

Tim Diaubalick, Lukas Eibensteiner and Rafael Salaberry

The value of acquisitional data for describing cross-linguistic differences in the expression of aspectuality. A focus on the learning strategies of German-speaking learners of Spanish

Abstract: With the aim of revealing the additional value that studies in Second Language Acquisition can contribute to linguistic theory building, this paper draws some conclusions from two published studies on German-speaking learners of Spanish as a foreign language. Whereas native speakers use tense-aspect markers in order to express the aspectual nuances required by the context, the learners in our studies seem to interpret them merely as reflections of other elements in the sentence, such as temporal adverbials. Often, such adverbials appear in textbooks of Spanish and are taught in class as markers of tense-aspect. However, with non-prototypical combinations the learning strategy of using temporal adverbs as markers of tense-aspect is often misleading and can lead to learning difficulties. Throughout both studies there is an orientation towards temporal adverbs, which is, unlike what has been previously reported with reference to learners of other native languages, independent of lexical aspect. We argue that these patterns help us understand the real function of aspectual markers in Spanish and at the same time confirm the alleged general tendency of German to be a more lexically-oriented language.

Keywords: cross-linguistic differences, transfer, tense and aspect, second language acquisition, Spanish language, learning strategies, metalinguistic awareness

1 Introduction

The study of the Spanish verb system has a long tradition going back to authors such as Bello (1847), who formulated the idea that the (Romance) Imperfect is characterised by its anaphoricity, suggesting that aspectual relations are merely

Tim Diaubalick, University of Wuppertal

Lukas Eibensteiner, Friedrich Schiller University Jena

Rafael Salaberry, Rice University

coincidental effects. Assuming this perspective, it might be claimed that the Imperfect and the Preterit are not aspectual forms in the strict sense. Although similar ideas have been defended by several scholars (e.g., Reichenbach 1947; Rojo 1990; Giorgi/Pianesi 2004), who find support in so-called time-relational theories of aspect (e.g., Klein 1994), these approaches stand in contrast to the argument – advanced by authors such as Comrie (1976) and Smith (1997) – that the aforementioned forms are themselves aspectual as they refer to whether a situation is viewed as bounded or unbounded (perfective or imperfective aspect, respectively).

To contribute to this long-standing debate, but from a different perspective, we will use data from second language (L2) acquisition¹ studies to assess the relevance of theoretical arguments. As argued by, for instance, Judy/Perpiñán (2015, 1–20), L2 studies on tense and aspect can effectively contribute to theoretical questions. In this vein, we will analyse the results of two different studies: on the one hand, we will examine the metalinguistic knowledge of aspectual distinctions by 103 German-speaking learners of Spanish; on the other hand, we will compare the acceptability judgements of different groups of learners of Spanish with a native-speaker control group. From the results of both studies, we draw some general conclusions regarding the nature of aspect in Spanish. The paper is organised as follows: after some introductory notes on the marking of aspect in Spanish (section 2), we will consider the most important hypotheses concerning its acquisition (section 3). In section 4, we present the methodological characteristics of the two studies and their results. Finally, we discuss the results and some of their limitations.

2 The role of grammatical aspect in Spanish grammar

In the following analyses, we make a clear distinction between three categories associated with the linguistic expression of time, following Comrie (1976): tense, which creates a connection to language-external elements and is thus deictic; grammatical or viewpoint aspect, which describes the relationship between several language-internal temporal layers; and lexical or situation aspect, which is defined by

¹ The terms *acquisition* and *learning* are often used to distinguish between implicit and explicit appropriation mechanisms. As there is no agreement on the use of these terms in the L2 literature, we will use both synonymously. Furthermore, we will use *second language* “as a cover term for any language other than the first language learned by a given learner [. . .] irrespective of the number of other non-native languages possessed by the learner” (Sharwood Smith 1994, 7; emphasis in the original). Therefore, no distinction between second and third language acquisition will be made.

the lexical expression of a situation, such as states, activities, accomplishments and achievements (Vendler 1957).

In linguistic reality, the three concepts usually appear together and often turn out to be difficult to separate. This is especially true for the past tenses in Spanish, which we focus on in this chapter. Consider the following examples:

- (1) *Pablo vio* _{PRET} *la serie completa.*
'Pablo watched the whole series.'
- (2) *Pablo veía* _{IMP} *la serie completa.*
'Pablo was watching/used to watch the whole series.'

In both sentences, we find a telic verb phrase 'watch the whole series' which carries an inherent endpoint. The use of the Preterit in (1) adds the information that this endpoint was reached in the past, whereas the same information is uncertain in (2). Depending on the context or situation, the Imperfect in (2) can be understood as indicating an interruption, marking an ongoing action, or a habit of a television enthusiast. In terms of the concepts proposed by Comrie (1976), the Spanish Imperfect can therefore be described as conveying imperfective aspect since the action is presented as unbounded as opposed to the Preterit, which always carries a notion of completion or completeness (= bounded). As this distinction is internal to the situation, the contrast is characterised as aspectual.

It is important to note, however, that there is no general agreement on whether this sharp distinction between external and internal properties necessarily leads to a distinction between tense and aspect. Thus, conceptualisations such as Klein's (1994), which builds on Reichenbach (1947), aim to describe all temporal properties as a whole, making use of relationships such as anteriority, simultaneity and inclusion. In a similar vein, Rojo (1990) and Giorgi/Pianesi (2004) defend the view that the Romance Imperfect² is, in fact, characterised by its anaphoricity, while aspectual relations are merely the coincidental effect of a given situation. In this sense, one could adopt the terminology coined by Bello (1847), according to whom a more appropriate term for the form *veía* is Co-Preterit, which is not only another label, but represents a very different conceptualisation of the verb system. Without repeating all of their arguments, Giorgi/Pianesi's (2004) main point is that the Imperfect needs a so-called anchor provided by linguistic or extra-linguistic factors. This anchor can be represented by a *verbum dicendi* introducing indirect speech or

2 Giorgi/Pianesi's (1997) arguments are based on Italian but can be transferred equally well to Spanish.

by a certain type of temporal adverb, such that the tense form can be described as *present-in-the-past*. However, the anchor can also be replaced by a more abstract form of licensing³ context, for example, reference to a dream or a game, and this, according to Giorgi/Pianesi (2004), is the reason why the Imperfect is the only past tense that can express an orientation towards the future or convey modal readings. In sum, it is inherent in this view that the notion of grammatical aspect is not a part of Spanish grammar.

This approach is therefore crucially different from that defended by García Fernández (1999), Leonetti (2004) and Fábregas (2015), who argue that it is the Imperfect's anaphoricity that is the coincidental effect, whereas grammatical aspect inherently characterises the contrast between Imperfect and Preterit. To refute the counterargument, García Fernández (1999) insists on the connection between the lexical aspect of a verb and possible readings induced by combinations with different tense forms, as shown in the following examples:

- (3) *Juan nos contó* _{PRET} *que María había llorado* _{PLUPERF} *el día de su boda.*
 'Juan told us that Maria had cried on her wedding day.'
- (4) *Juan nos contó* _{PRET} *que María estaba* _{IMP} *triste el día de su boda.*
 'Juan told us that Maria was sad on her wedding day.'

Although both predicates, i.e., 'crying' in (3) and 'being sad' in (4), happened in anteriority to *contó* 'told', only the activity verb requires the pluperfect. This is due to the connection between lexical aspect and grammatical aspect. In this case, the dynamic verb is compatible with perfectivity so the anteriority can be marked with a pluperfect. The stative verb instead receives the interpretation of anteriority directly from the adverbial. This example shows that aspectual levels are not independent.

Leonetti (2004), in turn, draws a connection to the distinction between stage-level and individual-level predicates, arguing that it is precisely the unboundedness of the Imperfect that requires the presence of an anchor or other type of functional motivation (e.g., linguistic or extra-linguistic information provided by the context). That is, the anaphoricity is not an inherent property of the Imperfect, but a necessary effect of its aspectuality.

We will provide evidence in favour of the latter arguments taken from studies in L2 acquisition. We will show that learners whose first language does not have grammatical aspect but instead relies on lexical cues such as temporal adverbs (e.g.,

3 Thanks to an anonymous reviewer for pointing this out.

German)⁴ will struggle to master the Spanish past tenses. These empirical findings consequently only support the view that the Imperfect expresses imperfectivity, i.e., that aspectuality underlies the contrast between the verb forms. This argument is based on the following idea: if we assume the contrary, i.e., if the Spanish past tenses are not characterised by aspectual features, a language learner would only need to understand temporal features such as simultaneity and anteriority, and any aspectual uses would follow automatically as coincidental effects. Thus, for a learner whose L1 already possesses and uses such temporal features, there should be no problem, as these features can be simply transferred or rearranged (see, e.g., Hawkins/Hattori 2006; Lardiere 2009).

To show that this transfer is, in fact, not so simple, we take German L1 as an example. German has similar temporal contrasts to Spanish, but no grammatical aspect (see footnote 4). As the findings of the studies described below show no evidence of simple transfer (as even the most advanced learners fail to acquire the aspectual meanings of the past tenses in Spanish), the assumption that aspect is not part of Spanish grammar must be considered suspect. In the next section, we will review some of the most important hypotheses regarding L2 acquisition of aspect to illustrate some of the learning problems that can arise when L1 transfer is not possible and new aspectual concepts have to be learned.

3 Hypotheses about the L2 acquisition of aspect

Given the complexity of aspect as described in the previous section, the development of tense-aspect provides a fruitful ground for research in L2 acquisition. The topic became particularly prominent after Roger Andersen (1986; 1991) proposed his Lexical Aspect Hypothesis. A number of subsequent hypotheses along with a significant body of empirical data collected over thirty years (see Salaberry/Comajoan 2013; Bardovi-Harlig/Comajoan-Colomé 2020 for recent reviews) have provided a solid foundation for the theoretical analysis of an ever-expanding range of tense-aspect phenomena. The following are some of the hypotheses that are relevant to the aims of this paper.

4 German is a so-called non-aspect language (Diaubalick 2019, 82–91; Eibensteiner 2021, 34–39). This means that it does not have any grammatical devices to express aspectual distinctions and therefore has to rely on pragmatic or lexical devices, such as, for example, the particle *gerade*, to express imperfectivity (progressivity), e.g., *Ich schlief gerade, als er mich anrief*: ‘I was sleeping when he called me’. In this sense, both German past tense forms, i.e., *Präteritum* (*ich schlief*) and *Perfekt* (*ich habe geschlafen*), express the same temporal notion of pastness [+ anteriority] and can be used interchangeably (keeping stylistic differences apart) (Heinold 2015).

The Lexical Aspect Hypothesis

The Lexical Aspect Hypothesis (Andersen 1986; 1991; Andersen/Shirai 1994) asserts that during the initial stages of acquisition L2 learners will recognise and mark aspectual configurations along a developmental path that is defined by inherent lexical aspectual meanings. In these initial stages learners usually produce prototypical combinations of lexical and grammatical aspect (i.e., stative predicates with imperfective morphology, telic predicates with perfective morphology), . . . lexical aspectual values are learned and then superseded by viewpoint or grammatical aspectual values.

The Default Past Tense Hypothesis

In contrast to the Lexical Aspect Hypothesis, Salaberry's Default Past Tense Hypothesis (1999; 2003; 2011) asserts that beginner (tutored) learners will initially default to a single marker of past tense to convey past tense in general. This is based on empirical data that show that anglophone learners of Spanish will use perfective morphemes to contrast present and past tenses (i.e., use morphology as a marker of tense). As the English Simple Past is not an aspectual form, but a tense marker (De Swart 2012), learners will basically transfer the temporal notion of pastness [+anteriority]. The same argument holds by and large when the L1 is German, which does not mark aspect grammatically either. A second claim of this hypothesis is that the effect of lexical aspect on the use of morphological markers increases with proficiency insofar as improvements in L2 knowledge also lead to a predominant use of prototypical pairings (Salaberry 2011; McManus 2013). The transition from prototypical to non-prototypical associations will only happen as learners gain access to larger amounts of L2 input data and gain experience and proficiency in the L2.⁵

The Lexical Underspecification Hypothesis

Giacalone-Ramat/Rastelli (2008, 242) proposed that beginner L2 learners are unable to use information about the inherent semantic meanings postulated to be part of lexical aspect (see also Rastelli 2009; 2019; Rastelli/Vernice 2013). The Lexical Underspecification Hypothesis asserts that L2 learners will have to reconstruct lexical

⁵ Tong/Shirai (2016) expanded the scope of application of the Default Past Tense Hypothesis to include not just the past tense, but progressive aspect as well. Using data from L1 English speakers of L2 Chinese (Mandarin) on two aspectual markers (i.e., perfective *-le* and progressive *-zai*), Tong/Shirai argue that beginner learners primarily use the perfective marker *-le* across all lexical aspectual classes (a default form for past tense). Eventually, as their proficiency increases, learners show a stronger association between the lexical semantic information of verbal predicates and past tense markers.

aspectual categories of verbal predicates, even in the case of frequently used verbs. This hypothesis challenges the purported independence between lexical aspect and viewpoint aspect insofar as learners make use of a compositional definition of aspect comprising layers of information above the verbal predicate level from the very beginning of the learning process.

Non-prototypical cases and the influence of adverbial phrases

The methodological problem with Andersen's Lexical Aspect Hypothesis and subsequent hypotheses is that they tend to focus on the initial stages of acquisition and therefore do not take into account the full complexity of aspectual meanings (i.e., non-prototypical cases). Accordingly, recent L2 studies have started to expand their focus to advanced stages of acquisition in order to address the full range of complexity of aspectual meanings, i.e., a broad range of contextual factors influencing the linguistic construal of a situation (e.g., Salaberry 2013).

It should be noted that the semantic contribution of context is not necessarily arbitrary or inconsistent – at least native speakers tend to be consistent in their interpretation of non-prototypical cases. For instance, the following examples from Spanish (Güell 1998, 102) illustrate the complex nature of non-prototypical aspectual interpretations of state verbal predicates engendered by the informational context provided by specific adverbial phrases:

- (5) *Lo supo* PRET / **sabía* IMP *durante mucho tiempo.*
'(S/he) knew it for a long time.'
- (6) *Lo *supo* PRET / *sabía* IMP *desde hacía mucho tiempo.*
'(S/he) knew it from a long time ago.'

First, the non-prototypical use of the Preterit with a state verb in (5) presented in conjunction with the adverbial *durante mucho tiempo* precludes an inchoative interpretation (i.e., the beginning of the state), but gives rise instead to an aspectual meaning typically reserved for the imperfective form (i.e., non-punctual, durative). Notice, however, that the imperfective form is dispreferred (marked with an asterisk) in (5) as the adverbial phrase triggers an interpretation of the situation as bounded. Along the same lines, the preference for the imperfective form in (6) stands out in this context given the use of the adverbial phrase *desde hacía mucho tiempo*, which, in principle, would trigger an inchoative interpretation. The choice of the imperfective, however, keeps the focus on the actual state irrespective of the explicit highlighting of the inception point. The situation is viewed as unbounded and the perfective form is therefore dispreferred.

A similar argument can be made for the case of events (telic or atelic). For instance, in the Romance languages imperfective and perfective forms are used to describe the iteration of eventualities: habituality and iterativity are conveyed with the Spanish Imperfect and Preterit, respectively (e.g., de Swart 1998; Langacker 1999). Thus, in its proper context, the Imperfect conveys the aspectual notion of habituality (as shown in 7), whereas in (8) the adverbial phrase *por años* triggers interpretation of the situation as bounded and so the Preterit is preferred with the consequence that a rather distinct aspectual concept (i.e., interactivity) – is conveyed:

- (7) *Cuando era niño, Lucas jugaba_{IMP} al fútbol.* [habitual]
 ‘When [he] was a child, Lucas played/used to/would play soccer.’
- (8) *Por años, Lucas jugó_{PRET} al fútbol.* [iterative]
 ‘For years, Lucas played soccer.’

As was the case in the example of states described above, the specific effects of the adverbial phrases trigger distinct aspectual meanings (i.e., habituality or iterativity) that transcend the simple prototypical meanings of boundedness assigned to the imperfective-perfective contrast.

Overall, the findings from studies assessing knowledge of non-prototypical cases tend to converge: non-native speakers have difficulty with non-prototypicality in aspectual marking. Among the studies that specifically address the nature of non-prototypical morphological selection of aspectual marking as part of the comprehensive definition of the construct of aspect, the data from Salaberry (2013) show that Spanish near-native speakers were unable to distinguish fine-grained representations of the aspectual concepts of habituality versus iterativity even though they demonstrated native-like judgements of prototypical uses of aspect (see also Pérez-Leroux et al. 2007; Salaberry/Martins 2014). Given the proposed protracted effect of prototypical markings, even advanced learners may continue to mark viewpoint aspect in close alignment with congruent lexical aspectual categories (Salaberry 2011). Other recent studies on L2 Spanish have compared data from L1 German learners with data from L1 speakers of Romance languages (e.g., Diaubalick/Guijarro-Fuentes 2019; Diaubalick/Eibensteiner/Salaberry 2020). These studies confirm that non-native speakers of Spanish (in this case L1 German speakers) also have difficulty with non-prototypicality in aspectual marking.

Finally, another example of non-prototypical combinations consists of atypical combinations of adverbials and verb forms. Some of these adverbials are taught in class and in textbooks as so-called “signal words” that serve as temporal

markers. For instance, *ayer* ‘yesterday’ is often regarded as a trigger word for the Preterit, while *cuando* ‘when’ and *siempre* ‘always’ are often found with the Imperfect. This approach has been critically discussed (see, e.g., Llopis-García et al. 2012), given that while these co-occurrences may have statistically relevant frequencies, they do not constitute linguistic dependencies. However, previous studies have found that these adverbs do play a decisive role in the selection of past tense forms, which can have either positive (see, e.g., González 2008; Baker/Quesada 2011) or negative effects (Rothman 2008; Diaubalick 2019) depending on whether the combination is prototypical or not. Crucially, it is especially native speakers of Germanic languages who tend to use such markers, as lexical marking plays a major role in their L1. However, not all Germanic speakers behave in the same way when the effect of their L1 conflicts with rule-guided learning (González/Diaubalick 2020).

Observation of an interaction between what is taught in class and what is actually relevant for proper language use leads us to the next factor relevant for L2 learning: metalinguistic rules.

Metalinguistic rules

The overall outcome of the analysis of the meanings of aspect confirms what is a well-known phenomenon experienced by both native and non-native speakers: the use of aspectual contrasts is difficult because of an inherent ambiguity resulting from the effect of contextual components of sentences and discourse. Given this semantic complexity, the focus on pedagogical rules to explain the L2 development of aspectual contrasts has as long a history as Andersen’s Lexical Aspect Hypothesis (e.g., Lunn 1985; Frantzen 1995; Westfall/Foerster 1996). Efforts to teach an expanded conceptualisation of aspect focus on the development of (deep levels of) metalinguistic knowledge in the light of claims regarding the benefits of such pedagogical intervention. Hu (2010, 64), for instance, argues that “explicit discussion of and deliberate reflection on linguistic patterns and properties” is helpful “because linguistic terms are essentially succinct ways of categorizing patterns and relationships found in a language”.

In many cases, however, the descriptions of aspectual meanings have led to incomplete (and thus misleading) explanations. For instance, in Spanish most “rules of thumb” (e.g., Whitley 1986) focus on prototypical markings of verbal morphology. To address the challenge posed by inaccurate rules of thumb, two theoretical proposals have argued for a reconceptualisation of the way traditional instructional procedures guide learners to develop a representation of aspectual contrasts in L2 Spanish: Concept Based Instruction (e.g., Negueruela 2003; Negueruela/Lantolf 2006; Yáñez-Prieto 2008; Lantolf 2011) and the Competing

Systems Hypothesis (e.g., Rothman 2008; Long/Rothman 2012). The Competing Systems Hypothesis argues for the existence of a parallel system of grammatical representation developed through exposure to classroom instruction. Long and Rothman (2012, 70), for instance, claim that the system of learned metalinguistic knowledge “is likely to no longer be (completely) conscious to the learner, but would have passed from declarative memory to a system that is more proceduralised within the mind.” This second system competes with the default system, which is assumed to develop through direct access to L2 data (i.e., not mediated by pedagogical rules). Consequently, under the Competing Systems Hypothesis it is necessary to expand learners’ access to (naturalistic) language data beyond those typically found in instructional settings.

The Concept Based Instruction Hypothesis, on the other hand, proposes developing explicit linguistic knowledge (organised in such a way as to promote understanding, control and organisation) as the solution: “models must raise learners’ awareness of what linguistic resources are available to them to carry out concrete linguistic actions with specific purposes across all contexts” (Negueruela/Lantolf 2006, 84–85). In sum, both proposals highlight the importance of explicit metalinguistic rule-based knowledge in the acquisition of an L2, but the pedagogical implications are quite different. Whereas the Competing Systems Hypothesis emphasises the role of authentic, naturalistic input to obtain a native-like understanding of a given grammatical phenomenon, the Concept Based Instruction Hypothesis stresses the importance of awareness-raising strategies.

In the next section, we will review the results of two doctoral dissertations (Diaubalick 2019; Eibensteiner 2021). We will (1) show that (tutored) learners indeed rely on explicit knowledge (e.g., rules of thumb) to overcome learning difficulties with regards to aspectual distinctions, and (2) that the reliance on such learning strategies leads to native-like attainment in prototypical, but not in non-prototypical contexts. As L2 learners are apparently unable to acquire such non-prototypical contexts, we will argue that the Spanish past tenses are characterised by aspectual features that do not exist in the learners’ L1 German. Concept Based Instruction can therefore help learners understand the use of aspect in prototypical contexts and may play an important role in helping them understand non-prototypical ones, which are more difficult to process. In order to develop intuitions, however, high quality, authentic, naturalistic input seems to be necessary, as proposed by the Competing Systems Hypothesis.

4 Empirical Evidence from Germans learning Spanish

4.1 Study 1: Metalinguistic rule-based knowledge of German-speaking learners of Spanish – the use of temporal adverbs as a learning strategy

In this section, we present a study that is part of a larger research project (see Eibensteiner 2021), in which we used different tests to measure how the participants acquired the opposition of perfective and imperfective aspect in Spanish and whether they were influenced by their previously acquired linguistic knowledge. In addition to several tasks to elicit production and interpretation data, we used a metalinguistic reflection task based on a semantic interpretation task in order to elicit the learners' explicit rule-based knowledge. We will examine the kind of explicit rule-based knowledge German-speaking learners of Spanish use to overcome learning problems in cases where they are forced to make a decision between the Preterit and the Imperfect. We will show that one of these rules concerns temporal adverbs, the so-called “signal words”. Here, the students often overlook the fact that such rule-based strategies are merely (sentence-level) guidelines that do not exhaust the possible interpretations afforded by aspect in Spanish grammar.

4.1.1 Methodology

In this study, we analysed data from 103 German-speaking learners of Spanish, whose ages ranged from 14 to 19. All of them were students attending a German or Austrian high school (*Gymnasium*) and, consequently, had knowledge of at least one other foreign language (i.e., English, French or Latin). Most of the participants were intermediate to advanced learners of Spanish,⁶ and therefore had knowledge of the morphology and functions of Spanish past tenses.

The metalinguistic reflection task was based on a semantic interpretation task used in the main study (see the introductory notes to section 4.1). The interpretation task contained 35 items which consisted of a German context and two Spanish sentences contrasting perfective and imperfective aspect (*crucé* vs. *cruzaba* in the

⁶ Based on the guidelines of the German/Austrian curriculum for Spanish, we estimated their proficiency in Spanish to be on average between CEFR levels B1 and B2.

examples in Table 1). The participants had to judge the acceptability of the two sentences on a Likert scale from -2 (totally inappropriate) to +2 (perfectly appropriate):

Table 1: Examples of the semantic interpretation task – sentences (A) and (B).⁷

(A)	Ich war dabei, auf die andere Seite der Straße zu gehen. Ich bin jedoch nicht angekommen, weil mich mitten auf der Straße ein Auto angefahren hat.				
	<i>Crucé la calle.</i>				
	-2	-1	0	1	2
	<i>Cruzaba la calle.</i>				
(B)	-2	-1	0	1	2
	Ich bin zu einem Freund auf der anderen Seite der Straße gelaufen. Nachdem ich auf der anderen Seite der Straße angekommen war, hat mich ein Radfahrer überfahren.				
	<i>Crucé la calle y me atropelló un ciclista.</i>				
	-2	-1	0	1	2
	<i>Cruzaba la calle y me atropelló un ciclista.</i>				
	-2	-1	0	1	2

Using a stimulated-recall procedure we selected six items from the semantic interpretation task to elicit the learners’ metalinguistic reflections on their acceptability judgements of the sentences. Using pair think-aloud protocols the participants had to reflect orally on the sentences by answering the following questions:

1. Why did you choose the Preterit/Imperfect? How did you get to your decision?
2. What was easy/difficult for you?

The conversations were recorded, transcribed, and coded using qualitative content analysis procedures following Kuckartz (2016).

4.1.2 Results

The analysis of the participants’ metalinguistic reflections revealed different categories of explicit rule-based knowledge regarding the aspectual distinction between

⁷ Translation of the German contexts (all translations by the authors):
(A) ‘I was crossing to the other side of the street. I did not get there because a car ran me over in the middle of the street.’
(B) ‘I ran to a friend on the other side of the street. Having got to the other side of the street, a cyclist ran me over.’

perfective and imperfective aspect. The main categories for the Preterit and the Imperfect are summarised in Table 2:⁸

Table 2: Explicit rule-based knowledge of the Preterit and the Imperfect.

Basis of the explication	Categories for the Preterit	Categories for the Imperfect
(1) Grammatical Aspect	Completion/boundedness	Non-completion/unboundedness Progressivity Habituality
(2) Discourse Function	Events/actions that move the storyline forward (e.g., one-time events; inchoative and punctual actions)	Descriptions of the background of a story
(3) Signal Words	Temporal adverbs (e.g., <i>ayer</i> ‘yesterday’)	Temporal adverbs (e.g., <i>de pequeño</i> ‘as a child’)
(4) Tense	Temporal explanations (e.g., something happened in the past)	Temporal explanations (e.g., something used to happen a long time ago)
(5) Lexical Aspect	– ⁹	States Durative events

The first two categories are the most frequent and, therefore, possibly the most important. Regarding category (1), i.e., explanations based on notions of grammatical aspect, the participants made explicit reference to the (non-)completion and/or (un-)boundedness of a situation. Regarding sentence (B) of the reflection task (see Table 1), in which a cyclist ran over a person who had just crossed the street (i.e., the act of crossing the street had been completed), the learners explained that the person in the example had already crossed the street when the cyclist knocked him/her down and therefore the Preterit was required. In sentence (A), on the other hand, in which a car ran over the person as s/he was crossing the street, they judged that the Imperfect was required because the action of crossing the street was not

⁸ The analysis is based on Eibensteiner (2021; see especially pp. 199–205 for a detailed description). For the purposes of this Chapter, however, the data were re-coded in order to obtain more straightforward categories that would be relevant for the present study (e.g., comments referring to specific temporal adverbs or to the fact that so-called “signal words” were used as a learning strategy were classified together under the category *signal words*).

⁹ The explanations referring to punctual events subsumed under the category *discourse function* could also have been categorised as being based on lexical aspect as they make explicit reference to the lexical semantic notion of punctuality. However, their classification under category 2 seems more appropriate given that the learners did not usually stress the notion of punctuality but explained that they chose the Preterit because it is used to describe *foregrounded* punctual events.

completed. In the second category, i.e., explanations referring to the discourse function of the tenses, the participants were mainly of the view that the Preterit characterises events/actions that move the storyline forward (e.g., one-time events), while the Imperfect serves to describe events that embellish the main event.

Category 3, i.e., *signal words*, is of particular interest for the present purposes. Here, the participants refer to specific temporal adverbs that – in their opinion – trigger the use of the Preterit/Imperfect. For example, participant 522 argues that in sentence (D) of the reflection task,¹⁰ in which a person met with some friends for having dinner (completed event), the adverb *ayer* acts as a signal word for the use of the Preterit:¹¹

522: In [sentence] number (D), the action happened yesterday, and yesterday is a signal word, *ayer*, so – this means that you have to select the *Indefinido* [Preterit].

(Corpus B 517_522: 4–6)

In general, the participants not only refer to temporal adverbs to explain the function of the tenses, they are also aware that such signal words can serve as a learning strategy. Participants 520 and 528, for example, claimed that they explicitly focussed on such trigger words when analysing the sentences in the semantic interpretation task:

528: [. . .] Why did you choose this particular verb form? (laughs)

Yeah. Why- why indeed-

520: Well, you look at the beginning of the sentences.

528: Yeah, at the er – signal words.

520: Yeah, exactly, the signal words.

(Corpus B 520_528: 7–11)

In another example, participant 705 explained that she noticed the signal word *ayer* and, consequently, she knew that she had to use the Preterit, because she had learned at school that such words trigger the use of perfective morphology:

705: Well, er, looking at sentence [. . .] [D] we think that the first [option; the Preterit] is correct, because we have learned that *yesterday* or *ayer*, er, is a signal word for *Indefinido* and the first [sentence in the example] is *Indefinido*.

(Corpus B 705_718: 62–64)

¹⁰ The trigger word *gestern* ‘yesterday’ is presented in the German context of sentence (D): *Gestern habe ich mich mit vielen Freunden zum Essen verabredet* ‘Yesterday I met many friends for dinner’.

¹¹ The original transcripts are in German and were translated by the authors for the purpose of the present article.

In fact, textbook analyses and interviews with teachers (Eibensteiner 2017) reveal that in German schools these signal words are often used to explain the difference between perfective and imperfective aspect. However, such learning strategies do not always lead to Spanish past tenses being learnt properly and can even impede acquisition, as is shown in the next statement, referring to sentence (A):

- 926: [. . .] I think, the first [option; the Preterit] is correct. – Or, maybe both [sentences] are wrong [. . .] because he has not- he has [still] not crossed the street.
- 925: Yeah, he was actually crossing the street, and therefore *cruzaba* [the Imperfect should be correct].
- 926: Yes, but there is no *cuando* or something like that. This means that both [sentences] are wrong.
- 925: Yes, but that's not important [for the selection of past tense forms].
(Corpus B 925_926: 27–31)

Whereas participant 925 correctly points out that the Imperfect is the correct option (as the person in the example has not finished crossing the street), participant 926 rejects both tenses because s/he does not find any lexical clue (i.e., a proper signal word) which s/he considers necessary for correctly interpreting the situation.

In sum, these examples show that learners explicitly rely on temporal markers that they have learned in class to interpret situations and to choose between the Preterit and the Imperfect. We propose that the reliance on signal words as a learning strategy will often lead to a correct choice of past tense forms, especially in prototypical cases. However, as will be shown in the next section, in non-prototypical contexts it can also lead to misinterpretation of the situation and therefore be the source of errors.¹²

¹² As pointed out by an anonymous reviewer, the tendency to use adverbials as lexical means to express temporal-aspectual features in greater detail (especially in the case of natural learners) has also been highlighted by Klein (2009) and others. In contrast to Klein's proposal, however, the students in the study reviewed above do use morphological means to express tense and aspect (in part, as a reflection of explicit instruction in class). However, if an adverb is placed in the sentence, those morphological elements seem to merely reflect the content given by the adverb, resembling a somewhat redundant agreement process.

4.2 Study 2: Quantitative study on the (im)possibility of acquiring aspectual nuances and possible compensation strategies

In this subsection, we summarise those findings from Diaubalick (2019) that are relevant for the present article. We show that even the most advanced German learners of Spanish continue to struggle with the perfectivity/imperfectivity contrast, and this is especially evident in non-frequent/non-prototypical usages. To compensate for this, they develop a learning strategy based on explicit rules (see chapter 4.1), which seems to help in some cases, but in others it produces deviations from both native speakers and learners of other L1s (especially Romance L1s, such as French and Italian). The aim of this study, therefore, was to tease apart the specific challenges faced by German learners from other difficulties encountered in L2 learning in general. While a number of different compensation strategies were identified in all the groups, a particularly salient one adopted by German learners (but not learners of other L1s) was based on the use of adverbs.

4.2.1 Methodology

The data summarised here form part of a larger study on the acquisition of the Spanish temporal-aspectual system with the participation of learners from a variety of language backgrounds. The three crucial groups consisted of 206 German learners of Spanish, 145 French-, Italian- and Portuguese-speaking learners, and 83 native speakers as a control group. Following a placement test, the learners were divided into three groups according to their proficiency level: lower intermediate, higher intermediate and advanced. The experiment consisted of several tasks featuring different usages of the past tenses (a total of 145 test items). Here we describe the results from two of them: a grammaticality judgement task and a text completion task.

For the grammaticality judgement task, participants had to assess the level of acceptability of 36 randomised target items (plus distractors), which fell into four categories: (1) so-called “standard contexts” (frequent contexts, such as one-time events vs. habitual actions); (2) coercion contexts (including stative verbs coerced to an eventive meaning); (3) impersonal subject items (inspired by Slabakova/Montrul 2003; 2008), and (4) aspectually conflicting items (non-prototypical usages, such as telic elements in imperfective contexts). For reasons of space, examples are given in the results section below rather than here. Importantly, some of the items included temporal adverbs (the “signal words” presented in section 4.1). The text completion task consisted of a coherent narrative, written specifically by the study’s author, with different combinations of telic and atelic verbs with various adverbs.

4.2.2 Results

The results of the grammaticality judgement task showed an important effect of the item condition: whereas in the so-called standard contexts all learners came closer to the native control group with increasing proficiency (such that there were no significant differences between the performances of the advanced learners and the native speakers), in the non-frequent/non-prototypical contexts, this was generally only the case for learners with a Romance L1, which meant there were some persistent differences between the German learners and the other groups. The following two figures illustrate this finding (adapted from Diaubalick 2019, 221ss.; presentation modified).

The figures show the mean judgements per group, with items rated on a scale between 1 (completely acceptable) and 5 (completely unacceptable). Focussing first on Figure 1, which summarises the findings for the standard context items, the data show relatively clear tendencies in both learner groups: while the low intermediate level learners start with a mean judgement of around 3 (a sign of uncertainty on the scale used), rising proficiency correlates with stronger certainty and also greater proximity to the judgement of the native control group. In Figure 2, on the other hand, we see the results for one of the non-standard categories showing the different behaviours of the two learner groups. Whereas the Romance learners come

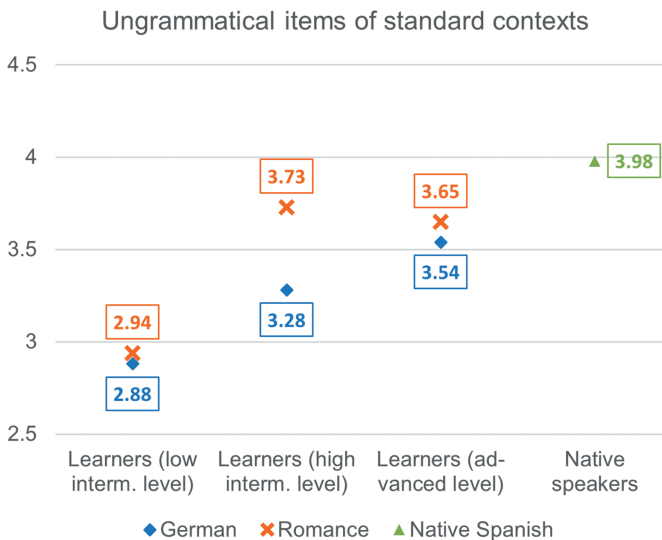


Figure 1: Mean judgement on ungrammatical standard context items (expected: 5); the y-axis shows only relevant values.

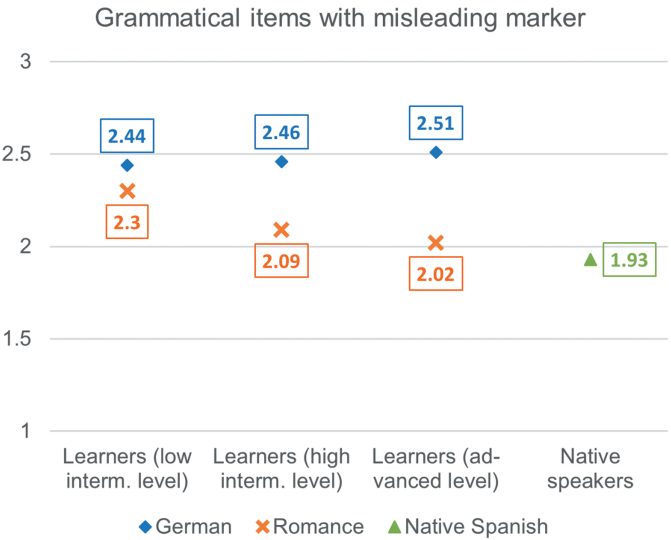


Figure 2: Mean judgements on grammatical items with misleading markers (expected: 1); the y-axis shows only relevant values.

closer to the judgement of the native control group with increasing proficiency, the data of the German group shows no effect of proficiency at all. A detailed analysis of the data showed that this was generally due to overgeneralisation of a learning strategy based on temporal markers. In what follows, we will illustrate this with a few examples.

Although the main task of the experiment was to provide grammaticality judgements, some of the participants annotated the items with corrections, as in the following example (originally item 4, reported here as 9):

- (9) *En el año 1989 la gente solía_{IMP} quejarse del muro de Berlín.*
'In 1989, people used to complain about the Berlin Wall.'

What is interesting about this item is that, although no significant differences between the groups in terms of statistical numbers were found (Diaubalick 2019, 236), i.e., generally all participants tended to accept the sentence as grammatical, some participants still suggested corrections or improvements, assuming that the adverbial phrase *en el año 1989* triggers use of the Preterit. Qualitative analysis revealed some interesting insights into how misleading markers can affect learners' judgements (albeit not discernible on an overall numerical level): out of ten corrections, eight were given by the German learners, all of whom suggested use of the Preterit – either replacing the verbal periphrasis *soler + inf.* with a perfective

verb form (*se quejaron* ‘they complained’, or *la gente se quejó* ‘the people complained’) or even providing the inherently ungrammatical perfective form *solió*. As the verb *soler* ‘use to’ is semantically associated with habituality, a Preterit is *per se* impossible. The other two corrections came from an Italian (who likewise suggested *solió*) and a French student (who suggested *solía quejándose* ‘used to complain’). As the latter is actually also an imperfective form, it means that only one non-German student proposed a perfective form, as opposed to eight German learners, which again is indicative of this group being guided by temporal markers. Much stronger evidence, however, comes from another item (originally item 12, here 10):

- (10) *La semana pasada Pablo sabía_{IMP} la respuesta, pero ahora ya no se acuerda.*
 ‘Last week, Pablo knew the answer, but now he doesn’t remember it anymore.’

The native speakers accepted the item with an average rating of 1.58, similar to the Romance speakers’ ratings (low intermediate: 1.71; high intermediate: 1.72; advanced: 1.80). The German learners, in contrast to the other groups, had a significantly lower tendency to accept the sentence (low intermediate: 2.44; high intermediate: 2.60; advanced: 2.34; Diaubalick 2019, 237). This significant difference arguably stems from the fact that the German learners focussed on the adverbial phrase *la semana pasada* ‘last week’, which they know as a trigger word for the Preterit and therefore tend to use the perfective verb form *supo* instead of the imperfective *sabía*. However, the Imperfect is the required form here as it leaves the verb with its stative meaning (non-coercion). It is again in the corrections provided where the nature of these differences can be seen: several German learners suggested substituting the Imperfect with the Preterit, although this would, in fact, coerce the verb into an eventive meaning, corresponding roughly to the translation *got to know/learned* (see section 3). No such corrections were given by anyone within the other groups.

Taken together with the results of the completion task, which likewise pointed to an overgeneralisation of temporal markers being interpreted as signal words leading to significant differences with misleading triggers, the conclusion drawn from these findings is that German learners appear to have difficulties, especially in the less frequent/non-prototypical cases, that persist even at advanced proficiency levels. To compensate, they develop an explicit learning strategy based on temporal markers as trigger words, which, in contexts where the adverbials are misleading, leads to significantly different judgements from the other groups.

5 Discussion and conclusion

Our goal was to show how the analysis of L2 acquisition data can contribute to theoretical discussions on specific linguistic phenomena (in this case, aspect). A summary of the findings from both studies (i.e., Diaubalick 2019; Eibensteiner 2021) reveals that L1 German learners of Spanish (whose L1 does not have grammatical aspect and therefore relies on lexical cues such as temporal adverbs) face important difficulties when acquiring the meanings and uses of Spanish past tenses. As we have argued, these results are, in fact, predictable if aspect is regarded as an inherent property contrasting the Imperfect with the Preterit (see section 2). German-speaking learners have to learn this aspectual contrast as an entirely new concept, which is why they behave differently from learners of Spanish from other language backgrounds.

It is now time to come back to the idea we proposed in section 2: if, for the sake of argument, we consider the Imperfect to be a mere Co-Preterit (i.e., all aspectual values are merely coincidental and arise from particular contexts), only temporal values (e.g., anteriority) would have to be acquired. Moreover, as the German grammar also contains grammaticalised temporal features, relations such as anteriority and simultaneity could be acquired through transfer from the L1. However, this scenario does not fit with the findings presented here as acquisition problems evidently persist. We can therefore discard the assumption that there is merely a temporal contrast between the Spanish past tenses. In essence, the arguments lead to the conclusion that the proper concept of aspect must be acquired.

Firstly, we need to address the possibility of achieving ultimate attainment of aspectual knowledge in an L2. While some authors argue that this is in principle possible in L2 Spanish (e.g., Montrul/Slabakova 2002), others have argued against this claim (e.g., Salaberry 2013; Diaubalick/Guijarro-Fuentes 2016). Distinct outcomes are, however, a methodological artefact given that they arise from distinct conceptualisations of the construct of aspect. Montrul and Slabakova, for example, explicitly leave out non-prototypical contexts and, as a result, their approach to determining whether aspectual knowledge has been acquired differs from other studies. In fact, they cannot effectively answer the question whether the concept of aspect can be acquired in an L2 or not, as their methodology disregards important aspects. In essence, given that the findings from the studies described above show that, at a minimum, the most advanced learners fail to acquire the aspectual meanings of past tenses in Spanish, ultimate attainment of aspect in L2 Spanish seems improbable and the assumption that aspect is not part of Spanish grammar must be considered suspect.

Secondly, as German grammar does not contain aspect as a grammatical category, facilitative transfer of aspectual notions from L1 German to L2 Spanish is impossible. Learners therefore need to employ compensatory strategies in approaching the learning task. In effect, the data from both studies presented in section 4 reveal that L1 German learners use rule-based knowledge to overcome learning difficulties (e.g., reliance on temporal adverbs). More importantly, the use of such learning strategies seems to have a positive influence on the L2 acquisition of aspect in prototypical contexts, but not in non-prototypical contexts. To explain such outcomes, Salaberry (2020) suggests that the distinction between implicit and explicit types of knowledge (Krashen 1985; Paradis 2009; Ullman 2016) parallels the demarcation between non-prototypical and prototypical conceptualisations of aspect, respectively. He argues that “deep” conceptual components of language (non-prototypical) may be representative of the type of implicit language knowledge that can only be attained by L1 acquisition mechanisms. In contrast, prototypical meanings of aspect are learnable by means of explicit learning processes available to L2 learners, often consisting in explicit rule-based strategies taught in Spanish classes. Especially when the linguistic representation of aspectuality differs in the L1 and the L2 (as is the case with German-speaking learners of Spanish), learners may need to focus explicitly on those differences to be able to adjust their linguistic production to the new L2 representations.

Thirdly, on the one hand, explicit instruction on aspect could be a viable approach to enable learners to understand new conceptualisations of aspect, as argued by Concept Based Instruction (e.g., Negueruela/Lantolf 2006; see section 3). On the other hand, explicit knowledge may lead to the construction of a second system based on overgeneralisation, as proposed by the Competing Systems Hypothesis (Rothman 2008), thus negatively affecting acquired implicit knowledge. Contrary to Rothman’s position, however, the analysis of the two main studies reviewed here (i.e., Diaubalick 2019; Eibensteiner 2021) shows that overgeneralisations function as a compensation strategy in the absence of properly acquired aspectual notions. In other words, explicit ruled-based knowledge does not compete with implicit competence but instead compensates for the lack of knowledge. Furthermore, the extent to which awareness-raising strategies – as proposed by Concept Based Instruction – could help learners compensate for the lack of acquired aspectual notions, especially evident in non-prototypical/non-frequent contexts, remains an open question. Further empirical evidence is, therefore, still needed.

References

- Andersen, Roger W., *El desarrollo de la morfología verbal en el español como segundo idioma*, in: Meisel, Jürgen (ed.), *Adquisición de lenguaje = Aquisição da linguagem*, Frankfurt am Main, Vervuert, 1986, 115–138.
- Andersen, Roger W., *Developmental sequences. The emergence of aspect marking in second language acquisition*, in: Huebner, Thom/Ferguson, Charles A. (edd.), *Crosscurrents in second language acquisition and linguistic theories*, Amsterdam, Benjamins, 1991, 305–324.
- Andersen, Roger W./Shirai, Yasuhiro, *Discourse motivations for some cognitive acquisition principles*, *Studies in second language acquisition* 16 (1994), 133–156.
- Baker Jennifer L./Quesada, Margaret, *The effect of temporal adverbials in the selection of preterit and imperfect by learners of Spanish L2*, in: Plonsky, Luke/Schierloh, Maren (edd.), *Selected proceedings of the 2009 second language research forum. Diverse contributions to SLA*, Somerville, Mass., Cascadilla Press, 2011, 1–15.
- Bardovi-Harlig, Kathleen/Comajoan-Colomé, Llorenç, *The aspect hypothesis and the acquisition of L2 past tense morphology in the last 20 years*, *Studies in second language acquisition* 42:5 (2020), 1137–1167.
- Bello, Andrés, *Gramática de la lengua castellana. Destinada al uso de los americanos*, Santiago de Chile, Impr. Del Progreso, [1847]. Retrieved from <http://hdl.handle.net/2027/hvd.hwhiuz> (last access: 22.07.2021).
- Comrie, Bernard, *Aspect*, Cambridge, Cambridge University Press, 1976.
- De Swart, Henriette, *Aspect shift and coercion*, *Natural language and linguistic theory* 16:2 (1998), 347–385.
- De Swart, Henriette, *Verbal aspect*, in: Binnick, Robert (ed.), *The Oxford handbook of tense and aspect*, Oxford et al., Oxford University Press, 2012, 752–780.
- Diaubalick, Tim/Guijarro-Fuentes, Pedro, *How do German speakers acquire the tense-aspect-system in Spanish as a second language? An empirical study*, in: Guijarro-Fuentes, Pedro/Juan-Garau, Maria/Larrañaga, Pilar (edd.), *Acquisition of Romance languages. Old acquisition challenges and new explanations from a generative perspective*, Berlin/Boston, Mouton de Gruyter, 2016.
- Diaubalick, Tim/Guijarro-Fuentes, Pedro, *The strength of L1 effects on tense and aspect. How German learners of L2 Spanish deal with acquisitional problems*, *Language acquisition* 26:3 (2019), 282–301.
- Diaubalick, Tim, *La adquisición del sistema verbal español por aprendices alemanes y el papel del aspecto gramatical. Una comparación entre los tiempos del pasado y los tiempos del futuro*, Tübingen, Narr Francke Attempto, 2019.
- Diaubalick, Tim/Eibensteiner, Lukas/Salaberry, Rafael, *Influence of L1/L2 linguistic knowledge on the acquisition of L3 Spanish past tense morphology among L1 German speakers*, *International journal of multilingualism* (2020), 1–18.
- Eibensteiner, Lukas, *Didaktisierung der spanischen Vergangenheitstempora. An der Schnittstelle von Wissenschaft und Praxis*, in: Corti, Augustín/Wolf, Johanna (edd.), *Romanistische Fachdidaktik. Grundlagen – Theorien – Methoden*, Münster, Waxmann, 2017, 203–215.
- Eibensteiner, Lukas, *Transfer im schulischen Drittspracherwerb. Wie L2-Kenntnisse des Englischen, Französischen und Lateinischen den L3-Erwerb von perfektivem und imperfektivem Aspekt beeinflussen*, Tübingen, Narr Francke Attempto, 2021.
- Fábregas, Antonio, *“Imperfecto” and “indefinido” in Spanish. What, where and how*, *Borealis – an international journal of Hispanic linguistics* 4:2 (2015), 1–70.

- Frantzen, Diana, *The effects of grammar supplementation on written accuracy in an intermediate Spanish content course*, *Modern language journal* 79:3 (1995), 329–344.
- García Fernández, Luis, *Sobre la naturaleza de la oposición entre pretérito imperfecto y pretérito perfecto simple*, *Lingüística española actual* 21:2 (1999), 169–188.
- Giacalone-Ramat, Anna/Rastelli, Stefano, *Learning actionality. An investigation on data of L2 Italian*, in: Ahrenholz, Bernt, et al. (edd.), *Empirische Forschung und Theoriebildung. Beiträge aus der Soziolinguistik, Gesprochene-Sprache-Forschung und Zweitspracherwerbsforschung. Eine Festschrift für Norbert Dittmar zum 65. Geburtstag*, Frankfurt am Main, Peter Lang, 2008, 239–250.
- Giorgi, Alessandra/Pianesi, Fabio, *Tense and aspect. From semantics to morphosyntax*, New York/Oxford, Oxford University Press, 1997.
- Giorgi, Alessandra/Pianesi, Fabio, *On the speaker's and the subject's temporal representation. The case of the Italian imperfect*, in: Guéron, Jacqueline/Lecarme, Jacqueline (edd.), *The syntax of time*, Cambridge, Mass., MIT Press, 2004, 259–298.
- González, Paz, *Towards effective instruction on aspect in L2 Spanish*, *International review of applied linguistics* 46:2 (2008), 91–112.
- González, Paz/Diaubalick, Tim, *Subtle differences, but rigorous implications. German and Dutch representation of tense-aspect features. Evidence from SLA*, in: De Vogelaer, Gunther/Koster, Dietha/Leuschner, Torsten (edd.), *German and Dutch in contrast. Synchronic, diachronic and psycholinguistic perspectives*, Berlin/Boston, De Gruyter, 2020, 299–328.
- Güell, M, Lourdes, *La adquisición del tiempo verbal en el aprendizaje del español como lengua extranjera*, Universitat Autònoma de Barcelona, unpublished doctoral dissertation, 1998.
- Hawkins, Roger/Hattori, Hajime, *Interpretation of English multiple wh-questions by Japanese speakers. A missing uninterpretable feature account*, *Second language research* 22:3 (2006), 269–301.
- Heinold, Simone, *Tempus, Modus und Aspekt im Deutschen. Ein Studienbuch*, Tübingen, Narr Francke Attempto, 2015.
- Hu, Guangwei, *Revisiting the role of metalanguage in L2 teaching and learning*, *EA journal* 26:1 (2010), 61–66.
- Judy, Tiffany/Perpiñán, Silvia, *The importance of crosslinguistic comparison in the study of the acquisition of Spanish*, in: Judy, Tiffany/Perpiñán, Silvia (edd.), *The acquisition of Spanish in understudied language pairings*, Amsterdam, Benjamins, 2015, 1–20.
- Klein, Wolfgang, *Time in language*, New York et al., Routledge, 1994.
- Klein, Wolfgang, *How time is encoded*, in: Klein, Wolfgang/Li, Ping (edd.), *The expression of time*, Berlin, De Gruyter, 2009, 39–82.
- Kuckartz, Udo, *Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung*, Weinheim et al., Beltz, 2016.
- Krashen, Stephen D., *The input hypothesis. Issues and implications*, Torrence, CA, Laredo, 1985.
- Langacker, Ronald W., *Grammar and conceptualization*, Berlin/New York, De Gruyter, 1999.
- Lantolf, James P., *The sociocultural approach to second language acquisition. Sociocultural theory, second language acquisition, and artificial L2 development*, in: Atkinson, Dwight (ed.), *Alternative approaches to second language acquisition*, London, Routledge, 2011, 24–47.
- Lardiere, Donna, *Some thoughts on the contrastive analysis of features in second language acquisition*, *Second language research* 25:2 (2009), 173–227.
- Leonetti, Manuel, *Por qué el imperfecto es anafórico*, in: Fernández, Luis G./Camus Bergareche, Bruno (edd.), *El pretérito imperfecto*, Madrid, Gredos, 2004, 481–507.
- Llopis-García, Reyes/Real Espinosa, Juan M./Ruiz Campillo, José P., *Qué gramática enseñar, qué gramática aprender*, Madrid, Edinumen, 2012.

- Long, Drew/Rothman, Jason, *Generative approaches and the competing systems hypothesis. Formal acquisition to pedagogical application*, in: Schwieter, John W. (ed.), *Innovative research and practices in second language acquisition and bilingualism*, Amsterdam, Benjamins, 2012, 63–84.
- Lunn, Patricia V., *The aspectual lense*, *Hispanic linguistics* 2 (1985), 49–61.
- McManus, Kevin, *Prototypical influence in second language acquisition. What now for the Aspect Hypothesis?*, *IRAL* 51:3 (2013), 299–322.
- Montrul, Sivina/Slabakova, Roumyana, *The L2 Acquisition of morphosyntactic and semantic properties of the aspectual tenses preterite and imperfect*, in: Pérez-Leroux, Ana T./Muñoz Licerias, Juana (edd.), *The acquisition of Spanish morphosyntax. The L1-L2 connection*, Dordrecht et al., Kluwer, 2002, 115–151.
- Negueruela, Eduardo/Lantolf, James P., *Concept-based instruction and the acquisition of L2 Spanish*, in: Salaberry, Rafael/Lafford, Barbara (edd.), *The art of teaching Spanish. Second language acquisition from research to praxis*, Washington DC, Georgetown University Press, 2006, 79–102.
- Negueruela, Eduardo, *Systemic theoretical instruction and L2 development. A sociocultural approach to teaching-learning and researching L2 learning*, Pennsylvania State University, unpublished Doctoral Dissertation, 2003.
- Paradis, Michel, *Declarative and procedural determinants of second languages*, Amsterdam et al., Benjamins, 2009.
- Pérez-Leroux, Ana T., et al., *Non-native recognition of the iterative and the habitual meanings of Spanish preterite and imperfective tenses*, in: Licerias, Juana/Zobl, Helmut/Goodluck, Helen (edd.), *The role of formal features in second language acquisition*, New York, Erlbaum, 2007, 432–453.
- Rastelli, Stefano, *Lexical Aspect too is learned. Data from Italian learner corpora*, in: Saxena, Anju/Viberg, Åke (edd.), *Multilingualism. Proceedings of the 23rd Scandinavian conference of linguistics*, Uppsala, Acta Universitatis Upsaliensis 8, 2009, 272–283.
- Rastelli, Stefano, *The imperfective paradox in a second language. A dynamic completion-entailment test*, *Lingua* (2019), 1–23.
- Rastelli, Stefano/Vernice, Mirta, *Developing actional competence and the building blocks of telicity in L2 Italian*, *International review of applied linguistics in language teaching* 51:1 (2013), 55–75.
- Reichenbach, Hans, *Elements of symbolic logic*, New York, Free Press, 1947.
- Rojo, Guillermo, *Relaciones entre temporalidad y aspecto en el verbo español*, in: Bosque, Ignacio (ed.), *Tiempo y aspecto en español*, Madrid, Cátedra, 1990, 17–43.
- Rothman, Jason, *Aspectual morphology use in adult L2 Spanish and the competing system hypothesis. When pedagogical and linguistic rules conflict*, *Languages in contrast* 8:1 (2019), 74–106.
- Salaberry, M. Rafael/Comajoan, Llorenç (edd.), *Research design and methodology in studies on L2 tense and aspect*, Berlin/Boston, De Gruyter, 2013.
- Salaberry, M. Rafael, *the development of past tense verbal morphology in classroom L2 Spanish*, *Applied linguistics* 20:2 (1999), 151–178.
- Salaberry, M. Rafael, *Tense aspect in verbal morphology*, *Hispania* 86:3 (2003), 559–573.
- Salaberry, M. Rafael, *Assessing the effect of lexical aspect and grounding on the acquisition of L2 Spanish past tense morphology among L1 English speakers*, *Bilingualism: language and cognition* 14:2 (2011), 184–202.
- Salaberry, M. Rafael, *Contrasting preterit and imperfect use among advanced L2 learners. Judgments of iterated eventualities in Spanish*, *IRAL* 51:3 (2013), 243–270.
- Salaberry, M. Rafael, *The conceptualization of knowledge about aspect. From monolingual to multilingual representations*, in: Bardel, C/Sánchez, C (edd.), *Third language acquisition. Age, proficiency and multilingualism*, Berlin, Language Science Press, 2020, 43–66.

- Salaberry, M. Rafael/Martins, Custodio, *Crosslinguistic transfer of core aspectual conceptualizations in Portuguese and Spanish. Theoretical and methodological factors*, in: Amaral, Patricia/Carvalho, Ana M. (edd.), *Portoguese-Spanish interfaces. Diachrony, synchrony and contact*, Amsterdam/Philadelphia, Benjamins, 2014, 335–355.
- Sharwood Smith, Michael, *Second language learning. Theoretical foundations*, London et al., Longman, 1994.
- Slabakova, Roumyana/Montrul, Silvina, *Genericity and aspect in L2 acquisition*, *Language acquisition* 11:3 (2003), 165–196.
- Slabakova, Roumyana/Montrul, Silvina, *Aspectual shifts. Grammatical and pragmatic knowledge in L2 acquisition*, in: Muñoz Licerias, Juana/Zobl, Helmut/Goodluck, Helen (edd.), *The role of formal features in second language acquisition*, New York, Erlbaum, 2008, 106–140.
- Smith, Carlota S., *The Parameter of aspect*, Dordrecht et al., Kluwer, 1997.
- Tong, Xiner/Shirai, Yasuhiro, *L2 acquisition of Mandarin “-zai” and “-le”*, *Chinese as a second language research* 5:1 (2016), 1–25.
- Ullman, Michael T., *The declarative/procedural model. A neurobiological model of language learning, knowledge, and use*, in: Hickok, Gregory/Small, Steven L. (edd.), *Neurobiology of language*, Amsterdam et al., Elsevier, 2016, 953–968.
- Vendler, Zeno, *Verb and times*, *The philosophical review* 66:2 (1957), 143–160.
- Westfall, Ruth/Foerster, Sharon, *Beyond aspect. New strategies for teaching the pretérito and the imperfecto*, *Hispania* 79:3 (1996), 550–560.
- Whitley, Melvin S., *Spanish/English contrasts. A course in Spanish linguistics*, Washington DC, Georgetown University Press, 1986.
- Yáñez-Prieto, Maria-del-Carmen, *On literature and the secret art of (im)possible worlds. Teaching literature through language*, unpublished PhD thesis, State College, PA, The Pennsylvania State University, 2008.

