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RESEARCH ARTICLE

Tense and aspect in the interlanguage of Slavic speakers learning Romance languages

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ABSTRACT

The study addresses the research gap of how being a speaker of a Slavic language influences the ability to convey tempo-aspectual meanings in Romance languages by examining personal and impersonal narratives delivered in written and spoken mode by learners of L3 Spanish and L3 Italian with L1 Slovak and L2 English. Narratives are analysed following the methods of interlanguage analysis proposed by Ellis and Barkhuizen [(2005). *Analysing learner language*. Oxford University Press] and Salaberry and Comajoan [(2013). *Research design and methodology in studies on L2 tense and aspect*. De Gruyter Mouton], such as coding for grounding, frequency analysis of tense forms and lexical aspectual classes, etc. Following the ideas presented by Bayley (2013, Data analysis: Quantitative approaches. In M. R. Salaberry & L. Comajoan (Eds.), *Research design and methodology in studies on L2 tense and aspect* (pp. 357–390). De Gruyter Mouton), binomial logistic regression models were built which showed that (a) the combination of discourse grounding and lexical aspect is of predictive power regarding the appropriateness of participants' choices of morphological marking; (b) the distributional characteristics of morphological marking on telic predicates differs from activities and statives. One of the main differences compared to the results of previous studies, conducted on speakers of Germanic languages, is that the data did not provide enough evidence for morphological marking being used to convey primarily temporal distinctions (see Salaberry, 1999, The development of past tense verbal morphology in classroom L2 Spanish. *Applied Linguistics*, 20 (2), 151–178. https://doi.org/10.1093/applin/20.2.151; Wiberg, E. (1996). Reference to past events in bilingual Italian-Swedish children of school age. *Linguistics*, 34(5), 1087–1114. https://doi.org/10.1515/ling.1996.34.5.1087]) and presented the marking of telic predicates in foreground with perfective morphology as consistent, disregarding the level of participants' performance.

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1. Introduction

The core idea of investigating how the tense-aspect system of a Romance language (Spanish or Italian) as L3 gets organised in the course of interlanguage development by speakers of a Slavic language (Slovak) with L2 English was motivated by the present state of affairs focusing predominantly on learners of English (e.g. Bardovi-Harlig, 1998; Roberts & Liszka, 2013, etc.) or learners of Romance languages with Germanic L1s (e.g. Eibensteiner, 2019; Rosi, 2009, Salaberry, 1999, etc.).

Much of the novelty lies in an attempt to describe how being a native speaker of a Slavic language such as Slovak with knowledge of L2 English may influence the ability to convey and interpret temporal and aspectual meanings in Italian and/or Spanish, learned as third languages. In fact, not only is the Slovak language underrepresented within the field of acquisition studies, but also its tense-aspect system is said to deviate from what is considered to be the prototype representative of a Slavic aspectual system, Russian, considerably, according to the East–West Theory of Slavic aspect (see Dickey, 2000, 2001; Fortuin & Kamphius, 2015). To gain a deeper understanding of how tempo-aspectual meanings are conveyed in L3 Italian and Spanish, we examine the use and distribution of morphological tense-aspect markers in two types of narratives (personal and impersonal) produced in two different modes of delivery (written and spoken), the way such distribution is related to lexical aspect and discourse grounding, and interpret the linguistic patterns found in the data considering participants' background languages.

2. Tense and aspect from a cross-linguistic perspective

Natural languages convey temporal and aspectual information by a variety of linguistic means of multiple types and levels. Although the conceptual primitives underpinning temporality form to a large extent a uniform system of meanings (Evans, 2003), there exist subtle differences in how we categorise, and understand the world from a time-related perspective (see Boroditsky et al., 2011; Evans, 2003, 2007, 2013; Fuhrman et al., 2011; Gentner et al., 2002). Necessarily, these become even more pronounced since, as Chomsky and Berwick (2011, p. 38) advocate, 'externalization can be solved in many different and independent ways' leading to the fact that '[t]he meanings grammaticized in language vary, as do the linguistic forms' (Smith, 1997, p. 14). The purpose of this section is to present the interaction of verbal tense and aspect markers with the lexical aspectual features of the predicates in Italian and Spanish, because these languages and linguistic devices constitute the focus of interlanguage analyses presented in the second part of the study. The tense-aspect systems of the languages under scrutiny will also be contrasted with Slovak and English, because these two languages, spoken by all of the participants, constitute possible sources of transfer or crosslinguistic support.

2.1. The perfective-imperfective opposition in Romance languages, Slovak and English

In Romance languages, aspectual oppositions are best observable in the past tense forms of the indicative, for instance by comparing the use and distribution of tenses such as

Passato Remoto (ita-PR), Passato Prossimo (ita-P) and *Imperfetto (ita-IMP)* in Italian, or *Pretérito Indefinido (esp I)* and. *Imperfecto (esp-IMP)* in Spanish. For instance, in example (1) the event of writing a letter is presented as perfective, i.e. temporally delimited and concluded. In example (2), on the contrary, the same event is presented imperfectively (see Bertinetto, 1986, pp. 75–78). The attention is directed to a single moment of this process, its right boundary is open and no overt information is given about its continuation after the focalised moment. In fact, if the sentence (2) was uttered by a speaker A in a conversation, it would create a sense of suspense and probably bring speaker B to ask a question about what happened next (see Bertinetto, 1986, p. 353). The same considerations can be made for Spanish, with *esp-I* in sentence (1) and *esp-IMP* in sentence (2). In this specific case, the perfective-imperfective opposition conveyed by verbal morphology in Romance languages can be directly translated into Slovak and English. In Slovak, the unmarked form of the verb *to write* is imperfective *(písať),* its perfective counterpart is formed by adding a prefix *(na + písať)* and conveys the meaning 'to write to end' (see Dziviaková, 2022, p. 228). In English, the perfective aspect is conveyed by the simple past, the imperfective meaning by the progressive periphrasis.

> (1) Quel mattino Luca ha scritto (ita-PR) una lettera.
>   Aquella mañana Lucas escribió (esp-I) una carta.
>   V to ráno, Lukáš napísal (sk-PERF) list.
>   That morning, Lucas wrote (e-SIMP) a letter.
> (2) Quel mattino Luca scriveva (ita-IMP) una lettera.
>   Aquella mañana Lucas escribía (esp-IMP) una carta.
>   V to ráno, Lukáš písal (sk-IMP) list.
>   That morning Lucas was writing (e-PROG) a letter.

However, in several cases, the aspectual meanings conveyed by the two Romance languages cannot be directly translated into Slovak or English and vice versa.

English makes a systematic distinction between perfective and progressive aspect, i.e. the counterpart of perfectivity is progressivity (Declerck et al., 2006; Klein & Li, 2009; Smith, 1997). However, progressivity is a subdomain of the broader category of imperfectivity and is only one of the several imperfective meanings conveyed by Romance languages. Other imperfective meanings, such as the continuous aspect, the habitual aspect and gnomic imperfectivity, are often conveyed by the simple past in English or by periphrases such as 'used to / would + Infinitive'. In fact, the simple past in English is an unmarked form, which can also convey imperfective meanings (see Declerck et al., 2006, p. 30; Dušková, 1999, p. 105), as observable in (3). In this context, the imperfective morphology in the Romance languages conveys the continuous aspect: in Bertinetto's terms (1986, pp. 162–172), the two events are located within a single temporal framework, their duration is undetermined, no reference is made to their conclusion and the readers' attention is not directed towards a single stage of the events. The same meaning is conveyed by imperfective verbs in Slovak.

> (3) [They decided to write a letter.] Jane dictated (e-SIMP) while Mary wrote (e-SIMP).
> [Hanno deciso di scrivere una lettera.] Gianna dettava (ita-IMP) mentre Maria scriveva (ita-IMP).
> [Han decidido escribir una carta.] Juana dictaba (esp-IMP) mientras María escribía (esp-IMP).
> [Rozhodli sa napísať list.] Jana diktovala (sk-IMP) kým Mária písala (sk-IMP).

In Slovak, aspect is defined as a lexico-grammatical category (see Jarošová & Sokolová, 2013; Veselý et al., 2020), because it is inherent to the lexical meaning of each predicate but is also influenced by the presence or absence of suffixes and prefixes and consequently by grammatical and derivational processes. Several predicates form aspectual pairs, where one predicate expresses the perfective aspect and the other the imperfective aspect. According to Sokolová (2009), a corpus analysis conducted on 13.126 verbs revealed that 44% of the verbs formed an aspectual pair, 3% were biaspectual (i.e. with context-dependent, either perfective or imperfective meanings), while 53% did not have an aspectual counterpart (25% were imperfective tantum and 28% were perfective tantum). In cases of verbs only having either a perfective or an imperfective meaning, a direct translation of the perfective-imperfective opposition present in Romance languages into Slovak is often impossible. For instance, attitude verbs such as *dôverovať (to trust), dúfať (to hope)* and existential verbs such as *byť (to be), žiť (to live)* in Slovak are typically imperfective and do not have a perfective counterpart (see Sokolová, 2009). In Romance languages, however, these verbs can be inflected both perfectively and imperfectively, as observable in examples (4) and (5). In example (4), the imperfective form conveys the continuous aspect, i.e. the situation is visualised as temporally unbounded, with undetermined duration. In a narrative text, (4) is expected to be part of a descriptive sequence. Example (5), on the contrary, visualises the situation as temporally delimited or, in Sokolová's (2009) words, as a photo placed on a specific point of the time axis. In a narrative text, it may appear in the coda, as a final comment or constatation. These aspectual differences cannot be directly transferred into Slovak, because the verb *byť ('to be')* is imperfective and does not have a perfective counterpart. The difference between the two sentences is also hard to convey in English due to the lack of linguistic devices specialised in the expression of the continuous aspect.

(4) Era (ita-IMP) una bella giornata.
Era (esp-IMP) un día precioso.
Bol to krásny deň.
It was a beautiful day.
(5) È stata (ita-PP) una bella giornata.
Fue (esp-I) un día precioso.
Bol to krásny deň.
It was a beautiful day.

To translate these sentences into English, the Simple past may be used in both (4) and (5) because, as pointed out above, as an unmarked verb form, the simple form can also convey imperfective meaning (which is supplied by the lexical aspectual category – state). In the Slovak translation, on the contrary, the imperfective verb *byť (to be)* is to be used in both contexts. In fact, according to synoptic theories of Slavic aspect, the imperfective is the unmarked member of the perfective-imperfective opposition in Slovak (Dickey, 2000, p. 17) and, due to its unmarkedness, it can also be used in contexts where a perfective form may be expected.

3. The development of tense and aspect marking in the interlanguage

In the past decades, considerable attention has been dedicated to the development of tense and aspect marking the interlanguage (IL). Starting from Andersen (1991), several

studies investigated the validity of the lexical aspect hypothesis (LAH), according to which the lexical aspectual value of the predicates drives the learners' choices of morphological aspect marking: semantically congruent combinations of lexical aspect and verbal morphology appear in the IL before semantically non-congruent combinations (see Andersen & Shirai, 1996).

Despite the wealth of studies that investigated the validity of the LAH for Romance languages (e.g. Comajoan, 2005, 2006; Giacalone, 1995, 2002; McManus, 2013; Salaberry, 1999, etc.) we still lack a complete picture about how the acquisition process unfolds. The main reasons for this are the following: the studies investigate different types of learners (e.g. instructed and non-instructed, with different linguistic backgrounds), focus on different Romance languages (i.e. Spanish, Catalan, French, Portuguese, Italian) and also show considerable methodological differences. However, there are some patterns that constantly emerge, independently from these differences. The most relevant for the present study are the followings: (1) the prominence of temporality in early stages of acquisition and (2) the influence of learners' L1(s) and L2(s).

3.1. The prominence of temporality

Several studies confirm the importance of lexical aspect as one of the driving forces of the development of tense-aspect marking in the IL, as predicted by the LAH. However, research also suggests that lexical aspect may not exert its effect in early stages of language acquisition. In fact, beginner learners of Romance languages tend to use verbal morphology to mark tense, but not aspect according to several studies on L2 Spanish (Salaberry, 1999, 2002), L2 French (McManus, 2013) and L2 Italian (Wiberg, 1996; Toth, 2020b). To explain this phenomenon, Salaberry (1999) formulated the *Default Past Tense Hypothesis*, according to which learners of Spanish in the initial stages of attainment use the *Pretérito Indefinido* to locate events on the time axis, but not to convey aspectual information. Wiberg (1996), who formulated the *Unmarked Tense Hypothesis,* observed that bilingual children acquiring Italian in Sweden used *Passato Prossimo* to mark the feature of pastness, while the distinction between the perfective and the imperfective aspect appeared to be a secondary opposition. The idea that tense marking may be acquired earlier than aspect marking is substantiated by studies showing that beginner learners are not entirely aware of the lexical aspectual characteristics of the target language predicates (Rastelli & Vernice, 2013) and that temporality may be mastered at an earlier stage than aspectuality in child language acquisition (Bertinetto et al., 2015).

3.2. The influence of learners' L1(s) and L2(s)

Most of the studies reviewed in section 3.2 investigated learners of Romance languages from an SLA perspective and focused on the influence of learners' L1 without taking into account the effect of other languages in their linguistic repertoires. Studies carried out from a third language perspective (e.g. Comajoan, 2005; Diaubalick et al., 2020; Eibensteiner, 2019, 2021; Salaberry, 2005, 2020; Vallerossa et al., 2021) showed that previously learned languages may affect the tense-aspect marking in Romance languages, especially two types of contexts: (1) prototypical contexts and (2) contexts that do not require form-

function remapping. Salaberry (2005) found that L1 English speakers of L3 Portuguese with an advanced knowledge of Spanish were able to transfer their understanding of tense and aspect to Portuguese in prototypically perfective contexts, i.e. where telic predicates were marked with perfective morphology. Eibensteiner (2019, 2021), who investigated L3 learners of Spanish with L1 German and L2 English, showed that aspectual knowledge in L2 English had a positive effect in contexts where morphologically similar verb forms had a similar function (i.e. English *simple past* and Spanish *Pretérito Indefinido* in perfective contexts; the progressive periphrases *to be + V-ing* in English and *estar + gerund* in Spanish in progressive contexts). The positive transfer was not observable in contexts which require form-function remapping, for instance, when progressive aspect is conveyed by *Imperfecto* and not by progressive periphrasis in Spanish. Based on these data, Eibensteiner (2021, pp. 298–307) proposed the *Extended Default Past Tense Hypothesis,* according to which the source of transfer of aspectual knowledge may be the L2 rather than the L1, in cases when aspect marking in the L2 and the L3 is more alike than aspect marking in the L1 and the L3. According to Vallerossa et al. (2021), however, positive transfer is not limited to the contexts identified by Eibensteiner (2021). In fact, in Vallerossa et al.'s study (2021), Swedish learners with high aspectual knowledge of L2 English (HAK) outperformed those with low aspectual knowledge (LAK) in accepting *Imperfetto* and rejecting *Passato prossimo* in both habitual and progressive contexts Thus, the advantage shown by HAK learners indicates that positive transfer from the L2 may also occur in contexts where one-to-one form-function mapping is not possible, provided that the learners are aware of the meanings conveyed by the linguistic devices under examination. In other words, the awareness of the notions of habituality and progressivity in L2 English enables the learners to correctly attach these meanings to the *Imperfetto* in L3 Italian. In accordance with Vallerossa et al.'s (2021) conclusions, Eibensteiner (2023) found evidence for positive transfer from L2 French to L3 Spanish in perfective contexts, regardless the structural dissimilarity between the linguistic means at the learners' disposal, i.e. *Passé Composé* in French and *Pretérito Indefindto* in Spanish.

These findings are consistent with the Linguistic Proximity Model (Westergaard, 2021) and the Scalpel Model (Slabakova, 2017), which claim that transfer is not a holistic phenomenon but affects various linguistic properties in a different way. It may occur from both the L1(s) and the L2(s), depending on the degree of similarity of the linguistic structures taken into consideration; on the proficiency in the L2(s); and on the extent to which learners are aware of the form-meaning connections in the languages they speak.

Finally, Vallerossa et al. (2021) found that in L3 learners of Italian, L2 knowledge of both English and another Romance language resulted in positive transfer in habitual contexts, but only English knowledge led to a positive transfer in progressive contexts. This finding was interpreted as evidence for the L2 Status Factor Hypothesis (Bardel & Falk, 2012), according to which the L2(s) are more likely to be activated as a source of transfer in the L3(s) because these language systems are supported by declarative knowledge, while the L1 is subsumed by the procedural system (see Paradis, 2009). However, the study of Vallerossa et al. (2021) was based on a sentence interpretation task, which may be more likely to trigger declarative knowledge than a language production task.

Previous studies focusing on production tasks in Italian (e.g. Rosi, 2009; Toth 2020a, 2020b) offer evidence for the DPTH (Salaberry, 1999), by showing that learners at early

stages of language acquisition tend to mark tense rather than aspect and that highly proficient learners use prototypical combinations more consistently than those with lower proficiency. However, these studies dedicate marginal attention to the effect of learners' L2(s). Vallerossa's (2021) study constitutes a remarkable exception in that it compares low- and high-proficiency learners of Italian, further divided into two groups: those with and those without knowledge of another Romance language. On one hand, the study confirms the general pattern observed in previous studies, such as the more pronounced tendency to use prototypical combinations by highly proficient learners. On the other hand, the study uncovers some elaborate differences related to the knowledge of another Romance language. Such knowledge seems to facilitate the learning of imperfective marking: learners who also speak another Romance language use *Imperfetto* more consistently regardless of their proficiency in Italian, while those highly proficient in Italian are also able to use non-prototypical combinations when required by the contexts.

4. The present study

The research findings reviewed in section 3 originate from studies conducted on learners with a Germanic L1. To our best knowledge, there is a lack of studies focusing on speakers of a Slavic language, especially a West-Slavic language such as Slovak. This appears to be a significant research gap, given that Slavic languages have a rich aspect system with many idiosyncrasies, as noted by Dahl (1985), and thus constitute a complex source of transfer of aspectual knowledge.

By analysing narrative texts, the study focuses on the ability to convey tempo-aspectual meanings in L3 Italian or Spanish by speakers with L1 Slovak, who have also been exposed to English during their entire school career. Since previous research showed that the type of narrative and the mode of language production may have a significant effect on the research outcome (Comajoan, 2005; Salaberry, 2003), it examines both personal and impersonal narratives in both written and spoken form. The main research questions are the following:

1. To what extent is the distribution of morphological tense-aspect marking influenced by semantic prototypes in the interlanguage of learners on different proficiency levels?
2. To what extent are the observed linguistic patterns affected by the type of narrative task?

4.1. Recruitment of participants

Participants ($N = 35$) were recruited among undergraduate students of Romance languages at a University located in Slovakia, by means of presentations of the planned study at different university courses, such as *Introduction into linguistics for students of Romance languages*, *Written production in Italian, Written production in Spanish* and *Plurilingual teaching methods*. Since the study plan is flexible and student-centred, all three courses hosted students who were at different stages of their undergraduate careers.

To comply with the highest standards of research ethics, the procedures of data collection followed the guidelines on Ethics in Social Science and Humanities, formulated by a

panel of experts at the request of the European Commission.[1] The participation was entirely voluntary and anonymous; withdrawal was possible at any stage without any consequences.

The participants were free to choose the language (Italian or Spanish)[2] in which they preferred to complete the tasks. However, they were instructed to use the same language throughout the tasks.

4.2. Methods of data collection

All the participants were invited to complete five tasks: four language production tasks and a metalinguistic reflection task on tense and aspect. The language production tasks consisted of two types of narratives (personal and impersonal) in two different modes of delivery (written and spoken) giving four combinations, namely: personal spoken (PS), personal written (PW), impersonal spoken (IS) and impersonal written (IW).

The prompt for the personal narrative was a request for participants to describe their school-leaving examination in both spoken (PS) and written (PW) mode of delivery. The prompt for the impersonal narrative was to tell a story based on the episode known as *The lion's cage* from the silent film *The Circus* (1928) starring Charlie Chaplin in both spoken (IS) and written (IW) format. In both cases participants were explicitly asked to tell a story based on the video and, when necessary, were given prompt questions, such as *What happened in this video? What did the characters do and how did they feel?* However, 15 texts showed a predominant use of the present tense and contained more descriptive than narrative elements. We acknowledge that the present tense is often used in narratives by both native speakers and non-native speakers of Romance languages (see Bonilla, 2011; Lo Duca & Solarino, 1992; Roggia, 2011, etc.). However, as observed by several studies (e.g. Bonilla, 2011; Silva Corvalán, 1983), the present tense neutralises the aspectual values expressed by past tense morphology and can be used in both perfective and imperfective contexts. In these cases, the aspectual interpretation is based on semantic and discourse cues. Since the focus of the present study was to examine the distribution of morphological tense and aspect marking in the interlanguage against the background of the hypotheses examined in 3.2, the texts written by using only the present tense were excluded from the analysis because they did not provide any information about participants' ability to mark tense and aspect morphologically. The texts in which the authors switched to the present tense in certain contexts (e.g. historical present, gnomic contexts, etc.) were maintained in the corpus.

Some of the participants whose data had to be excluded volunteered for an additional task, to retell an episode from Gaarder Jostein's novel Sofie's World[3] (IW2, IS2). For those who used past tenses in the episode retelling (*N* = 10), we kept the IW2/IS2 texts as a sample of impersonal narrative. For those who did not volunteer for this additional task or once again used the present tense throughout the entire narrative without any past tense marking (*N* = 5), the impersonal narrative was treated as missing data.

The metalinguistic reflection task (META) was inspired by Pinto's Metalinguistic Ability Test (see Pinto, 1995; Pinto et al., 1999) and consisted of nine pairs of sentences in Italian or Spanish, which only differed by the presence of perfective/imperfective morphology, as observable in (8). Students were asked to compare the two sentences and decide whether both sentences were correct, whether they conveyed the same meaning or some different

meanings, motivate their answer and explain how these meanings can be conveyed in another language of their choice. As suggested by Pinto et al. (2003), the administration of this task was preceded by an in-depth discussion of a sample pair of sentences, to give participants an insight into the different aspects of language they may refer to in their answers. The number of sentences to analyse was limited, because we aimed to obtain in-depth reflections on these sentences and avoid the participants getting overwhelmed. The collection of written data was carried out in small groups of 5 up to 10 participants. They were provided a secure *https* link to each of the three written tasks, which they completed in the order of their choice, within a 25 minute time constraint. The spoken language data were collected during a second meeting, approximately a week later.

4.3 The dataset

The adherence to the ethical guidelines mentioned in 4.1 ensured participants' welfare and safety, but also posed several challenges in data processing and analysis. For example, contrarily to our request, 5 participants used different ID numbers when they submitting individual tasks, which made it impossible to link the different measurements to the same participant, while others withdrew during different stages of the data collection.

Since we believe that all the tasks submitted by the participants constitute a valuable source of information about their interlanguage, we did not exclude partial data. The statistical procedures of data analysis were applied to the whole dataset and to subgroup of 10 participants with complete data, to check for any differences.

The complete dataset contained 95 narratives and 27 metalinguistic tasks, collected from 35 participants, from which 20 decided to focus on Spanish and 15 on Italian. The distribution of data across languages and text types is summarised in Table 1. Among the 10 participants who completed all the five tasks 8 decided to focus on Italian and 2 on Spanish, i.e. the subset with complete data was composed of 40 narratives (32 in Italian and 8 in Spanish) and 10 metalinguistic tasks (each composed of 9 items).

4.4 The languages of the participants

Nearly all the participants were L1 speakers of Slovak, except for one bilingual participant (Italian and Slovak) and one L1 speaker of Hungarian. According to their self-assessment[4], the participants had a good knowledge of English, mostly between B1 and C1. The participants who submitted the data in Italian ranked themselves at level A2 (*N* = 6), B1 (*N* = 6) or B2 (*N* = 3) in Italian; those who completed the task in Spanish rated their knowledge of Spanish as basic (A1-A2) (*N* = 3), intermediate B1 (*N* = 7), B2 (*N* = 10) or advanced (C1-C2) (*N* = 5). 19 participants were speakers of more than one Romance language, however, only 12 of them were using two Romance languages actively. All the students

Table 1. Distribution of all measurements across languages.

	PS		PW		IS		IW	
	ITA	ESP	ITA	ESP	ITA	ESP	ITA	ESP
N of measurements	15	6	14	20	8	5	11	16

PS (personal spoken), PW (personal written), IS (impersonal spoken), IW (impersonal written).

decided to complete the task in the language they were more proficient in, expect for one. In addition, all of the participants declared to have a receptive knowledge of the Czech language, which they use regularly (e.g. reading books or watching films in Czech).

5. Data analyses

The written narratives and the metalinguistic reflections were directly transferred to a CAQDA software, the spoken narratives were transcribed by using the VOICE mark-up conventions (VOICE Project, 2007) with some small adjustments to the specificities of Italian and Spanish.

First, the narratives were evaluated holistically, based on the assessment grids for spoken and written production presented in the *Companion volume* of the *Common European framework of reference for languages* (2020, pp. 183–189). The Common Reference Level assigned to each narrative (on a scale from A1 to C2) was transformed into a numerical value (ranging from 1 (= A1) to 6 (= C2)), giving rise to a nominal variable, namely CEFRGroup, with four levels (A2 (2, 2.5], A2+ (2.5, 3], B1 (3, 3.5], B1+ (3.5, 4]).

The second step in data analysis consisted in coding each clause with a finite verb form for grounding, verbal morphology and lexical aspect (see Toth (2020b, p. 111–139) for an in-depth discussion of the methodological choices). The main criterion for the definition of foreground was sequentiality, its most salient characteristics according to a wide range of studies (e.g. Bardovi-Harlig 2013; Dry 1983; Hopper 1979; Reinhart 1984, etc.). Thus, clauses coded as foreground matched the chronological order of the reported events, moved the story forward and answered the question *What happened?*. Clauses coded as background presented descriptions, events overlapping with the main story line or departures from the main story line. The coders acknowledged that foreground and background are discourse-pragmatic phenomena and they do not exist independently of their linguistic marking (see Comajoan, 2013, p. 331). Therefore, the participants' choice of morphological marking was also taken into account as an indicator of grounding. As recommended by Comajoan (2005, p. 55) 'in those cases when one sentence could be foreground or background, and morphology determined the interpretation of discourse grounding, the coding favoured the form produced by the learner'. Subsequently, each clause was coded for verbal morphology and lexical aspect. The classification of predicates into lexical aspectual classes followed a three-way approach assigning predicates to one of the following classes: telic predicates, activities and states (for a detailed discussion of the operational tests, based on Shirai (2013) and Bertinetto (1986), see Toth (2020b, pp. 134–136)).

Student's answers to the metalinguistic task were scored according to the criteria proposed by Pinto et al. (1999, p. 81). The analysis of each pair of sentences (hereafter item) was given a score raging from 0 to 2. The answers scored 0 did not provide any clarification of how tense and aspect marking influences the interpretation of a sentence or reflected a misconception about the use of tense and aspect marking. The answers scored 1 provided some degree of pertinent analysis, however, did not offer a complete explanation, while those scored 2 showed an in-depth understanding of the tempo-aspectual meanings conveyed by Romance verbal morphology.

Each metalinguistic item was scored by two evaluators, with an inter-coder agreement of 90%. The remaining items were discussed until agreement was reached. The sum-total

of subjects' metalinguistic scores for individual items gave rise to the predictor variable MetaScore (scale ranging from 0 to 18).

TextType, a predictor variable directly related to the second research question is based on the type of narrative (personal / impersonal) and the mode of delivery (spoken / written) (see 4.2) resulting in four combinations (personal-spoken > PS, personal-written > PW, impersonal-spoken > IS, impersonal-written > IW).

Since respondents delivered their language production in either Italian, or Spanish, the language of delivery was controlled for, although differences were not expected.

6. Results

6.1. Responses to the metalinguistic task

Participants' responses to the metalinguistic task are analysed in more detail in a separate study (Toth in progress). Here we only point out some results that are relevant to the interpretations of the linguistic patterns in their language production.

The metalinguistic reflections show a strong reliance on Slovak to interpret tempo-aspectual meanings in Romance languages. Even though all the learners have been exposed to English for approximately twelve years before entering university, and twelve students were learning more than one Romance language, they compared the sentence pairs in Romance languages to Slovak in 161 (93%) cases, to English in 8 (5%) cases and to another Romance language in 4 (2%) cases. Moreover, the sentence pairs which allowed for a direct translation of the perfective-imperfective meanings into Slovak elicited more accurate metalinguistic reflections and were translated in a very similar way by all respondents, whereas the material not allowing a direct translation often resulted in inaccurate explanations and variability in supplied translations. Example 5 demonstrates a typical explanation of a sentence pair where the aspectual distinction was directly translatable to Slovak:

> Example 5
> Sentence pair to be analysed:
> 5A Mia nonna diceva (ita-IMP) di stare alla larga da chi non ama gli animali.
> 5B Mia nonna ha detto (ita-PERF) di stare alla larga da chi non ama gli animali.
> The participant's comment:
> Obe sú správne.
> 5A situácia sa opakovala – Moja stará mama hovorievala (sk-IMP), aby sme sa držali ďalej od toho, kto nemá rád zvieratá.
> 5B situácia sa stala raz – Moja stará mama povedala (sk-PERF), aby sme sa držali ďalej od toho, kto nemá rád zvieratá.
> *Both sentences are correct*
> *5A the situation occurred repeatedly – My grandmother used to tell me to stay away from those who don't like animals*
> *5B the situation occurred once – My grandmother told me to stay away from those who don't like animals.*

Example 6 serves as a demonstration of respondents' difficulties with sentences where the perfective-imperfective distinction was not transferable into Slovak.

> Example 6
> Sentence pair to be analysed:

6A L'imperatore governava (ita-IMP) il suo popolo con saggezza.
6B L'imperatore governò (ita-PERF) il suo popolo con saggezza.
The participant's comment:
6A: Cisár vládol (sk-IMP) svojmu ľudu múdro.
6B: Cisár vládol (sk-IMP) svojmu ľudu múdro.
Podľa mna obe vety sú správne. Nevidím v nich rozdiel.
6A: The emperor ruled over his people wisely
6B: The emperor ruled over his people wisely
In my opinion both sentences are correct. I cannot see any difference between them.

In this case, the aspectual information conveyed by Romance tense-aspect morphology cannot be expressed by the perfective-imperfective distinction in Slovak, since the verb *vládnuť* [to rule] (as well as its synonyms) is an imperfective tantum in Slovak, i.e. it does not have a perfective counterpart. In fact, in Example 6 both sentences are translated by using the same verb form and the respondent concludes that he/she cannot not see any difference between them. Other respondents state that the perfective sentence refers to a shorter time span than the imperfective sentence or propose implausible translations.

To determine the relationship between respondents' metalinguistic awareness and their use of tense-aspect morphology, a logistic regression model with the predictor variable MetaScore (see section 5) was built for each combination of lexical aspectual class and level of discourse grounding. As the summary of the model shows (Table 2), respondents scoring higher in the metalinguistic awareness task were found to be more successful in delivering appropriate verb morphology in one combination only – states in background.

6.2. The effect of semantic prototypes on the use of morphological aspect marking

The results related to the first research question, i.e. to what extent is the use of morphological tense-aspect marking in the narratives influenced by semantic prototypes in the interlanguage of learners on different proficiency levels are presented in two steps: first we examine the overall distribution of perfective and imperfective marking in the Italian and Spanish texts; after which we show to what extent and how these patterns change across proficiency groups. A qualitative description of the data is followed by the presentation of statistical analyses.

Tables 3 and 4 show the distribution of morphological tense-aspect marking within the three lexical aspectual classes (telics, activities, states) and within the two levels of discourse grounding (foreground and background) in the Italian (ITA) and the Spanish (ESP) texts respectively. Within-category analysis (as defined by Bardovi-Harlig 2002) was preferred to cross-category analysis because its results are less biased by the imbalance of tokens across lexical-aspectual categories and levels of grounding,[5] observable when looking at the absolute number of tokens reported in column *n*.

The rows labelled FG-PERF and BG-IMP represent the cases when the use of verbal morphology was conformed to the expectations that arose from the narrative context (i.e. perfective morphology was used in the foreground and imperfective morphology was used in the background) and were classified as appropriate uses of tense-aspect marking by native speaker informants. The rows FG-IMP and BG-PERF represent cases

Table 2. Results of the regression analyses: the influence of metalinguistic awareness on the appropriateness of morphology by lexical aspect and grounding.

	Foreground			Background		
	Telic β (CI)	Activities β (CI)	States β (CI)	Telic β (CI)	Activities β (CI)	States β (CI)
MetaScore	−0.02 (−0.20, 0.16)	0.03 (−0.12, 0.18)	−0.05 (−0.16, 0.06)	0.35 (0.03, 0.83)	0.02 (−0.23, 0.28)	0.16*** (0.09, 0.23)

Note: CI: 95%-confidence intervals for regression coefficient β, *p < .05, **p < .01, ***p < .001.

where the participants' use of verbal morphology contradicted the expectations that arose from the narrative context (i.e. imperfective morphology was used in foreground contexts and perfective morphology in background contexts) and were classified as context-inappropriate by native speaker informants.[6] The appropriateness of tense and aspect marking was seen as an indicator of learners' awareness of the tempo-aspectual meaning conveyed by the past tense forms. In fact, as pointed by Comajoan (2006, p. 211), 'incorporating appropriateness of use […] comes close to incorporating a measure of the insider's advantage'.

Appropriateness of use was distinguished from accuracy of form: verb forms with minor morphological or orthographic deviations were counted as appropriate as long as they fit the contexts and the intended tense form was clearly identifiable.

The first observation that emerges from Tables 3 and 4 is that the patterns found in the Italian and the Spanish texts are highly similar. In both languages, telic predicates are the strongest in attracting their prototype: the vast majority appears in the foreground, their presence in the background is occasional (see column *n*). When used in the foreground, they are consistently marked with perfective morphology (98% in ITA and 97.6% in ESP). Their morphological marking in the background is less categorical: they are more likely to carry imperfective marking (76.9% in ITA and 63.2% in ESP), but can also be found with perfective marking (23.1% in ITA and 36.8% in ESP). However, any inference derived from the morphological marking of telic predicates in the background has to be treated with caution due to the low frequency of this combination and the fact that all inappropriate uses accumulated within the A2+ CEFR group.

Compared to telics, statives are less tied to their prototypical context (i.e. the background) and their prototypical morphological marking (i.e. imperfective). Even though the majority of statives occurs in the background, their presence in the foreground cannot be seen as occasional (see colum *n*). Moreover, the rate of appropriately assigned perfective marking in the foreground (80% in ITA and 85.9% in ESP) is comparable to the rate of appropriately assigned imperfective marking in the background (88.3% in ITA and 82.8% in ESP). The morphological marking of activities resembles that of statives.

Table 3. Distribution of perfective and imperfective morphology in the narratives by lexical aspect and grounding (ITA).

		Telics		Activities		States	
		n	%	n	%	n	%
ITA	FG-PERF	350	98.0	100	88.5	108	80.0
	FG-IMP	7	2.0	13	11.5	27	20.0
	BG-PERF	3	23.1	3	6.1	48	11.7
	BG-IMP	10	76.9	46	93.9	362	88.3

Table 4. Distribution of perfective and imperfective morphology in the narratives by lexical aspect and grounding (ESP).

		Telics		Activities		States	
		N	%	n	%	n	%
ESP	FG-PERF	319	97.6	77	82.8	140	85.9
	FG-IMP	8	2.4	16	17.2	23	14.1
	BG-PERF	7	36.8	4	7.0	57	17.2
	BG-IMP	12	63.2	53	93.0	274	82.8

The overall similarity of the linguistic patterns in the Italian and Spanish data has been confirmed by the results of regression analysis: the interaction of Language and Grounding showed that the language in which respondents delivered their narrative (ESP or ITA) played a significant role in one combination only, namely – stative predicates in background, where language production in Spanish resulted in a significantly lower probability of appropriate verb morphology ($p = .03$). Further, the finding was positive for the lower performing groups only (A2, $p < .01$; A2+, $p = .033$) (see Figure 1). Since the individual target language groups did not differ significantly in five out of six combinations and in the remaining one they followed an identical pattern with the values of inappropriate use being more pronounced in ESP data, the data for individual languages were merged.

Regarding respondents' performance in individual combinations of lexical aspect and grounding, visual inspection (Figure 2) is sufficient to notice that all classes of predicates were used appropriately beyond chance in both foreground and background contexts. However, the bottom left area of Table 5 shows a statistically significant difference between telic predicates in (for them prototypical) foreground contexts and activities and states in (for them prototypical) background contexts. The likelihood of appropriate tense-aspect morphology was significantly higher for telics in the foreground than for activities and states in the background; the difference between activities and states was not significant.
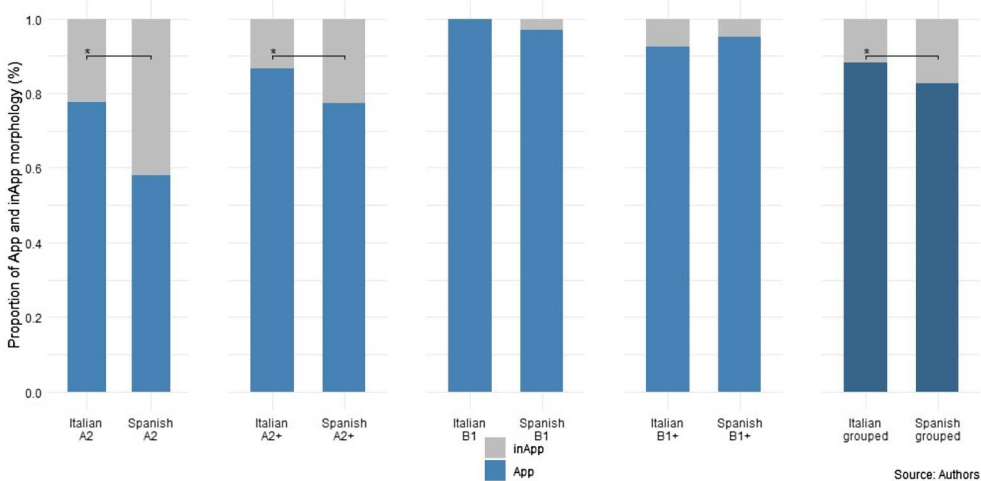
Figure 1. Proportions of Appropriate (i.e. imperfective) and inAppropriate (i.e. perfective) aspect marking on statives in the background by proficiency group and language of delivery
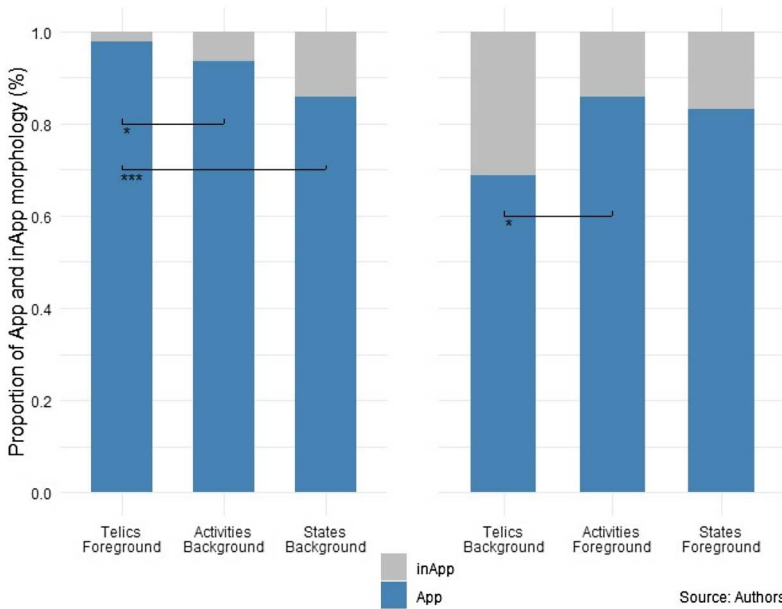
Figure 2. Proportion of Appropriate and inAppropriate tense-aspect marking by lexical aspect and grounding

Table 5. Results of the regression analyses for between-class and within-class comparisons.

| | | Foreground | | |
		Telics β (CI)	Activities β (CI)	States β (CI)
Background	Telics	−3.01* (−3.92, −2.10)	1.02* (0.02, 2.02)	0.81 (−0.14, 1.77)
	Activities	−1.15* (−2.24, −0.06)	0.84 (−0.02, 1.70)	−0.21 (−0.79, 0.38)
	States	−1.99*** (−2.65, −1.34)	−0.85 (−1.79, 0.09)	0.2 (−0.17, 0.57)

Note: CI: 95%-confidence intervals for regression coefficient β, *$p < .05$, **$p < .01$, ***$p < .001$.

The top right area of Table 5 shows a different tendency in non-prototypical contexts: telics in the background achieved a significantly lower rate of appropriately assigned tense-aspect marking than activity predicates in the foreground, while the difference between telic and stative predicates was not statistical. The difference between activities and statives was insignificant, too. Finally, the diagonal of Table 5 pinpoints the effect of grounding within the same lexical-aspectual class. As respondents used activity predicates and stative predicates with a statistically indistinctive rate of appropriateness, whether in foreground or background, the rate of appropriate verb morphology did not change as a function of prototypicality. On the other hand, it was a subject to a significant change with telic predicates.

To further investigate the influence of Lexical Aspectual Class and Grounding, the data were disaggregated according to performance level (CEFRGroup) (Figure 3).[7] Two patterns were observed – not-developing and developing. First, telic predicates in the

Figure 3. Proportion of Appropriate and inAppropriate morphological marking by lexical aspect, grounding and performance level (CEFR)

foreground and activities in the background are constantly assigned appropriate morphological marking across all CEFR groups. Similarly, although there is room for improvement, statives in the foreground as a non-prototypical combination do not show any significant development. Second, the two combinations that show visible developmental pattern are activities in the foreground, where the A2 group performed significantly worse from all other CEFRGroups, and stative predicates in background, where two performance levels were identified – A2 grouping with A2+; and B1 grouping with B1+ (for the statistical significance of these differences see Table 6).

The improvement of morphological marking on activities in the foreground can be illustrated by comparing two excerpts from the personal narratives: Excerpt 1, from a text classified in the A2 group, and Excerpt 2, from a text classified in the B1 group. The last sentence of Excerpt (1) contains an activity predicate (*festeggiare / to celebrate*) with imperfective marking, which suggests that the right boundary of the time span occupied by the event is open and its course is likely to be interrupted by another event (see Bertinetto, 1986, p. 353). In other words, the sentence creates the impression that a background event is described, which is about to be interrupted by an event located on the

Table 6. Results of the regression analysis: significant interactions of lexical aspectual class, grounding, and performance level (CEFR).

Aspect	Grounding	Proficiency	Std. Error	Sig.
Activity	Foreground	A2 vs. A2+	0.551	0.017
		A2 vs. B1	0.874	0.021
		A2 vs. B1+	0.67	0.016
	Background	-	-	-
States	Foreground	-	-	-
	Background	A2 vs. B1	1.034	0.004
		A2 vs. B1+	0.395	0.001
		A2 + vs. B1	1.014	0.016
		A2 + vs. B1+	0.338	0.002

main story line. Given that it is the concluding sentence of the narrative, we don't think that the student deliberately chose imperfective morphology to create an effect of suspense. It is more likely that his/her choice was prompted by the lexical aspectual characteristics of the predicate *to celebrate*, which refers to a process with no inherent endpoint. This interpretation is corroborated by the fact that the use of imperfective marking in this context was perceived as incorrect by native speaker informants.

> (Excerpt 1) Della parte orale ho avuto il tema di enciclopedie della grammatica ma della letteratura non mi ricordo molto bene. (…) Dopo l'esame di maturità **festeggiavamo** (ita-IMP) molto con i miei amici.
> *(…) For the oral part I had the encyclopaedias but I don't remember very well [the topic] of literature. (…) After the exam we celebrated a lot with my friends.*

By contrast, Excerpt 2 shows that in a text classified in the B1 group the perfective marking is used on the same predicate in a similar context.

> (Excerpt 2) Sono stata contenta con il mio esame e l'ho superato con il bel voto. Dopo ho incontrato i miei amici, **abbiamo festeggiato** (ita-PERF) i nostri esami e poi durante la sera è venuto anche il nostro professore ed **ha festeggiato** (ita-PERF) insieme con noi.
> *I was happy with my exam and passed it with the good grade. Afterwards, I met my friends, we celebrated our exams and then during the evening our professor also came and celebrated together with us.*

The improvement of the morphological marking on statives in the background can be illustrated by comparing two excerpts from the impersonal narratives: Excerpt 3 (A2 + group), and Excerpt 4 (B1 group). In Excerpt 3, there is an unexpected switch to perfective marking in the background with a stative predicate, while in Excerpt 4 imperfective marking is used in a similar context.[8]

> (Excerpt 3) Intentaba escapar mientras el león estaba durmiendo, pero en la otra jaula **fue** (esp-PERF) un tigre.
> (Excerpt 4) Quería salir pero la puerta se cerró. En otra puerta, que abrió, **estaba** (esp-IMP) un tigre.

6.3. The effect of text type and mode of delivery

Figure 4 shows the data described in section 6.2 disaggregated in four categories according to personal involvement in the narrative and mode of language production. This visual representation suggests that the principal differences are related to the personal involvement in the narrative (i.e. personal vs. impersonal) rather than to the mode of delivery (i.e. written vs. spoken). In fact, personal involvement in the narrative proved to be a statistically significant variable (Table 7). The proportion of appropriately delivered verb morphology in personal spoken narratives (PS) differed significantly from that in impersonal narratives, both spoken (IS) ($p < .05$) and written (IW) ($p < .01$). Although part of the variation undeniably stems from the mode of delivery, as PS and IW differ in both mode and involvement, it can be concluded that the prominent grouping factor is personal involvement. For this reason, the predictor TextType was substituted for by the term TaskType (Figure 3), which import ($p < .001$) is in line with the Text-Type-based observation. The models with different predictors – TextType and TaskType were tested, with the latter having significantly better predictive power (Chi-square =
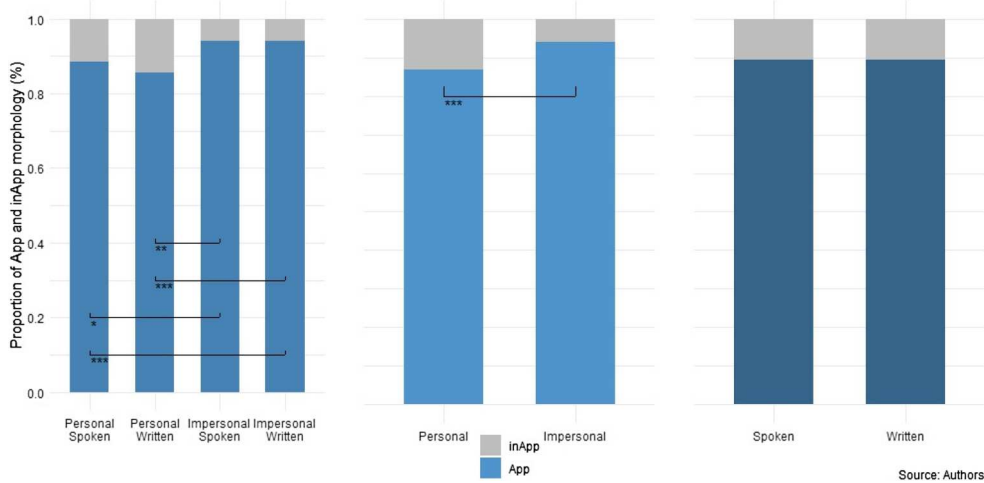
Figure 4. Proportion of Appropriate and inAppropriate morphological marking by the type of narrative and mode of delivery, the type of narrative (grouped), and the mode of delivery (grouped)

Table 7. Results of the regression analyses: the influence of the type of narrative on the appropriateness of morphology.

	IS − PS	IW − PS	PW − PS	IW − IS	PW − IS	PW − IW
	β (CI)	β (CI)	β (CI)	β (CI)	β (CI)	β (CI)
TextType	0.73*	0.75**	−0.26	0.02	−0.99*	−1.01***
	(−0.12, 1.57)	(0.19, 1.29)	(−0.67, 0.16)	(−0.89, 0.93)	(−1.83, −0.14)	(−1.55, −0.46)

Note: CI: 95%-confidence intervals for regression coefficient β, *p < .05, **p < .01, ***p < .001.

5.1, df = 1, p = 0.024). On the other hand, the term Mode, having arisen from grouping based on the mode of delivery, into S(poken) and W(ritten) was shown to be insignificant (p = .306).

To map the exact differences between personal and impersonal narrative, respondents' production was tested for individual lexical aspectual classes in both foreground and background separately. Out of six conditions (Table 8), only two significantly different cases were found. First, stative predicates in background contexts received significantly lower proportion of appropriate verb morphology in personal narratives than in impersonal ones (p < .01). Second, the same kind of difference, only more pronounced, was observed for telic predicates in the background (p < .05). The term TaskType was

Table 8. Results of the regression analyses: the influence of the type of narrative on the appropriateness of morphology by individual combinations of lexical aspect and grounding.

	Foreground			Background		
	Telic	Activities	States	Telic	Activities	States
	β (CI)	β (CI)	β (CI)	β (CI)	β (CI)	β (CI)
TaskType	0.13	0.66	0.11	0.97*	0.86	0.77**
	(0.90, 1.16)	(0.21, 1.53)	(1.00, 1.22)	(0.53, 1.22)	(0.83, 2.54)	(0.24, 1.31)

Note: CI: 95%-confidence intervals for regression coefficient β, *p < .05, **p < .01, ***p < .001.

not found to be moderating the influence of lexical aspectual classes already interacting with Grounding (activities: $p = 0.546$; statives: $p = 0.965$,) as it does not influence neither direction nor strength of the relations between the two.

7. Discussion

The present study aimed to answer two questions – first, to what extent is the use of morphological tense and aspect marking in interlanguage narratives influenced by semantic prototypes, and second, to what extent are the observed linguistic patterns affected by the type of the narrative task. These questions have been investigated in numerous studies focusing on speakers of Germanic languages learning Romance languages. The main novelty of the present study is its focus on such learners of Spanish and Italian that are highly underrepresented in previous research, namely native speakers of a West-Slavic language with L2 English. Although the data pertain to two different languages, from the global perspective, the distributional patterns observed in the Spanish data closely resemble those observed in the Italian data. This almost identical spread of morphological marking was disturbed only in the case of stative predicates in background, where language production in Spanish resulted in a significantly lower probability of using appropriate verb morphology. However, except for the lower rate of appropriateness in the Spanish data, the two target language groups followed an identical pattern. The data for individual languages were therefore merged and the discussion concerns both languages at once.

The observation that lexical aspectual class in the interaction with discourse grounding is a significant predictor of the appropriateness of morphological marking constitutes the principal link between our data and a wide range of previous studies on the LAH and DH (reviewed in section 3).

The most evident difference to the results of previous studies is that the data of L1 Slovak speakers do not show evidence for morphological marking being restricted to convey temporal meaning *in sensu* Salaberry (1999), where one *default* verb form is overextended at the expense of the other form or where the tendency towards a default form is present in more relative terms (e.g. Salaberry, 2003; Wiberg, 1996) but still visible. In our data, perfective marking was never *systematically* overextended[9] to imperfective contexts and vice versa; and the overall appropriateness of perfective and imperfective marking was high already in the A2 CEFR group (89% in the FG and 75% in the BG) compared to what has been observed in previous studies. For example, McManus (2015) showed that his respondents supplied PERF morphology in 64% (English L1) – 77% (German L1) of PERF contexts with the mean classroom exposure to French being almost eight years. The early sensitivity to the aspectual meanings of verbal morphology that emerged from our data may result from the learner's L1, given that Slovak presents a systematic distinction between perfective and imperfective aspects. This idea is supported by participants' strong reliance on Slovak in the metalinguistic task, which should be taken into account, even if the relationship between students' metalinguistic score and the appropriateness of morphological marking in their narratives was statistically significant only in one case – statives in the background.

The finding that all participants relied on their L1 (Slovak), independently of their overall level of performance, stands in contrast with the results presented by Vallerossa

(2022), showing that reliance on the L1 (Swedish) to interpret aspectual contrasts in L3 Italian is more consistent among learners who are highly proficient in their L3. This difference between the two findings resonates with the idea that the choice of a supporter language may be shaped by a range of variables in addition to the proficiency in the target language (see Jessner, 2008; Jessner et al., 2016). In our interpretation, participants in the present study perceived their L1 as a relevant model for understanding tempo-aspectual contrasts due to the presence of a systematic perfective-imperfective marking and the possibility of a direct translation of most aspectual contrasts conveyed by Romance languages.

Previous research provides some indirect support for this line of reasoning: Comajoan (2019) argues that translation is one of the most frequent strategies used by learners to explain their choice of tense-aspect marking, while Eibensteiner's (2021, 2022) Extended Default Past Tense Hypothesis suggests that L3 learners who are familiar with different aspectual systems thanks to their background languages use as primary source of transfer the system they perceive as more relevant for the L3. If we consider these insights in conjunction, we are led to believe that the high degree of reproducibility of Romance aspectual contrasts in Slovak induced learners to perceive their L1 as the most relevant model of aspectual meanings, independently of their proficiency in their L3.

However, as shown in sections 2.1 and 6.1, reference to Slovak is helpful in processing all but one aspectual contrast conveyed by Romance languages. For the interpretation of our data the most relevant difference between the two aspectual systems is represented by stative predicates, which only have an imperfective form in Slovak and do not allow for a direct translation of the aspectual meaning conveyed by statives marked perfectively in Romance languages. This difference may have a significant influence on the way statives are processed. Thus, leaving aside the general boosting effect that L1 Slovak seems to exert, we will now try to explain the patterns in the morphological marking of individual lexical aspectual classes. Our explanation is inspired by studies on transfer in learning tense and aspect marking. These studies focus on L2 influence and suggest that positive transfer from an L2 is more likely in prototypical contexts (see Diaubalick et al., 2020; Salaberry, 2005), in contexts allowing for a direct form-meaning mapping from the L2 to the L3 (Eibensteiner, 2022), or in contexts where two languages encode the same aspectual meaning, even if they require form-meaning remapping (Eibensteiner, 2023; Vallerossa et al., 2021). Even though in our data the influence of the L1 seems to be stronger than the influence of the L2, we can prudently use these ideas to interpret some of our findings by combining two considerations: the first is prototypicality, and the second is positive effect of Slovak contingent on the reproducibility of Romance tempo-aspectual meanings.

A conjunct effect of prototypicality and positive transfer from Slovak may explain the observation that telic predicates in the foreground are systematically marked with perfective morphology in all CEFR groups. On the other hand, the prototypicality of the telic-perfective-foreground association may have overruled the possible positive effect of Slovak in imperfective contexts. Even though the most frequently used telic predicates have aspectual correlates and imperfective is generally the unmarked form in Slovak, the number of telic predicates in the background was exiguous in all CEFR groups and generated some context-inappropriate use of perfective morphology. Also, this observation does not fully fit the predictions posed by LAH. While Andersen's telic events are told

to start bearing imperfective marking in the undocumented 5th stage and are documented for the 6th stage, states marked perfectively are documented for the 8th stage. With the threshold for acquisition set to use in obligatory contexts as high as 80% (as noticed by Andersen, 1991, although there are studies using the threshold of 90%, e.g. Brown, 1973; Cazden, 1968), our respondents seem to have mastered the morphological marking of statives in foreground (83.2%) to a higher extent than that of telics in background (68.8%), thus in a reversed order. The caveat of this interpretation is that all cases of telics marked with perfective morphology in background were produced only by learners in the A2+ CEFR group. It is thus unclear why these inappropriate uses did not emerge already in the production of the A2 CEFR group, or, considering the number of tokens, whether either the categorical (A2, B1 and B1+ CEFR) or flawed (A2 +) performance was not a case of a random fluctuation. Further research, which combines production data with more controlled tasks (such a cloze-texts), where the distribution of lexical aspectual classes in foreground and background is more balanced, is necessary to further investigate this surprising finding. Moreover, following Shirai's observation (1991) that achievement predicates are more prone to IMP marking than accomplishment predicates (due to them inviting an iterative meaning), a two-way categorisation of telic predicates might prove relevant.

Activity predicates are known to be an ambivalent category in the sense that their morphological marking is not categorically associated with either perfective or imperfective marking (see Rosi, 2009; Salaberry, 2005). What arose from the data is 'cleaved' behaviour – in terms of frequency, activities occurred in foreground contexts more often, but in terms of appropriateness their morphological marking in the background was more successful. In this case, being an L1 speaker of Slovak may have a facilitating effect given that the most frequently used activities in the present corpus belong to aspectually correlated pairs, where the imperfective is the unmarked form.

The participants' L2, English, may also have exerted a positive influence on the morphological marking of activities in the background, particularly in progressive contexts. As numerous studies observe, progressive marking is a core feature of the English tense-aspect system (Rocca 2007) and the existence of progressive periphrasis in English as well as in Italian and Spanish facilitates positive transfer, thanks to the similarity of both form and meaning (see Eibensteiner, 2021, 2022). In the present corpus, the progressive periphrasis was used almost exclusively with activity predicates (4 out of 5 cases in Italian, 14 out of 15 cases in Spanish), only occasionally with telic predicates (1 case in each language) and was never incorrectly overextend to statives.

Differently from the background, the appropriateness of the morphological marking on activities in the foreground showed a developmental pattern across CEFR groups: it was significantly lower in the A2 group compared to the more proficient ones. As observed by Andersen, the ability to mark activities perfectively may be considered 'the first break from a system whereby the inflection is strongly controlled by the inherent semantics of the verb (or predicate)' (1991, pp. 315–316), given that the temporal unboundedness conveyed by activities on the lexical level is in contrast with the temporal boundedness conveyed by perfective morphology. Thus, the A2 + group in the present corpus may represent learners who have completed an important step in the development of tempo-aspectual representations in their interlanguage.

Among prototypical contexts, the morphological marking of statives in the background proved to be the most challenging: this result echoes the findings of previous studies recognising statives a problematic category (e.g. Comajoan, 2006; Rosi, 2009; Salaberry, 2005; Soulé & Pérez-Vidal, 2021; Štrbáková, 2022, etc.) but is surprising in the light of participants' L1, where statives are always imperfective. Furthermore, the appropriateness of this combination showed a significant improvement in the intermediate CEFR groups (B1 and B1+) compared to the low CEFR groups (A2 and A2+) and the existence of a developmental pattern was corroborated by the observation that the likelihood of appropriately used imperfective marking on statives increased as a function of metalinguistic score.

The appropriateness of morphological marking on statives in the foreground turned out to be similar to the background but it did not change as a function of a CEFRGroup membership. Surprisingly, statives found their way to foreground contexts with perfective marking already in the production of respondents in the lowest CEFR group (A2), with a high rate of appropriateness (around 80%). A possible explanation for this observation might originate from instructed language learning, where the perfective morphology is presented earlier than the imperfective one (Gómez-Pablos, 2022; Lo Duca, 2006). Thus, learners might be under the influence of conflicting distributional biases – by a controlled input in a classroom environment and authentic language they have been encountering.[10]

Another interpretation worth considering is positive transfer from L2 English. The possibility of viewing states perfectively by means of the Simple Past may have counterbalanced the constrain that originates from the L1 Slovak and contribute to a better understanding of the meaning of perfective marking on this type of predicates. However, this line of reasoning is overshadowed by the observation that students nearly never refer to English in their metalinguistic explanations. It is conceivable that they were not able to verbalise their metalinguistic and crosslinguistic intuitions related to English or did not feel confident enough to explicitly state them. These suppositions merit careful consideration in subsequent research, given that reliance on L2 English in understanding perfective marking on statives would be in contrast with the results of previous studies (e.g. Salaberry, 2020; Vallerossa et al., 2021), which indicate that the use and interpretation of this combinations is more likely to be influenced by the L1. Subsequent research is also needed to explore why the appropriateness of perfective marking on statives did not show improvement within the higher CEFR groups.

The lack of a direct relationship between metalinguistic score and appropriateness of tense and aspect marking is in line with a general claim posed by the declarative/procedural model (Anderson & Lebiere, 2012; Johnson, 1996; Paradis, 2009; Ullman, 2016). Specifically, highly complex operations such as a real-time language production have been shown to require procedural pathways to run, while declarative pathways, constrained by working memory capacity, are unable to substantiate it. The dominance of procedural skills in language production may explain the finding that there were no significant differences in morphological tense and aspect marking in written versus spoken narratives. Although the order of the tasks was not counterbalanced, we do not believe that written tasks had a significant influence on the spoken ones because the collection of written and spoken data was at least a week apart. Furthermore, based on the analysis of randomly selected paired written and spoken transcripts, the overlap of inappropriate

uses of morphological tense aspect marking observed in written and spoken narratives was not systematic.

Where the type of task was of influence was the bifurcation between impersonal and personal narrative. The lower appropriateness of morphological marking in personal narratives may be linked to the fact that these narratives were characteristic of higher complexity and exhaustiveness of the topic and contained more contexts of non-prototypical tense and aspect marking, resulting in increased opportunity for inappropriate tense and aspect marking. Hence, a methodological origin of this observation cannot be excluded. However, the reason why the observed pattern was of statistical significance in only one prototypical (statives in background) and one non-prototypical (telics in background) combination is unclear and requires further investigation.

8. Limitations and implications for further research

This study presents several limitations to be considered. First, the data collection procedure was designed in compliance with the strict ethical guidelines mentioned in section 4, which was essential to safeguard participants, but also resulted in limited control over dropouts and submission of partial data.

Second, it was our priority to focus on production data and this decision turned out to have caused a bit of collateral damage. Although we opted for maintaining respondents' full anonymity, facing a researcher during recording sessions was unavoidable. Several students withdrew at this stage due to fear of becoming stigmatised for their level of performance, feeling ashamed, embarrassed, etc. The fact that only those participants volunteered for the spoken production tasks who felt comfortable enough to speak in front of a researcher while being recorded may have contributed to the observation that the mode of language production was not recognised as a significant predictor.

Further, the necessity of multiple measurements placed a considerable burden on the respondents, and there arose cases when they did not supply us with all the data, or they withdrew from further participation altogether. All these issues combined resulted in us working with an incomplete dataset, which counts as a methodological caveat. We tried to justify the procedures by building a regression model (glm(Response_app ~ TaskType)) on the dataset of the small, 'saturated' sample of 10 respondents (we, as if, trained the model on this small dataset). Then, we ran the model on the whole dataset (we, as if, tested the model). For both computations – 'train' and 'test', AUROC values were calculated (0.61 and 0.59, respectively). Since the model performed almost identically, whether working with fully paired (all four types of narrative for each of 10 respondents) or only partially paired data (some type of narrative or the mode of delivery was missing for certain amount of participants), we believe the findings are not invalid. These difficulties, however, need to be addressed when designing further research.

In spite of these limitations, we believe that the study constitutes a valuable insight into how being an L1 speaker of a West-Slavic language may influence the acquisition of tense-aspect marking in Romance languages and opens up numerous questions for further research. For instance, research with parallel learner groups may investigate to what extent the differences between learners with a Germanic and a Slavic L1 sketched out in the present study hold true if other variables, such as general proficiency in L2 English and level of metalinguistic knowledge about tense-aspect marking in the L1,

the L2 and the L3 are controlled for. The combination of production data with more controlled tasks (such as cloze-texts and semantic interpretation tasks) may contribute to a better understanding of some linguistic patterns that cannot be fully explained on the basis of the present data, such as the morphological marking of telic predicates in the background or the lack of development in the morphological marking on statives in the foreground.

Notes

1. The document is retrievable here: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-in-social-science-and-humanities_he_en.pdf
2. We were unable to recruit students willing to complete the tasks in French due to circumstances beyond our control. During the period when data collection took place, the study programs in French were temporarily closed at the department in question, because of the ongoing reforms in the higher education system of Slovakia.
3. A short excerpt from this novel was analysed by the students during a lesson, where they read it in four different languages (Italian, Spanish, English and German) and discussed about the differences and similarities in the translations. Since the data collection took place approximately two weeks after this lesson, we assumed that students still remembered the story, but were not much influenced by the grammatical patterns in the texts.
4. Participants completed their self-assessment by using the CEFR self-assessment Grids, which they were already familiar with because training on self-assessment was part of a compulsory course they all attended.
5. For a more detailed discussion of the advantages of this technique see Bardovi-Harlig (2002) as well as Toth (2020b, 133–134).
6. An anonymous reviewer noted that perfective morphology may occur in the background, for instance in a context such as 'L'estate scorsa siamo andati prima in Francia e poi abbiamo preso la macchina e ci siamo spostati in Italia (FG). C'è stato un temporale improvviso mentre andavamo in Italia (BG)[…]' In our opinion, it is not possible to classify the clause 'c'è stato un temporale' as foreground or background without a broader context. If the text continued with an information such as '[…] Per ripararci dal temporale abbiamo fatto una sosta in un albergo vicino a Torino e abbiamo deciso di visitare la città prima di ripartire'. the clause 'c'è stato un temporale' would be part of the foreground because it reports an information that moves the story forward. We acknowledge that coding for grounding involves the risk of circularity because, as Vet (1991, 71) notes, in some cases the main clue for deciding whether a clause is part of the foreground or the background is the use of verbal morphology. However, Comajoan (2013) gives a convincing argument in answer to this criticism, by stating that 'F [foreground] and B [background] are discourse-pragmatic phenomena, not real-world phenomena, and they do not exist independently of their marking in language (including their morphosyntactic marking)' (Comajoan 2013, 331). Therefore, as suggested by Comajoan (2005), we took into account the learners' choice of verbal morphology as an indicator of grounding (see section 5).
7. Statistical analyses are not available for telic predicates in the background, due to the low frequency of this combination and categorical performance in groups A2, B1 and B1+.
8. We acknowledge the presence of a lexical inaccuracy in both excerpts: in this context, the verb *haber* would be more appropriate than the verbs *ser* or *estar*. However, since all three predicates belong to the category of statives, we believe that such lexical inaccuracy does not influence the overall interpretation of the data.
9. An anonymous reviewer suggested that we reconsider the apparent contradiction between the use of the term *overextension* in the present context and our claims about states in the foreground marked with perfective morphology and the rare appearance of telic predicates in background. We offer two lines of argumentation.

First, by overextension we understand such a use of morphology that spans beyond the scope of its standard, conventional utilisation, because there is nothing else in user's repertoire to be used instead (see the definition in Britannica: https://www.britannica.com/topic/human-behavior/Development-in-adolescence). In his work of 1999, Salaberry observed PERF morphology to be spread across all the lexical aspectual classes with IMP being almost non-existent (5 tokens only), as Salaberry's subjects '*relied on one single marker of Past (Preterite)*' (Salaberry, 1999, p. 167, emphasis in original).

Second, we understand the term overextension as being linked to inappropriate use. For example, Andersen and Shirai (1994) noted an occasional overextension of English *-ing* to stative verbs which was not induced by expressing stage-level properties (see Rocca 2007). The term was even made an explicit part of the LAH (e.g. Andersen & Shirai, 1996) predicting that '[p]rogressive markings are not incorrectly overextended to stative verbs'. Our subjects showed they had both PERF and IMP morphology at their disposal. We therefore assume that the reason for using perfective morphology with statives in the foreground was not the lack of imperfective morphology but (at least in most cases) the learners' intention to present these situations perfectively. Similarly, we do not consider the strong association between telicity, perfective marking and foreground a case of overextension, due to the high rate of appropriateness of this combination. We believe that the explanation of why telic predicates are rarely used with imperfective marking in the background requires further investigation and it cannot be fully explained in terms of overextension.

10. One of the anonymous reviewers noted that this pattern also aligns with the DPTH, which predicts that initial learners, under the influence of classroom instruction, use the perfective past tense morphology with any lexical aspectual class, to mark pastness rather than perfective aspect. However, contrary to the predictions of the DPTH, learners in the present study used both the perfective and imperfective past with stative predicates, starting from the lowest proficiency group, but the appropriateness of morphological marking in the foreground did not improve as a function of increasing proficiency.

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