1993. Syntactic weight vs information structure and word order variation in Polish. *Journal of Linguistics* 29(2). 233–265.
- Skehan, Peter. 1998. *A cognitive approach to language learning*. Oxford: Oxford University Press.
- Skinner, Burrhus. 1957. *Verbal behavior*. New York: Appleton-Century-Crofts.
- State Statistics Committee of Ukraine. 2001. *All-Ukrainian population census 2001*. <http://2001.ukrcensus.gov.ua/eng/results/general/>.
- Sussex, Roland & Paul Cubberley. 2006. *The Slavic languages*. Cambridge University Press. Cambridge.
- Uspenskij, Lev Vasil'evič. 1954. *Slovo o slovac*. Leningrad: Detgiz. https://viewer.rusneb.ru/ru/000207_000017_RU_RGDB_BIBL_0000352370?page=1&rotate=0&theme=white.
- Van Moere, Alistair. 2012. A psycholinguistic approach to oral language assessment. *Language Testing* 29(3). 325–344. DOI: 10.1177/0265532211424478.

- VanPatten, Bill. 2004. Input processing in SLA. In Bill VanPatten (ed.), *Processing instruction: Theory, research, and commentary*, 1–31. Mahwah: Erlbaum.
- Woolhiser, Curt. 2014. The Russian language in Belarus: Language use, speaker identities and metalinguistic discourse. In Larissa Ryazanova-Clarke (ed.), *The Russian language outside the nation*, 81–116. Edinburgh: Edinburgh University Press.
- Wu, Shu-Ling, Yee Pin Tio & Lourdes Ortega. 2022. Elicited imitation as a measure of L2 proficiency: New insights from a comparison of two L2 English parallel forms. *Studies in Second Language Acquisition* 44(1). 271–300. DOI: 10.1017/S0272263121000103.