

## **Does the ending matter? Revisiting the acquisition of L2 Spanish grammatical gender by gendered and ungendered L1 adults**

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### **1. Introduction**

The acquisition of grammatical gender in Spanish has been widely investigated in the L2 and 2L1<sup>1</sup> literatures (e.g., Bruhn de Garavito and White, 2002; Franceschina, 2005; Montrul et al., 2008; Alarcón, 2011, 2020; Dussias, et al., 2013; Fernández Fuertes et al., 2016; González et al., 2019; Martoccio, 2019). In particular, previous studies on second language acquisition (SLA) have focused on identifying the difficulties L2 speakers encounter in their acquisition process and if they finally attain a native-like performance. This has been researched with speakers whose L1s have grammatical gender such as Russian, German and Dutch (e.g., Camacho and Kirova, 2015; Gómez Carrero and Ogneva, forthcoming; González et al., 2019), and more commonly with L2 speakers whose L1s have no grammatical gender such as English (e.g., Montrul et al., 2008, 2014; Alarcón 2011, 2020; Diebowski, 2021; Kirova and Camacho, 2021).

Some studies have shown interest in how gender transparency, that is, if the noun ends in -o for masculine (e.g., *libro* – ‘book’) and -a for feminine (e.g., *mesa* – ‘table’), can act as a cue to facilitate gender assignment and gender agreement to these speakers. This, indeed, has been the case for Spanish monolingual speakers, who have shown sensitivity to the differences in gender transparency (Bates et al. 1996; Caffarra et al., 2014). Thus, the aim of this chapter is to review the most relevant works recently published on the acquisition of grammatical

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<sup>1</sup> 2L1 refers to the speakers who have acquired two languages from birth, also known as simultaneous bilinguals.

gender in L2 Spanish. The focus is set on the role that the gender transparency of the noun plays in the speaker's acquisition and its effect depending on the presence or absence of gender in their L1.

This paper is structured as follows. We first provide a description of the Spanish gender system and the SLA theories which have been put forward in order to explain the acquisition of this grammatical feature. Next, we review studies on L2 Spanish gender acquisition by speakers of ungendered and gendered L1s. Results from both online and offline experimental research are taken into consideration. Finally, some conclusions obtained from the empirical findings as well as some ideas and suggestions for future research are included in the last section.

## 2. Gender in Spanish

Spanish animate nouns can be classified as masculine or feminine based on their biological sex (e.g., *niño* <sub>masc.</sub> vs. *niña* <sub>fem.</sub> – ‘boy’ vs. ‘girl’). However, the classification of Spanish inanimate nouns has been considered an arbitrary phenomenon because there are no characteristics which are strictly masculine or strictly feminine (Roca, 1989). Indeed, some nouns which designate animate beings can have more than one gender, such as *estudiante* (‘student’) or *cónyuge* (‘spouse’) which can refer to a feminine or a masculine referent depending on the agreement it establishes with the determiner or the adjective (e.g., *el* <sub>masc.</sub> *estudiante* / *la* <sub>fem.</sub> *estudiante*; *el* <sub>masc.</sub> *cónyuge* / *la* <sub>fem.</sub> *cónyuge*) (Real Academia de la Lengua Española, 2009). Harris (1991) classified Spanish nouns into three categories: inner core, outer core and residue nouns. First, the inner core nouns are the pairs which can be opposed based on their endings, that is, the pair *niño-niña* (‘boy-girl’), in which the ending -o corresponds to the masculine form of the noun while -a corresponds to its feminine form. The same occurs in the case of inanimate nouns such as *libro* (‘book’) and *casa* (‘house’), whose endings are transparent and indicate masculine and feminine nouns, respectively. The endings -o and -a are then considered transparent morphemes because 99.89% of the Spanish nouns which end in -o are masculine and 96.6% of the nouns which end in -a are feminine (Teschner and Russell, 1984). Second, the outer core nouns are the ones which have ambiguous or opaque endings, that is, a consonant or a vowel different from -o for masculine and different from -a for feminine, such as

*reloj* (masculine – ‘clock’) or *pared* (feminine – ‘wall’). The last category involves residue nouns which are mostly masculine nouns ending in -a such as *programa* (‘program’) or feminine ending in -o such as *mano* (‘hand’) (see Harris, 1991 for a detailed discussion).

The opposition in terms of gender transparency in the case of inanimate nouns, that is, transparent nouns vs. opaque nouns, has been discussed when investigating the acquisition of gender agreement between the noun, the determiner and the adjective within the determiner phrase, as in (1). Although Spanish has a very transparent gender system in comparison to other languages such as German, we can only establish «probabilistic tendencies or patterns» of the speaker’s performance (Kirova and Camacho, 2021: 8).

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|-----|--|----|---|
| (1) | a. La casa roja                          | vs | la pared blanca [femenine]              |
|     | the house <small>transparent</small> red |    | the wall <small>opaque</small> white    |
|     | ‘the red house’                          |    | ‘the white wall’                        |
|     | b. El libro rojo                         | vs | el lápiz amarillo [masculine]           |
|     | the book <small>transparent</small> red  |    | the pencil <small>opaque</small> yellow |
|     | ‘the red book’                           |    | ‘the yellow pencil’                     |

Furthermore, masculine is reported to be the default form in Spanish (Harris, 1991; Roca, 1989) or «the absence of any information about gender in lexical entries» (Harris 1991: 44). This status can be seen when using compound nouns in Spanish such as *el sacapuntas* (‘the pencil sharpener’) or *el abrelatas* (‘can opener’) as none of the words that form them are masculine, but, in this case, they are verbs (*saca*, *abre* – ‘extract’, ‘open’) and feminine nouns (*puntas*, *latas* – ‘tip’, ‘can’). The default status of masculine has also been seen in the overproduction of this gender value by L2 Spanish and Spanish heritage speakers<sup>2</sup>. These speakers are not able to access the appropriate form, so they overuse the default form (Diebowski, 2021).

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<sup>2</sup> Heritage speakers are those whose heritage language is the minority language acquired at home, while the L1 is the language present in the social context (Montrul, 2016).

### 3. Theories on SLA: Full access or no access to the Universal Grammar?

One of the questions that SLA literature has tried to answer is whether the L2 learner has access to the Universal Grammar (UG)<sup>3</sup>. Representational deficit proposals and full access proposals have been posited as an attempt to account for the grammatical variability of the L2.

Among the representational deficit proposals, the Failed Functional Features Hypothesis (Hawkins and Chan, 1997) argues that L2 learners cannot fully acquire uninterpretable features which are not present in their L1s after the critical period<sup>4</sup>. Put differently, the UG principles and operations are present in SLA but the features which are not present in the L1 may cause learnability problems (Tsimplici and Dimitrakopoulou, 2007). Thus, in the case of grammatical gender, only those L2 learners for whom grammatical gender is present in their L1s would be able to successfully acquire it in the L2. For instance, L1 German or L1 Russian adults learning Spanish will acquire gender in a native-like form, but this will not be the case for L1 English adults. In the same line, but rather focusing on the interpretability of the features, the Interpretability Hypothesis (Tsimplici and Dimitrakopoulou, 2007) claims that, after the critical period, the uninterpretable features which are not selected during the L1 acquisition from the UG inventory will not be accessible in the L2 acquisition. Although these authors originally used such a hypothesis to test *wh*-subject and object extraction by Greek learners of L1 English, this hypothesis as well as the Failed Functional Features Hypothesis have been applied to the gender acquisition phenomenon (e.g., Hawkins and Franceschina, 2004).

On the other hand, the full access proposals assume that L2 learners have complete access to the UG for the L2 in the same way they do for the L1. This implies that learners are able to acquire L2 Spanish past their

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<sup>3</sup> In general terms, the Universal Grammar (UG) is defined as the system that contains the principles and rules which are common to all human languages and which are «available to each individual prior to experience» (Chomsky, 2000: 7).

<sup>4</sup> The critical period refers to the window of time after which a language is no longer acquired, but learnt. This time period is what differentiates an L1 or a 2L1 speaker from an L2 speaker. However, there has not been an agreement on the exact age this occurs. Indeed, some researchers have indicated that there are diverse critical periods depending on the linguistic field (e.g., Meisel, 2008; Montrul, 2008).

critical period, even when certain features are not present in their L1, assuming that «L2 learners acquire complex and subtle properties of language that could not have been induced from the L2 input» (White, 2003: 22). One of the full access hypotheses, the Full Transfer/Full Transfer Hypothesis (Schwartz and Sprouse, 1996), asserts that «the learner's L1 grammar constitutes the initial state of L2 acquisition» (Diebowski, 2021: 76). Likewise, the Missing Surface Inflection Hypothesis (Prévost and White, 2000), another full access proposal, claims that the L2 learner can attain a native-like knowledge despite the fact the acquisition has been done past the critical period. The full access proposals also contend that advanced learners can fail to associate syntactic properties with their correct morphological and phonological forms. Yet, they link this failure to association rather than to the access.

SLA researchers have sought to test these hypotheses with data from all kinds of L2 Spanish adults. In the following sections, some of the most recent studies published using data from gendered and ungendered L1 speakers are reviewed.

#### 4. L2 Spanish gender acquisition by ungendered L1 speakers

The acquisition of L2 Spanish grammatical gender has been widely investigated when the speaker's L1 is ungendered<sup>5</sup>, that is, when it has no grammatical gender, as it is the case of English (e.g., Montrul et al., 2008, 2014; Alarcón, 2011, 2020)<sup>6</sup>. This has allowed researchers to observe if the absence of this grammatical feature hinders its acquisition or, on the

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<sup>5</sup> Most of the studies described in this paper have compared speakers with different linguistic profiles (i.e., monolingual, heritage speakers, L2 learners). As the focus of this paper is set on Spanish L2 learners, we are only reporting the results and conclusions related to this type of population.

<sup>6</sup> As one of the reviewers has pointed out, Spanish grammatical gender has also been explored in structures involving codeswitching or null noun constructions with child data (e.g., Licerias et al. 2000; Licerias et al., 2008) and with data from participants with atypical language development (Licerias and García Alcaraz, 2019) to determine how this feature is represented in the mind of the speaker. Yet, this is not discussed in this paper since it is out of the scope.

contrary, is not an obstacle for attaining grammatical gender in a native-like manner.

Martoccio (2019) investigated gender assignment in Spanish by using a vocabulary task. Participants were divided into two groups according to their proficiency levels: intermediate and advanced. Masculine and feminine animate and inanimate nouns with transparent and opaque endings were included in the mentioned task. Participants were asked the gender of 63 nouns as well as their certainty of the gender and meaning of the noun. Results showed that participants obtained a 100% accuracy assigning gender to transparent nouns (e.g., *casa* <sub>fem.</sub>, *libro* <sub>masc.</sub>) regardless of their proficiency level. However, when it came to opaque nouns (e.g., *pared* <sub>fem.</sub>, *lápiz* <sub>masc.</sub>), results varied across groups: advanced speakers demonstrated a native-like performance, while the intermediate group only scored a 65% of accuracy. According to Martoccio (2019: 15), these results suggest «a lack of both implicit and explicit knowledge of gender for these intermediate L2 learners».

In turn, Kirova and Camacho (2021) observed whether gender assignment cues (animacy of the noun, gender transparency and gender of the agreeing elements) influenced gender agreement in low and high proficiency L2 Spanish learners. They used a self-paced reading grammaticality judgment task in which they could also measure the participant's implicit knowledge. Results revealed that accuracy and speed in their answers were due to the gender transparency of the nouns as well as to the participants' proficiency levels: low proficiency participants were more accurate and faster with transparent nouns than with opaque nouns (86% and 61% of accuracy, respectively). These results indicate that low proficiency participants have not yet built abstract lexical representation when the noun has an opaque ending. Additionally, these researchers point to a preference for the masculine by default with some consonant endings such as -z or -l (*\*el luz* <sub>fem.</sub> – 'the light'). Alarcón (2020) also investigated gender accuracy and speed rates in the case of high proficient L2 learners. She found that neither accuracy nor speed were affected by the gender transparency of the noun.

In the same line, by recording eye movements from advanced L2 Spanish speakers, Halberstadt et al. (2018) addressed how L2 learners used the gender information encoded in the Spanish determiner when they had to choose between two nouns, either having the same or different genders, and which were contrasted in terms of gender transparency (e.g.,

*peine* masc. opaque ‘comb’ – *lápiz* masc. opaque ‘pencil’; *loro* masc. transparent ‘parrot’ – *langosta* fem. transparent ‘lobster’). In accordance with previous studies, their results revealed that participants used transparent endings as cues to facilitate gender processing, as «transparent nouns are more easily integrated into the grammatical gender system» (Halberstadt et al., 2018: 23).

Montrul et al. (2014) also addressed the effect of gender transparency of the noun by using three online spoken word recognition tasks. In them, participants had to decide on the gender of the noun as well as on whether sentences were grammatical or ungrammatical. Their results confirmed that L2 learners were faster and more accurate with transparent nouns than they were with opaque nouns. These conclusions concur with previous offline studies they had carried out (e.g., Montrul et al., 2008).

Foote (2015) used a sentence fragment production task to address the effect of the morphology of the noun in the acquisition of gender agreement in Spanish. Intermediate and advanced participants were presented the masculine and feminine versions of an adjective followed by a sentence fragment such as *la puerta del baño* (‘the bathroom door’). Participants were asked to repeat the fragment and to complete the sentence by using a verb and the corresponding form of the adjective. She found that L2 learners were affected by the transparency of the head noun since both groups produced more gender agreement errors when the noun was opaque. In this case, there was no effect caused by the level of proficiency.

The conclusions obtained from the studies described above are in line with other previous studies which did not take into account the gender transparency of the noun. While Grüter et al. (2012) observed that the results varied based on the type of task, as they were less accurate in an elicited production task in comparison to comprehension, Keating (2009) concluded that sensitivity to gender violations would rather depend on the level of the participants.

Overall, it seems that gender transparency plays a prominent role in the acquisition of L2 Spanish grammatical gender for speakers of ungendered languages, in particular, L1 English adults. These studies have shown that L1 English speakers show more sensitivity to gender ungrammaticalities and produce less gender errors when the noun has a transparent ending. Yet, opaque nouns are still difficult for them, and their

performance would depend on both their level of proficiency (intermediate vs. advanced) as well as the type of experiment (offline and online comprehension vs. a more guided production). A summary of the main results from the studies discussed in this section can be found in Table 1.

<b>Study</b>	<b>L1</b>	<b>Participants</b>	<b>Task</b>	<b>Results</b>
<b>Martoccio (2019)</b>	English	Intermediate and advanced L2 Spanish learners	Vocabulary task	Accuracy with transparent nouns Accuracy with opaque nouns depended on the level of the group
<b>Kirova and Camacho (2021)</b>	English	Low and high proficiency L2 Spanish learners	Self-paced reading grammaticality judgment task	Accuracy and speed in assigning gender depended on the level of the participant and the transparency of the noun
<b>Halberstadt et al. (2018)</b>	English	Advanced L2 Spanish learners	Visual world paradigm	Participants used transparent endings as cues to facilitate gender processing
<b>Montrul et al. (2014)</b>	English	Advanced L2 Spanish learners	Online spoken word recognition tasks	Participants were faster with transparent nouns
<b>Foote (2015)</b>	English	Intermediate and advanced L2 Spanish learners	Sentence fragment production task	Both groups were more accurate with transparent nouns

Table 1: Summary of the main results obtained in studies with ungendered L1 speakers.



## 5. L2 Spanish gender acquisition by gendered L1 speakers

A growing number of studies on SLA has paid attention to how the presence of grammatical gender in the L1 of the learners influenced L2 gender acquisition. Not only do these studies provide interesting insights into how gender values of the L1 and the L2 interact, but they also report whether L2 grammatical gender is processed and produced differently by speakers of gendered languages. Indeed, many of them have even included a comparison across groups with ungendered and gendered L1s in order to determine whether the absence or presence of this grammatical feature in the L1 affects gender acquisition in Spanish.

Russian, for example, has a three-gender system (masculine, feminine and neuter) which is considered transparent in comparison to other languages like German or Norwegian (Bordag et al., 2006). Selecting Russian as L1, Kirova (2016) addressed gender acquisition in L2 Spanish by using comprehension tasks such as a grammaticality judgment task and a picture-matching task. She also included speakers of an ungendered L1 like English and divided her participants according to their language proficiencies (low and advanced). Her results indicate that the absence of grammatical gender in the L1 does not affect gender acquisition in the L2, since the L1 English group showed similar accuracy to the L1 Russian speakers. The most advanced L1 English group demonstrated a native-like performance in terms of judgment and reaction times. In her findings, she observed that low proficiency L1 English speakers were more native-like with nouns with a transparent ending in comparison to nouns with opaque endings. It seems that «even low proficiency learners have a syntactic competence and they are starting to acquire a morphological competence» (Kirova, 2016: 143). Yet, she concluded that the presence of syntactic features may not guarantee morphological competence.

Camacho and Kirova (2015) investigated grammatical gender acquisition in L2 Spanish by L1 Russian speakers. Participants were divided into three proficiency levels: low, intermediate and high, and they were asked to evaluate a set of sentences. Although their main aim was to determine if the presence of gender in Russian facilitated the acquisition of the distribution and the structure of nominal phrases in Spanish, their experimental items also included transparent and opaque gender marking.

In other words, they compared the judgments given to transparent nouns to those given to opaque nouns (i.e., ending in -e). Their results suggest that transparent gender marking is important, yet not significant, and that participants treated words ending in -a differently from words ending in -o or -e.

Gómez Carrero and Ogneva (forthcoming) investigated L1 Russian and L1 English speakers performing an acceptability judgment task. Their task consisted in evaluating sentences in Spanish which included a determiner phrase with a determiner, an adjective and a noun. Their aim was to compare both groups of participants in order to determine whether the acquisition of grammatical gender in Spanish was affected by the presence or absence of gender features in the L1 and whether the morphology of the noun influenced acquisition. The authors found that both groups were sensitive to gender ungrammaticality, above all when nouns had transparent endings. Thus, they concluded that an overt morphology on the noun may act as a gender cue and facilitate the detection of gender mismatches (e.g., \**el* <sub>masc.</sub> *playa* <sub>fem. transparent</sub> *sucio* <sub>masc.</sub> – ‘the dirty beach’).

Ogneva (2022) focused on how transparent nouns helped or hindered assigning Spanish gender by using a task in which L1 Russian speakers had to classify nonce words (i.e., invented words) with transparent endings (i.e., *uplo* or *fella*) and nonce words with opaque endings (i.e., *sione*). She compared their results to Spanish monolinguals and found that, when dealing with transparent endings, both groups classified them correctly according to their endings, so that nouns ending in -o were classified as masculine and those ending in -a were classified as feminine. In the case of the opaque nouns, results revealed that both monolinguals and L1 Russian speakers categorized them as masculine, pointing to the masculine gender as the default form in Spanish.

On the other hand, German has an opaquer gender system, also based on three gender values: masculine, feminine and neuter (as discussed above for Russian, too). Diebowski (2021) addressed the acquisition of Spanish grammatical gender by L2 and heritage speakers. In her study, she included L1 English and L1 German adults with three proficiency levels (low, intermediate and advanced). Participants performed three tasks: a written forced-choice selection task, a written grammaticality judgment task and an oral elicitation picture task. In the experimental items, she incorporated determiner phrases with adjectives, and she took

into account gender transparency by balancing transparent and opaque nouns. Overall, results indicated that the presence of gender in the L1 influenced the acquisition of gender in Spanish as L2, since the L1 German group showed more accuracy. Although both groups' performance seemed to be modulated by the presence of transparent endings, the L1 English group stood up for its performance when encountering a transparent noun.

In sum, studies focusing on gendered L1 speakers acquiring Spanish as L2 have included data from Spanish monolinguals or from ungendered L1 speakers (normally English) in order to compare their results and to determine if the presence of this grammatical feature in their L1 facilitates its acquisition. Most of the studies described above have indicated a transfer effect from the L1 into the L2, that is, gendered L1 participants show more sensitivity to gender assignment and agreement errors when compared to ungendered L1 participants. Moreover, when discussing the effect of gender transparency, most of the studies have displayed similar results to those described by the studies of L1 English: participants show better performance when nouns are transparent. A summary of the main results from the studies discussed in this section can be found in Table 2.

Study	L1	Participants	Tasks	Results
<b>Kirova (2016)</b>	Russian /English	Low and advanced L2 Spanish learners	Grammaticality judgment task; a picture-matching task	L1 Russian and L1 English participants showed similar performance. Low proficiency L1 English showed a more native-like performance with transparent nouns
<b>Camacho and Kirova (2015)</b>	Russian	Low, intermediate and high L2 Spanish learners	Acceptability judgment task	Gender transparent marking is important but not significant

<b>Gómez Carrero and Ogneva (forthcoming)</b>	Russian /English	Advanced L2 Spanish learners	Acceptability judgment task	More sensitivity to gender ungrammaticalities when the noun is transparent
<b>Ogneva (2022)</b>	Russian	Intermediate -advanced L2 Spanish learners	Gender classification task of nonce words	Transparent nonce nouns were classified correctly. Opaque nonce nouns were classified as masculine as default
<b>Diebowski (2021)</b>	German /English	Low, intermediate and advanced L2 Spanish learners	A written forced-choice selection task; (a written grammaticality judgment task; an oral elicitation picture task	Transparent endings modulated the performance of both groups, above all for the L1 English speakers

Table 2: Summary of the main results obtained in the studies with gendered L1 speakers.

## 6. Conclusions

The present chapter has attempted to review the main recent studies on the L2 acquisition of Spanish grammatical gender. In particular, the emphasis has been placed on the discussion of experimental data from participants with ungendered L1s (mainly English) and with participants whose L1s have a gender system (mainly Russian and German), so that a comparison could be established in terms of their difficulty or easiness in the acquisition of this grammatical property in Spanish. More specifically, we have focused on the role of the gender transparency of the noun in the learner's acquisition process. Most of the reviewed studies suggest that a transparent ending entails a cue for gender marking (Montrul et al., 2014; Halberstadt et al., 2018; Ogneva, 2022, Gómez Carrero and Ogneva, forthcoming). Thus, it helps L2 Spanish learners identify gender

ungrammaticalities and it acts as a facilitator in the assignment of the corresponding gender value. Some researchers argue that L2 learners are less accurate assigning gender to opaque nouns, as they are not able to use the lexical route to access the gender of these nouns and they use the form-based route, instead (Kirova and Camacho, 2021).

Regarding the second issue under consideration in this chapter, the presence or absence of gender in the speaker's L1, results have been generally inconsistent. On the one hand, there is evidence that L2 speakers of Spanish are not able to fully acquire grammatical gender supporting the Failed Functional Feature Hypothesis (Hawkins and Chan, 1997). Indeed, these results have been reported in studies with speakers of both ungendered and gendered L1 (Kirova, 2016). On the other hand, some researchers suggest that L2 speakers can fully acquire grammatical properties, even though they are absent in their L1, supporting the Full Transfer/Full Access Hypothesis (Schwartz and Sprouse, 1996). What seems consistent is that the presence of a gender system in the L1, as in Russian or German, helps in its acquisition in the L2, since learners are aware of the presence of this grammatical feature, above all when they encounter nouns with opaque endings. However, L2 Spanish learners with ungendered L1s become aware of the presence of a gender system in the L2 when they are faced with transparent endings. This hints at a debate more related to the transparency of the gender system of the languages as L2. That is, if the scenario would be different if the L2 learners had to deal with languages with an opaquer system, such as German or Norwegian, as the L2, instead of Spanish, which has a more transparent gender system.

Considering all of the above, and as the most studied language combination is L1 English-L2 Spanish, it would be relevant to include native speakers of other ungendered languages, such as Asian languages (e.g., Chinese or Japanese) and Uralic languages (e.g., Finnish, Estonian) in future research. Similarly, there are only a few studies available on how native speakers of gendered languages acquire grammatical gender in L2 Spanish. Specifically, research with L1 Russian-L2 Spanish and L1 German-L2 Spanish language combinations has been conducted. Thus, future research should focus on other gendered languages, such as Dutch, Norwegian and other Romance languages (e.g., Italian, French). In fact, Romance languages may provide interesting insights into the interaction of closely related gender systems. Another possible line of research is to

collect data from native speakers of gendered languages with non-sex-based gender systems (Corbett, 2013).

Furthermore, although some of the studies have included L2 speakers of different language proficiency (beginner, intermediate and advanced), we are yet far from fully understanding how the grammatical gender system is being acquired at different stages and whether individual factors may play a role in this process. A longitudinal approach may shed light on this issue. Studies that investigate instructional or teaching strategy effects are also needed. Martoccio (2019) suggests that a stronger focus on distributional co-occurrence relations in the L2 classroom may help not only L2 learners but also non-native language instructors to improve gender assignment accuracy. It is also important to highlight that there are only a few works that have adopted an experimental approach focusing on the online processing of grammatical gender in L2. Event related potential (ERP) studies with native Spanish speakers showed that noun endings can act as a cue to facilitate gender assignment and agreement (Caffarra et al., 2014). Therefore, future studies should consider using eye-tracking or ERP with L2 Spanish speakers.

To summarize, research on grammatical gender acquisition in L2 Spanish has already provided some conclusions about how gender is acquired and processed by speakers of gendered and ungendered languages. Nevertheless, given that the results of these studies are in some way conflicting, especially when it comes to the topic of the presence or absence of gender in the L1, several questions remain open to debate. We have considered some of these questions in the present chapter, and future research should contribute to advancing on these issues. Grammatical gender is a complex phenomenon and therefore should be studied from a variety of theoretical and experimental approaches.

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