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The Acquisition of L2 Spanish Morphosyntax

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The increasing importance of Spanish as a global language over the past few decades has ushered in both an impressive influx of non-native speakers learning it in adulthood as well as a dramatic upswing in second language (L2) acquisition and processing studies focusing on Spanish. The proliferation is relatively new: despite having an established record of nearly four decades, by the late 90s research into L2 Spanish was still comparatively rare within the field of Second Language Acquisition (SLA) (Montrul and Bruhn de Garavito, 1999), which at the time was—and still is—dominated by L2 English studies. And yet, doing even descriptive justice to what in 2017 can be viewed as an extensive literature on L2 Spanish greatly exceeds the possibilities of a chapter like this one. Although perhaps unusual, we will start, then, by stating what this chapter cannot (and *should* not) be: an exhaustive survey of the field, one that discusses the nature and state-of-the-art knowledge of most linguistic properties investigated to date, and one that tells the reader all there is to know about the L2 acquisition of Spanish morphosyntax from the perspective of as many competing L2 theories as possible. While such a text would undoubtedly be useful for many, trying to do so herein would be akin to self-inflicted failure from the start, as a meaningful summary of this type could only be done well in a text of monograph length. Instead, we have aimed to offer you here a broad, authoritative index; an approachable and hopefully intriguing access point to a field that has rapidly grown in scope, methodological and theoretical approaches, especially in the past two decades.

Our task, then, is to give the reader a sense of the amount and the nature of studies that have dealt with the L2 acquisition of Spanish morphosyntax, providing as many useful references as possible to a plethora of domains of grammar investigated over the years. At the same time, we would be neglecting our duty as curators if we did not expand on our coverage of some specific points. The domains of grammar we cover in greater detail are meant to serve as examples of what could equally be written for all other domains of L2 Spanish morphosyntax we touch upon more in passing. What we give up in detail for most domains of L2 Spanish morphosyntax, we hope to make up for in broader coverage overall so that those wishing to delve further into any given topic on L2 Spanish morphosyntax will have access in this overview chapter to the citation of as much primary research as possible to get them started properly. This chapter is structured into two main sections, which bring together work focusing on properties associated to the verbal and nominal domains respectively[1], painting the overall picture of L2 Spanish morphosyntax studies with both broad, medium and narrow strokes. Within each of these sections, we provide a cursory overview of the range of linguistic properties that have been investigated (the broad strokes), which readers can follow up on through the cited studies and reviews. Next, we isolate one one specific property in more detail (the medium strokes), and finish by describing a key study which has investigated that property (the narrow stroke). Although a different formula to our task might equally or better do the job, we believe that this is the best way to confront the embarrassment of riches—the sheer quantity of grammatical properties and the sheer number of high quality studies that could be reviewed herein. We hope that, by adjusting the granularity of our survey in this manner, we will have achieved a fair balance between the sharpness and the breadth that are simultaneously expected from a chapter of this type.

Despite a bias in the number of studies from a formal linguistic perspective that have traditionally populated the L2 Spanish morphosyntax literature—especially when considering the last 40 years as opposed to the last decade or so—there are indeed many theories and frameworks of L2 acquisition (see, e.g., Herschensohn and Young-Scholten, 2013, and Geeslin, 2014a, as applied specifically to Spanish), all of which we hope to represent here. The beauty of working on acquisition is that we can afford, when appropriate, to put important paradigmatic discussions aside and deal primarily with the byproduct of well-designed studies: the data themselves. Data that are well-collected can sit neutrally at the periphery of both theory-internal and cross-theoretical debates, precisely because they can be treated descriptively and constitute the basis of evidence that all theories must ultimately account for. With this in mind, two general questions, which all cognitive theories of L2 acquisition

are concerned with, underlie our discussion: (i) whether or not child and adult acquisition are destined to be fundamentally different in development and outcome and (ii) how previous linguistic experience constrains, if at all, the progress and ultimate success of the L2 learning task.

Acquisition of properties related to the verbal domain

We begin this section by summarizing key findings of one of the most widely studied properties of Spanish: the Spanish copula (*ser* vs. *estar*) (e.g., Brown and Cortés-Torres, 2012; Bruhn de Garavito, 2009; Bruhn de Garavito and Valenzuela, 2008; Camacho 2012; Collentine and Asención-Delaney, 2010; Dorado, 2011; Geeslin, 2003, 2014b; Geeslin and Guijarro-Fuentes, 2006, 2008; Roby 2009; VanPatten, 1985, 1987; Woolsey, 2008; Zyzik and Gass, 2008). Most of this work shows that L2 learners, especially when their L1 does not have a two-way copula distinction, have difficulty converging on the distributional patterns throughout development. However, some studies also show that at later stages of acquisition this contrast can be fully mastered. This is an interesting property to study in part because the *ser vs. estar* distinction is a variable property across dialects of Spanish and the difference seems to be a moving target, that is, *ser vs. estar* seems to be in a continuous synchronic process of change, especially and differentially across particular native dialects (Sánchez-Alonso, Deo and Piñango, 2016). The sociolinguistic side of SLA theories have rightly taken this factor into consideration (see, e.g., Geeslin, 2003).

Additionally, the study of verbal arguments, be them subjects or objects, has been a source of great insight into the underpinnings of SLA theories more generally, as well as the study of Spanish more specifically. The acquisition and distribution of the subject arguments of the verb in Spanish have been a topic of particular focus, in part because a minimal requirement of all verbs (in use) is the associated subject. That is, a verb must project a subject position (whether morpho-phonologically present or not) whereas object arguments are—depending on the argument structure of the verb—optional. Subjects are, therefore, one of the most frequent syntactic structures in any language. As is well known, languages can vary syntactically with regards to whether they require an overtly expressed subject (e.g., English, French, German) or allow for the optionally overt expression of subjects (e.g., Spanish, Arabic, Italian) (see Alexiadou and Anagnostopoulou, 1998). In the case of so called null subject languages, the distribution of overt and null subjects is typically constrained by discourse pragmatic factors. Spanish is relatively straightforward in that the null pronoun is the default and thus tends to be used unless there is a discourse reason not to do so. Overt pronouns are pragmatically conditioned, typically indicating a shift in topic, contrastive focus or other discourse marking. The literature on L2 Spanish has examined both the syntactic and the syntax/discourse sides of subjects. Details aside, there is relative agreement that L2 learners of Spanish, irrespective of whether their L1 is or is not a null subject language, eventually acquire the syntactic properties of subjects, that is, that there are null expletive (obligatory) and null referential (optional) pronouns (e.g., Liceras, 1989; Liceras and Díaz, 1999; Lozano, 2002a; Montrul and Rodríguez Louro, 2006; Pérez-Leroux and Glass, 1997, 1999; Rothman, 2007, 2009; Geeslin and Gudmestad, 2008, 2011). However, the literature that has also examined the syntax-discourse knowledge regarding the distribution of overt and null subjects reveals that the syntactic properties are acquired much earlier than the discourse-dependant ones, if the latter is acquired to native-likeness at all (e.g., Lozano, 2002b, Montrul and Rodríguez Louro, 2006; Rothman 2007, 2009).

Object arguments, especially clitic pronouns (*me/nos, te/os, la/s*, *le/s*, *lo/s*, and so on), are much like subjects. Thus they can be treated either as the exponents of verbs (e.g., related to syntactic case) or because they are themselves DP/NPs, particular properties related to them, such as morphosyntactic agreement in gender and number, can be treated as part of the nominal domain. What makes clitics interesting is that for English native speakers—the majority of L2 learners tested—their L1 lacks this syntactic category entirely[2]. Concerning the licensing of clitic object pronouns, their appropriateness for case assignment and the collocational distributions (where they are placed with respect to finite and nonfinite verbal forms), research shows that clitics can be acquired (even sociolinguistic variation such as *leísmo* in study abroad contexts) even when the L1 lacks this syntactic category, despite developmental errors in apparent surface case forms (e.g., dative used for accusative and vice versa) and related word order issues (e.g., Bruhn de Garavito and Montrul, 1996; Geeslin, García-Amaya,

Hasler-Barker, Henriksen and Killam, 2010; Halloran and Rothman, 2015; Lee, 2003; Liceras, 1985; Liceras, Maxwell, Laguardia, Fernández, Fernández and Díaz, 1997; Malovrh, 2008; Malovrh and Lee, 2010; Montrul, 2010a, 2010b; Perales and Liceras, 2010; VanPatten 1990; Zyzik, 2004, 2006, among others). Additionally, Spanish allows for some objects to be null (based on semantic factors such as specificity), crucially those outside of syntactic islands. Recent studies have examined whether or not L2 learners of Spanish can acquire such restrictions (e.g., Bruhn de Garavito and Guijarro Fuentes, 2002; Zyzik, 2008; Rothman and Iverson 2013; Cuza et al., 2013b). This is an interesting topic since it has not been so exhaustively examined and because available data exists from a multitude of L1s learning Spanish as an L2. In this domain, results are mixed as regards the ultimate level of success of each learner group relative to the complexity of the L2 learning task based on how learnability follows from L1 transfer (see Iverson and Rothman, 2015).

Preterit/imperfect distinction

The general linguistic domain of verbal morphology is a vulnerable one during all types of language acquisition, as well as one that can be affected by attrition or language loss (see, e.g., Brown, 1973; Montrul, 2002; Prévost and White, 2000; Wexler, 1994 among others). It is no surprise, then, that Spanish has seen a large body of research concerning the preterit and imperfect distinction or grammatical (viewpoint) aspect given its persistent difficulty for many language learners of Spanish, especially for those whose L1 does not signal aspect in the same way Spanish does (see, e.g., Bardovi-Harlig, 1999; Domínguez, Tracy-Ventura, Arche, Mitchell and Myles, 2013; Montrul, 2002; Montrul and Slabakova 2003; Slabakova and Montrul, 2003, 2007; Rothman, 2008; Long and Rothman 2013; Salaberry 1999, 2003, 2011; Geeslin, García-Amaya, Hasler-Baker, Henriksen and Killam, 2012; among others). Grammatical aspect in the case of the preterit vs. imperfect distinction refers to the morphological encoding of perfectivity. Perfective aspect (preterit) relates to the notion of boundedness or completion of an event from the viewpoint of the speaker. In other words, the choice of the preterit indicates that an action/event has a fixed start and completed endpoint in the past, whereas the imperfect makes no commitment with regards to the start or ultimate completion of an event. When imperfect morphology is chosen, the focus is on the (unbounded) duration of an event and, as such, one only knows that an event took place in the past—whether or not it was completed or not is unknown. All languages have the ability to express the meanings encoded in the preterit and imperfect morphology; however, crucially, languages such as English do not grammaticalize this with dedicated morphology.

A significant part of research on the preterit/imperfect distinction in Spanish has been carried out by analyzing distinctive distributions of specific verb forms (e.g., preterit or imperfect) across categories of verbs that differ semantically in terms of their lexical aspectual properties (e.g., inherent telicity) (see Cadierno, 2000; Camps, 2002; Comajoan and Pérez Saldanya, 2005; Liskin-Gasparro, 2000). Some interesting trends follow neatly from research in this domain, such as tense-aspectual morphology among L2 learners emerging systematically (Bardovi-Harlig, 2000; Dietrich, Klein, and Noyau, 1995; Salaberry, 2008) as well as the finding of three main stages in the progression of how L2 tense-aspect marking is acquired (see Comajoan, 2014 for further details). In sum, the first stage is one in which learners tend to rely primarily on lexico-pragmatics, such as the context of language production and/or the interaction between speakers or expressions that may be transferrable from the L1. The second stage is one in which the use of time adverbials marks temporal and aspectual information, but crucially not with verbal morphology. The third and final stage is one in which verbal morphology emerges, where perfective past marking emerges first and is used with achievement and accomplishment verbs initially, later extending to stative and activity verbs. The imperfective past appears later, first with statives, followed by activities and accomplishments, and finally with achievements (as is the case for child L1 acquisition). In general, verbal forms are acquired before verbal uses such that forms are said to precede meanings (Bardovi-Harlig, 2000; Comajoan, 2014; Dietrich et al., 1995; Montrul, 2004; Salaberry, 2008). Moreover, it has been shown that while L2ers of Spanish may be able to produce both preterit and imperfect verbal forms, they do not always use them in contextually appropriate ways (Hasbún, 1995; Ramsay, 1990; Salaberry, 2008) and that the imperfect forms are semantically more varied than the preterit ones, potentially making them inherently more difficult to acquire (Bardovi-Harlig, 2000; Comajoan, 2014; Dietrich et al., 1995; Montrul, 2004;

Salaberry, 2008). This is particularly relevant to Spanish and other Romance languages because the imperfect has more pragmatic or non-prototypical uses than the preterit, which may affect the time it takes learners to detect prototypical instantiations of the imperfect in the input and incorporate them into their interlanguage grammar (Comajoan, 2014; Salaberry, 2005). In general, however, it is not the case that one single variable can account for the patterns observed in the acquisition of tense/aspect and at the same time be comprehensively explanatory (e.g., Wulff, Ellis, Römer, Bardovi-Harlig and LeBlanc, 2009; Bardovi-Harlig and Comajoan, 2008; Comajoan, 2014; Salaberry, 2008). While there are many variables discussed in the literature (e.g., individual needs of the learners, identity, and context of learning/instruction), the most commonly cited explanatory factors are the input that learners receive and the L1 from which they begin the process of L2 acquisition.

An exemplar proposal aimed at explaining the patterns of use of tense and aspect morphology, specifically among L2ers, is the Lexical Aspect Hypothesis (LAH) (Anderson and Shirai, 1994). This hypothesis posits that inherent aspectual properties of verbs play a major role in the acquisition of tense and aspect morphology such that there is a correlation (or correlations) between certain morphological forms and aspectual properties of verbs that are given priority in interlanguage grammars. Specifically, following from the above-mentioned patterns of the emergence of preterit/imperfect morphology, such morphology is claimed to appear in distinct stages which are determined by specific properties of the verbal predicate. On the one hand, perfective forms are said to surface with achievements and accomplishments (i.e., telic verbs), followed by activities and states, and on the other hand imperfective forms are said to surface with states first, followed by activities, accomplishments and achievements (Andersen 1986, 1991). The LAH further claims that input, specifically the way in which the distinct distributional pattern of morphological forms is presented, also plays a crucial role in the acquisition of tense/aspect morphology. This claim, as highlighted by Domínguez et al. (2013), is based on the idea that learners acquire the most stand-out morphological forms first (Relevance Principle see Bybee, 1985) and that they will make an association between features which are semantically congruent, such as telicity and perfectivity (Congruence Principle see Andersen, 1993; Andersen & Shirai, 1994; Shirai, 1993, 1995; Shirai & Kurono, 1998). Finally, the LAH posits that, following prototype theory (Rosch, 1973, 1978), there is a link between grammatical marking(s) and lexical class such that any given category will contain both its most prototypical exemplars, and other non-prototypical exemplars which are featurally more dissimilar to the prototypical members.

A very good example of research of L2 Spanish grammatical aspect testing the LAH is Domínguez et al. (2013). In order to test the LAH, the aim was to verify the development observed in previous studies showing that learners use present morphology in past tense contexts (at least initially), which is succeeded by a stage where the preterit is the sole past tense morphological marker produced, though it is used for telic predicates (verbs whose lexical meaning entails an inherent endpoint) only and, finally, that the imperfect emerges later than the preterit and is first used with state and activity verbs. In this study, the authors administered a comprehension task and three distinct types of narratives from which production data were collected and analyzed. There were 60 learners of Spanish as an L2 divided into three separate groups based on proficiency (i.e., beginner, intermediate, and advanced).

The first narrative was an impersonal one, which was designed to elicit past tense forms through the retelling of a short story. After looking at a series of pictures, participants were asked to tell the story to the experimenter. This task included habitual/imperfective contexts, as well as a non-iterative perfective context. The second was an impersonal controlled narrative designed to test learners' use of infrequent *form-to-meaning associations*. There were four contexts involving prototypical pairings of discourse grounding and lexical class while another four contexts were designed to elicit non-prototypical pairings. The third was a personal narrative that gave learners the chance to talk freely about memories from their childhood and their upbringing. Finally, a comprehension task examined whether learners knew that the use of past tense forms was influenced by context, and whether state (imperfect) and event (preterit) associations guided learners' choices.

The overall results demonstrated that learners' use of preterit forms did not coincide more often with telic than atelic predicates. Instead, the learners' pattern of responses revealed an association between state (imperfect) and event (preterit) forms. In other words, although lexical aspect played a

role in this case, dynamicity, and not telicity as predicted by the LAH, affected learners' choices to use either imperfect or perfect forms. Furthermore, the use of imperfect and preterit forms did not spread across lexical classes. This is an important study since it showed that L2 learners of Spanish do diverge from natives in expected use of grammatical aspect; however, such differences did not neatly align with the LAH. And so, while there is a clear pattern to their use that can be explained in formal linguistic terms, L2 learners seem to differ from the developmental sequence of child L1 Spanish speakers that appear to converge progressively on the adult grammatical aspect system via lexical aspectual biases. Domínguez et al.'s (2013) study dovetails nicely with other formal linguistic studies on grammatical aspect that have shown, at least at the advanced level of proficiency, that L2 learners have the complete representations of grammatical aspect in their interlanguage grammars (e.g., Montrul and Slabakova, 2003; Slabakova and Montrul, 2003, 2007).

Acquisition of properties related to the nominal domain

We start our discussion here related to L2 Spanish research on articles. Certain nominal semantic features (e.g., definiteness, specificity) regulate the use of articles (definites versus indefinites) and demonstratives, creating an area of difficulty for learners that might be compounded by the fact that articles and demonstratives also reflect morphosyntactic agreement for gender and number (see below for details). To date, article use in L2 Spanish has received a modest amount of attention in the literature (e.g., Cuza, Guijarro-Fuentes, Pires and Rothman, 2013a; Ionin, Montrul and Crivos, 2013; Montrul and Ionin, 2012). Typically, English-speaking learners of Spanish and other Romance languages such as Italian (see Slabakova, 2006) are charged with the task of unlearning the one-to-one mapping of definiteness vs. genericity expressed in English through definite plurals (e.g., *The elephants seem nervous*) and bare plurals (e.g., *Elephants have trunks*), respectively, since Spanish uses definite plurals in both cases. Furthermore, L1 English learners have to reconfigure the semantics of bare plurals in L2 Spanish, since these can have an existential reading (e.g., *Animales de todo tipo salían de las jaulas del zoo*, 'Animals of all kinds came out of the zoo's cages') but not a generic one (**Animales son seres vivos*, 'Animals are living beings', where the article "los" would be obligatory). Research on this topic has shown that, by advanced stages of proficiency, L1 English L2 Spanish learners appear to have native-like knowledge of the distribution of plural subject expressions in Spanish, despite the asymmetry between their native and their second language (e.g., Cuza et al., 2013a).

Certain determiners (e.g. articles, quantifiers, numerals, etc.) give rise to pragmatically calculated inferences that extend beyond the purely semantic meaning of the lexical items themselves. These pragmatic inferences are known as implicatures (Grice, 1975, 1989). A sub-type of these inferences, scalar implicatures (SI), are said to be derived from determiners which form part of a scale in which each term is ordered according to its informativity, such as the English quantifiers <*some, most, all>,* where the stronger terms naturally entail the weaker ones but not vice versa (Horn, 1972). Strictly speaking, *some* means 'at least one'. In this sense, it can refer to both a fraction as well as the entirety of a given set. This contrasts with *all*, which can only denote the entire set. Tacit principles of communication assume that, when an interlocutor uses the informationally weaker term *some*, the stronger term *all* does not apply, thus the pragmatically-based interpretation of *some* as meaning 'not all'. While some studies have found that adult L2ers are indeed able to process SIs just as native speakers—at times being even more pragmatic than natives, as in Slabakova (2010)—others have found that SIs are a property that challenges even the most advanced L2 learners (Miller, Giancaspro, Rothman, Iverson & Slabakova, 2016). Spanish is particularly interesting, at least from the perspective of L1 English learners, because it has two plural indefinites (*algunos* and *unos*) that roughly translate to *some* but that have inherently different semantic and pragmatic distributions (e.g., Gutiérrez-Rexach, 2001, 2003). While *algunos* is, in most cases, partitive, *unos* maps more faithfully to the ambiguity of English *some*. Miller et al. (2016) showed that, though at times approximating a native-like distribution of *algunos* and *unos*, advanced L1 English L2 Spanish learners did not appropriately distinguish between them, even when the context would have supported one reading over the other. In line with Papafragou and Musolino (2003) and Guasti, Chierchia, Crain, Foppolo, Gualmini and Meroni (2005),

Miller and colleagues suggest that SI calculation may be task dependent, and that more specialized methodologies might be needed to determine whether SIs can be acquired to native-like levels.

Spanish presents a typologically rare structure in the nominal domain (see López, 2012) called differential object marking (DOM), whereby direct objects are signaled, under certain conditions, by the insertion of the overt accusative Case marker 'a' immediately preceding the object noun phrase (e.g., *Marcos visitó **a** Juan*, 'Marcos visited (a) Juan'; *Todos los días veo a tu novia en el autobús*, 'Every day I see (a) your girlfriend in the bus'). For Spanish L2 learners who are native speakers of languages with no differential object marking, the learning task involves acquiring the insertion of 'a' in limited contexts, for example, before direct objects that are both animate and specific (e.g., *Laura vio a Carlos*, 'Laura saw (a) Carlos' vs. *Laura vio una mujer* 'Laura saw a woman'). The complete distribution of DOM, that is, the exact semantic, syntactic and pragmatic conditions regulating when DOM is licensed beyond the canonical case of animate, specific accusative objects in Spanish are definitively complex and potentially vary across native dialects (see Torrego, 1998; López, 2012). The acquisition of differential object marking in L2 Spanish speakers has received increasing attention in the literature (e.g., Guijarro-Fuentes and Marinis, 2007; Guijarro Fuentes, 2012; Bowles and Montrul, 2009; Farley and McCollam, 2004; Montrul, 2010a, 2010b, 2011; Montrul and Gürel, 2015). On the whole, research has shown that L2 learners can acquire DOM, especially in the canonical contexts; however, the complete distribution is acquired gradually throughout development, if completely acquired at all.

A further difference between English and Spanish—and, indeed, Romance in general—relevant to the nominal domain is the order in which nouns and (attributive) adjectives (can) appear within the noun phrase. While in English and other Germanic languages (as well as in unrelated language families such as Chinese) the adjective almost invariably precedes the noun (e.g., *a red car*), Spanish attributive adjectives are canonically postnominal (e.g., *un coche rojo*, 'a red car'), although they can optionally appear in prenominal position. When they appear prenominally they either convey: (a) an entirely different meaning of the adjective as in *un hombre pobre*, 'a poor man' vs. *un pobre hombre* 'a pitiful man', (b) the adjectival meaning does not change at all but the position correlates to whether the adjective describes a set reading (*las mujeres bonitas,* 'the beautiful women', where the phrase refers to a subset of women who happen to be beautiful) or a kind denoting reading (*las bonitas mujeres,* 'the beautiful women', where being a woman means one is beautiful), or (c) is a member of a limited class of adjectives that only appear prenominally—most frequently, qualitative non-restrictive adjectives such as *mero* in *el mero problema* ('the mere problem'; see Demonte, 1999, 2008, for more in-depth analyses and description). Research carried out in this domain has benefited from a considerable variety in learners' L1 backgrounds, examining native speakers of Chinese (Guijarro-Fuentes, 2014), French (Bruhn de Garavito and White, 2002), Italian and German (Rothman, Guijarro-Fuentes, Iverson and Judy, 2009) and English (e.g., Guijarro-Fuentes, Judy and Rothman, 2009; Judy, Guijarro-Fuentes and Rothman, 2008; Rothman, Judy, Guijarro-Fuentes and Pires, 2010). Importantly, the learning task for any of these groups involves acquiring the appropriate distribution of pre- and postnominal adjectives on the face of ambiguous evidence in the input. While L1 effects seem to obtain at lower and intermediate levels of proficiency (e.g., Bruhn de Garavito and White, 2002; Rothman et al., 2010), most if not all of these studies report convergence on native-like adjective placement by advanced stages of proficiency (see Guijarro-Fuentes, 2014, for discussion). This means that irrespective of any advantage L1 transfer might provide if the syntax is the same, as it was for the Italians in Rothman et al. (2009), the fact that all learners converge on the Spanish properties entails that new morphosyntactic structure is acquirable in adulthood.

Gender and number agreement

Research on the L2 acquisition and processing of properties related to the nominal domain in Spanish has been largely dominated by the study of gender and number agreement in the interlanguage of second language learners, as well as properties that follow from grammatical gender, such as nominal ellipsis (noun-drop) (e.g., Alarcón, 2011; Alemán Bañón, Fiorentino and Gabriele, 2014; Bruhn de Garavito and White, 2002; Fernández-García, 1999; Franceschina, 2002, 2005; Gabriele, Fiorentino and Alemán Bañón, 2013; Grüter, Lew-Williams and Fernald, 2012; Hawkins and Franceschina, 2004;

Iverson 2009, 2010; Keating, 2009; 2010; Lew-Williams and Fernald, 2010; Liceras, Díaz, and Mongeon, 2000; Liceras, Fernández-Fuertes, Perales, Pérez-Tattam and Spradlin, 2008; Montrul, 2011; Montrul, Foote and Perpiñán, 2008; Montrul, de la Fuente, Davidson and Foote, 2013; Sagarra and Herschensohn, 2010, 2011, 2013; see Alarcón, 2014, for review). Such a trend follows naturally from the bias in the literature towards L1 English learners of Spanish as an L2: grammatical gender is absent in English (see Example 1), and therefore constitutes a particular challenge for native speakers of this language when present in the L2. Number, a grammatical feature triggering comparable agreement inflection in associated words (articles and adjectives), is partially realized similarly in both languages—i.e., English displays number agreement between demonstratives and nouns, but not between nouns and adjectives and articles and nouns—and therefore provides a baseline to which the L2 acquisition of gender assignment and gender agreement can be compared within the same domain (Examples 2a/b). It is important to note, however, that number agreement is present beyond the nominal domain (e.g., subject verb agreement) in Spanish (and English), while gender is restricted to the nominal domain.

1. La casa roja tiene los suelos desgastados.
   The$_{F.SG}$ house$_{F.SG}$ red$_{F.SG}$ has the$_{M.PL}$ floors$_{M.PL}$ worn$_{M.PL}$
   'The floors in the red house are worn out.'
2. a. This house is red. / These houses are red. / The house/houses are red.
   b. Esta casa es roja. / Estas casas son rojas. / La casa es roja. / Las casas son rojas.

White, Valenzuela, Kozlowska-MacGregor and Leung (2004) report the findings of a comprehensive study on gender and number agreement in L2 Spanish by native speakers of French and English. Importantly, the study included both production and comprehension measures and examined learners at three levels of proficiency. In considering potential linguistic transfer from the L1, French- and English-speaking learners differ in several important aspects when it comes to the acquisition of gender and number agreement in Spanish, since these features are realized similarly in French but are either only partially present (number) or absent (gender) in English. Oral production of noun phrases was elicited through a picture-description task and a guessing game, whereas comprehension was tested using a picture-identification task making use of null nominals (noun-drop). All groups, irrespective of proficiency and L1, displayed comparatively higher scores in both production and comprehension of number relative to gender agreement. Furthermore, being a native speaker of an L1 that instantiates gender did not seem to determine whether this feature could be acquired in Spanish, nor did it appear to have notable consequences on development: both L1 groups seemed to find gender agreement equally problematic at first, but all showed signs of having acquired it by intermediate stages of proficiency—so much so, in fact, that the authors found no significant differences between intermediate and advanced learners and a control group of native speakers.

The comprehension task in this study is of particular methodological importance, since it involves the recovery of the appropriate referent noun based solely on the gender and number features instantiated in the article and the adjective, as these nouns were "dropped" or ellided (e.g., *Ponlas ahí, cerca de la [ ] roja*, 'put them there, close to the$_{F.SG}$ [ ] red$_{F.SG}$'). Successful completion of this task thus demonstrates knowledge of the morphological reflexes of the noun's gender specification, a knowledge that might be obscured by morpho-phonological matching when a noun with canonical word marking (*a-* for feminine, *-o* for masculine) is present. Indeed, as with other kinds of ellipsis, noun drop in Spanish is intimately related to the expression of agreement features in associated elements, in this case, gender and number (although see Snyder, Senghas and Inman, 2001). As a result, it has been typically looked at in studies examining gender and number agreement in L2 populations, both in children (e.g., Liceras, Díaz and Mongeon, 2000) and adults (e.g., Iverson, 2009, 2010; Grüter et al., 2012; Montrul et al., 2008).

One notable result in White et al.'s (2004) study is that learners seemed to have fewer problems with masculine than with feminine nouns. A closer inspection of the data revealed that, indeed, masculine agreement morphology was used with feminine nouns in some cases, whereas the opposite did not hold. White and colleagues advance an account in terms of markedness, arguing that masculine

morphology seems to be the default (or unmarked) form to which these learners resort when the mechanisms of gender agreement fail or the gender specification of a certain noun has not been fully acquired (see also Bruhn de Garavito and White, 2002; Fernández-García, 1999; Liceras et al., 2008; McCarthy, 2008, among others). Markedness effects have been investigated in the processing literature, which has shown that native speakers are sensitive to asymmetries between the unmarked and the marked specifications of features such as gender and number (e.g., Alemán Bañón and Rothman, 2016). Beyond the role of markedness, online measures of linguistic processing have been widely used to investigate gender agreement resolution in L2 learners of Spanish. Within the eye-tracking literature, for example, researchers have often probed non-native speakers' abilities to use gender cues in order to predict an upcoming noun, in the same way that native speakers of Spanish have been shown to do from as young as 3-4 years of age (Lew-Williams and Fernald, 2007). Dussias, Valdés Kroff, Guzzardo Tamargo and Gerfen (2013; cf. Lew-Williams and Fernald, 2010) found that only at advanced levels of proficiency did L1 English-L2 Spanish learners display a gender-based anticipatory effect, and that lower-intermediate L1 Italian learners did so only for feminine nouns—suggesting a markedness effect similar to the one discussed above. Similar studies employing both predictive processing and agreement violation paradigms suggest that traditionally reported learner difficulties in gender agreement do not necessarily mean that this is unacquirable in adulthood (e.g., Alarcón, 2009; Keating, 2009, 2010; Sagarra and Herschensohn. 2010, 2011, 2013; cf. Franceschina, 2005), although processing problems may extend beyond production (e.g., Gillon Dowens, Vergara, Barber and Carreiras, 2010; Grüter et al., 2012).

While the literature on L1 English learners of L2 Spanish has consistently addressed the issue of gender agreement on the basis of differences between these languages and the subsequent difficulty for L1 English learners, there is still no widespread agreement on whether the presence of a grammatical gender system in the L1 facilitates—or indeed impacts in any way—the acquisition and processing of gender agreement in L2 Spanish (e.g., White et al., 2004; Dussias et al., 2013). This is not to say that studies have found no influence of the L1. Indeed, despite behavioural findings of successful ultimate attainment by L1 English speakers (e.g., White et al., 2004), evidence in the processing literature is mixed. Gillon Dowens et al. (2010) report evidence from an EEG/ERP paradigm of persistent effects of what could be interpreted as L1 transfer even in advanced learners, who display native-like electrophysiological responses to violations of number agreement, but subtly different responses to violations of gender agreement. Crucially, a further study with L1 Chinese learners (Gillon Dowens, Guo, Guo, Barber and Carreiras, 2011) confirmed that the L1 English learners' native-like sensitivity to number agreement violations might be explained by the presence of number in the English inflectional system: Chinese learners, who do not have experience with gender or number agreement in their L1, showed similar responses to both types of violations which were, in turn, similar to the L1 English learners' response to gender agreement violations in the first study. On the other hand, more recent EEG/ERP studies focusing on the acquisition and processing of gender agreement in L2 Spanish have found, both cross-sectionally (Gabriele, Fiorentino and Alemán Bañón, 2013) and longitudinally (Alemán Bañón, Fiorentino and Gabriele, 2014), that native English speakers show native-like processing of (both number and) gender agreement violations at advanced stages of proficiency, irrespective of potential markedness effects (Alemán Bañón, Miller and Rothman, 2017). Furthermore, these studies have found that advanced L2 learners, like native speakers, can establish agreement dependencies beyond the noun phrase (e.g., with an intervening verb) and are sensitive to various degrees of structural distance (cf. Keating, 2009). Beyond the potential influence of the L1 in the acquisition and processing of the L2, a number of studies have provided evidence that other factors, both pertaining to the semantics of the head noun (e.g., animacy; Alarcón, 2009; Sagarra and Herschensohn, 2011, 2013) and to L2 processing more generally (e.g., working memory capacity; Sagarra and Herschensohn, 2010), may be crucial in predicting non-native performance in gender and number agreement.

Taken together, studies on the acquisition and processing of properties within the Spanish nominal domain suggest that, while linguistic phenomena such as adjective placement or gender assignment and agreement—in addition to (or compounded with) target-like use and distribution of articles—may be initially challenging for learners, all properties of the nominal system can eventually

be acquired, even by learners who do not have previous experience with some of these features. However, and while maturational constraints do not seem to be in place—at least for this domain—effects of this lack of experience (or, potentially, of experience with a grammatical system encoding similar properties in a different way) may linger well into advanced stages of proficiency, at least in what pertains to online language processing. In absence of widespread agreement within the processing literature, it is at present difficult to ascertain whether these effects may by themselves explain the kind of non-targetlike behaviour at near-native levels of proficiency that has been claimed to reflect insurmountable representational deficits in L2 morphosyntactic competence (e.g., DeKeyser, 2000; Franceschina, 2005; Hawkins and Chan, 1997; Tsimpli and Dimitrakopoulou, 2007).

Conclusions and future directions

Our aim in the present chapter has been to offer the reader an overview of the research carried out on the L2 acquisition of Spanish by speakers of different L1s, and in so doing, to highlight some of the insights that might be gleaned from a collective consideration of these results. We hope that, by adjusting our exposition to different levels of granularity for different linguistic properties, the chapter can be both a window to the variety and depth of the literature and a useful analytical tool that enables a wider perspective on what the available data tell us about the acquisition of Spanish in non-native contexts, and L2 acquisition more generally.

The studies reviewed in these pages have examined the acquisition of different properties of Spanish with a common methodological concern: making sure that the linguistic property under investigation was not present in some of the learners' L1s (in those studies that compare different L1 groups) or, alternatively, that two linguistic properties were tested within the same domain, with only one of them being present in the L1 (as is the case with some of the studies with L1 English speakers). By manipulating these two-way distinctions, researchers have been able to comment on the ultimate acquirability of properties that are new to L2 learners (i.e., not instantiated in the L1), especially with regard to how L1 transfer might condition the learning task (see, e.g., Ellis, Römer and O'Donnell, 2016; Eubank, 1993; Gass, 1996; Lardiere, 2009; Long, 2007; Ortega, 2009/2013; Schwartz and Sprouse, 1996; Tsimpli and Dimitrakopoulou, 2007, among others, for different perspectives on this issue). Across domains, most of the available evidence seems to suggest that learners can acquire the native-like expression and distribution of most linguistic properties, including those not present in the L1. However, a mismatch between the learner's native language and L2 Spanish will often result in a developmental path that diverges from that of learners with L1s that are similarly configured for a given property. In short, then, a large portion of the literature in L2 Spanish suggests that L1/L2 (mis)matches condition the learnability of particular linguistic properties and thus constrain interlanguage development, but crucially they are not deterministic to the ultimate attainment of those properties, at least under conditions that could reasonably give rise to native-like ultimate attainment in the first place. It is important to note that, taken together, these studies offer a level of description and modeling of the developmental sequence that allows us to predict not only that L1 transfer/cross-linguistic influence *will* impact learner interlanguage, but also *how* this may happen.

As we said at the beginning, there is no question that the significant and impressive spike of the past 20 years in L2 Spanish studies has contributed to correcting, at least in part, the bias present in SLA towards English as an L2. However, our field is still similarly biased towards L2 learners of Spanish whose L1 is English. So, while we can confidently say that at present we have a good idea regarding the acquisition of Spanish as an L2, we should perhaps concede more accurately that we have a better idea of how Spanish is acquired as an L2 when English is the L1. Of course, (some) important generalizations that pertain to L2 acquisition proper can be and have been made from this literature, but well established L1-specific developmental variation in L2 acquisition should encourage us to be measured with generalized claims that stem primarily from one language pairing. One strength of the literature examining English as an L2 comes from the combined power of patterns that emerge irrespective of the language pairing itself, that is, generalizable patterns that obtain irrespective of what the L1 is. In such cases, we can deduce that universal effects reflect either a byproduct of bilingualism proper or an age effect on acquisition/processing. Conversely and by comparison, when cross-linguistic patterns do not obtain, one can appreciate more clearly where and why the L1 imposes an influence for

L2 development and ultimate attainment. We believe that a significant part of the challenges ahead for the field is inevitably related to diversifying our knowledge base in this manner. Fortunately, some attention has indeed been dedicated in recent years to L2 Spanish studies that use non-English L1 speakers (see Judy and Perpiñán, 2015, and the works therein), alongside meta-analyses of research on L2 Spanish comparing and contrasting results for the same properties by speakers of different L1s (see, e.g., Iverson and Rothman, 2015)[3].

It should be clear from the treatment of research in this chapter that the acquisition and processing of Spanish as a non-native language is an expanding field that has much to provide to linguistic theory and application. Although paradigmatic differences between researchers delineate not only the types of properties examined, but also the methodologies used and the interpretation of available data to some extent, it is also clear that irrespective of theoretical differences there is a common bond bringing us together that decisively hovers around the Spanish language itself. We are not just linguists, but also Hispanic linguists.

REFERENCES

Alarcón, I. (2009). The processing of gender agreement in L1 and L2 Spanish: Evidence from reaction time data. *Hispania*, *92*(4), 814-828.

Alarcón, I. (2011). Spanish grammatical gender under complete and incomplete acquisition: Early and late bilinguals' linguistic behavior within the noun phrase. *Bilingualism: Language and Cognition*, *14*(3), 332-350.

Alarcón, I. (2014). Grammatical gender in second language Spanish. In K. L. Geeslin (Ed.), *The Handbook of Spanish Second Language Acquisition*. Oxford: Wiley-Blackwell, pp. 202-218.

Alemán Bañón, J., Fiorentino, R. and Gabriele, A. (2014). Morphosyntactic processing in advanced second language (L2) learners: An event-related potential investigation of the effects of L1-L2 similarity and structural distance. *Second Language Research, 30*(3), 275-306.

Alemán Bañón, J., Miller, D. and Rothman, J. (2017). Examining morphological variability in the online comprehension and production of number and gender agreement in L2 Spanish: An ERP study. *Journal of Experimental Psychology: Learning, Memory and Cognition.*

Alemán Bañón, J. and Rothman, J. (2016). The role of morphological markedness in the processing of number and gender agreement in Spanish: an event-related potential investigation. *Language, Cognition and Neuroscience*. Epub ahead of print, 12 Aug 2016, doi: 10.1080/23273798.2016.1218032.

Alexiadou, A. and Anagnostopoulou, E. (1998). Parameterizing Agr: word order, V-movement and EPP-checking. *Natural Language and Linguistic Theory, 16*(3), 491-539.

Andersen, R. (1986). El desarrollo de la morfología verbal en el español como segundo idioma. In J. M. Meisel (Ed.), *Adquisición de lenguaje/Aquisição da linguagem*, pp. 115– 138. Frankfurt: Vervuert.

Andersen, R. W. (1991). Developmental sequences: The emergence of aspect marking in second language acquisition. In T. Huebner and C. A. Ferguson (eds.), *Crosscurrents in second language acquisition and linguistic theories*. Amsterdam: John Benjamins, pp. 305-324.

Andersen, R. W. and Shirai, Y. (1994). Discourse motivations for some cognitive acquisition principles. *Studies in Second Language Acquisition, 16*(2), 133-156.

Bardovi-Harlig, K. (1999). Exploring the interlanguage of interlanguage pragmatics: A research agenda for acquisitional pragmatics. *Language learning, 49*(4), 677-713.

Bardovi-Harlig, K. (2000). *Tense and Aspect in Second Language Acquisition: Form, Meaning, and Use.* Hoboken, NJ: Wiley-Blackwell.

Bardovi-Harlig, K. (2005). Tracking the elusive imperfect in adult L2 acquisition: Refining the hunt. In P. Kempchinsky and R. Slabakova (eds.), *Aspectual inquiries*. Houten: Springer Netherlands, pp. 397-419.

Bardovi-Harlig, K and Comajoan, L. (2008). Order of Acquisition and Developmental Readiness. In B. Spolsky and F. M. Hult (eds.), *The Handbook of Educational Linguistics.* Oxford, UK: Blackwell, pp. 383-397.

Borgonovo, C., Bruhn de Garavito, J. and Prévost, P. (2005). Acquisition of mood distinctions in L2 Spanish. In A. Brugos, M. R. Clark-Cotton and S. Ha (eds.), *Proceedings of the 29th Boston University Conference on Language Development*. Somerville, MA: Cascadilla Proceedings Project, pp. 97-108.

Bowles, M. and Montrul, S. (2009). Instructed L2 acquisition of Differential Object Marking in Spanish. In R. Leow, H. Campos and D. Lardiere (eds.), *Little Words. Their History, Phonology, Syntax, Semantics, Pragmatics and Acquisition*. Georgetown: Georgetown University Press, pp. 199-210.

Brown, R. (1973). *A first language.* Harvard: Harvard University Press.

Brown, E. and Cortés-Torres, M. (2012). Syntactic and pragmatic usage of the [*estar* + adjective] construction in Puerto Rican Spanish: ¡Está brutal! In K. L. Geeslin and M- Díaz-Campos (eds.), *Selected proceedings of the 14th Hispanic Linguistics Symposium*. Somerville, MA: Cascadilla Proceedings Project, pp. 61-74.

Bruhn de Garavito, J. (1994). Acquisition of the Spanish plural: what is taught and what must be acquired. Paper presented at the *Fourteenth Cincinnati Conference on Romance Languages and Linguistics*, University of Cincinnati, Ohio, USA, May 1994.

Bruhn de Garavito, J. (2009). Eventive and Stative Passives: The Role of Transfer in the Acquisition of ser and estar by German and English L1 Speakers. In J. Collentine, M. García, B. A. Lafford and F. Marcos Marín (eds.), *Selected Proceedings of the 11th Hispanic Linguistics Symposium*. Somerville, MA: Cascadilla Proceedings Project, pp. 27-38.

Bruhn de Garavito, J. and Guijarro-Fuentes, P. (2002). L2 acquisition of indefinite object drop. In J. Costa and M. J. Freitas (eds.), *GALA 2001 Proceedings*. Lisbon, Portugal: Associaçao Portuguesa de Linguística, pp. 60-67.

Bruhn de Garavito, J. and Montrul, S. (1996). Verb movement and clitic placement in French and Spanish as a second Language. In A. Stringfellow, D. Cahana-Amitay, E. Hughes and A. Zukowski (eds.), *Proceedings of the 20th Annual Boston University Conference on Language Development, Volume 1*. Somerville, MA: Cascadilla Proceedings Project, pp. 111-122.

Bruhn de Garavito, J. and Valenzuela, E. (2008). Eventive and stative passives in Spanish L2 acquisition: A matter of aspect. *Bilingualism: Language and Cognition, 11*(3), 323-336.

Bruhn de Garavito, J. and White, L. (2002). L2 acquisition of Spanish DPs: The status of grammatical features. In A. T. Pérez-Leroux and J. M. Liceras (eds.), *The acquisition of Spanish morphosyntax: The L1/L2 connection*. Dordrecht: Kluwer, pp. 153-178.

Bybee, J. (1985). *Morphology*. Amsterdam & Philadelphia, PA: John Benjamins.

Bylund, E. (2009). Maturational constraints and first language attrition. *Language learning, 59*(3), 687-715.

Cadierno, T. (2000). The acquisition of Spanish grammatical aspect by Danish advanced language learners. *Spanish Applied Linguistics, 4*(1), 1-53.

Cadierno, T. (2004). Expressing motion events in a second language: A cognitive typological perspective. In M. Achard and S. Niemeyer, *Cognitive linguistics, Second Language Acquisition, and Foreign Language Teaching*. Berlin: Mouton de Gruyter, pp. 13-49.

Cadierno, T., Ibarretxe-Antuñano, I. and Hijazo-Gascón, A. (2016). Semantic categorization of placement verbs in L1 and L2 Danish and Spanish. *Language Learning, 66*(1), 191-223.

Cadierno, T. and Ruiz, L. (2006). Motion events in Spanish L2 acquisition. *Annual Review of Cognitive Linguistics, 4*(1), 183-216.

Camacho, J. (2012). *Ser* and *Estar*: The Individual/Stage-level Distinction and Aspectual Predication. In J. I. Hualde, A. Olarrea and E. O'Rourke (eds.), *The Handbook of Hispanic linguistics*, 453-475.

Camps, J. (2002). Aspectual distinctions in Spanish as a foreign language: The early stages of oral production. *International Review of Applied Linguistics in Language Teaching (IRAL)*, 40(3), 179-210.

Collentine, J. (1995). The development of complex syntax and mood-selection abilities by intermediate-level learners of Spanish. *Hispania, 78*(1), 122-135.

Collentine, J. (2003). Subjunctive/Syntax: The Development of Subjunctive and Complex-Syntactic Abilities among Foreign Language Learners of Spanish. In B. A. Lafford and R. Salaberry (eds.), *Spanish Second Language Acquisition: State of the Science*. Washington, D.C.: Georgetown University Press, pp. 74-97.

Collentine, J. (2010). The acquisition and teaching of the Spanish subjunctive: An update on current findings. *Hispania, 93*(1), 39-51.

Collentine, J. and Asención-Delaney, Y. (2010). A Corpus-Based Analysis of the Discourse Functions of *Ser/Estar* + Adjective in Three Levels of Spanish as FL Learners. *Language Learning, 60*(2), 409-445.

Comajoan, L. (2014). Tense and Aspect in Second Language Spanish. In K. L. Geeslin (ed.), *The Handbook of Spanish Second Language Acquisition*. Oxford, UK: Blackwell, pp. 235-252.

Comajoan, L. and Pérez Saldanya, M. (2005). Grammaticalization and language acquisition: Interaction of lexical aspect and discourse. In D. Eddington (ed.), *Selected Proceedings of the 6th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages*. Somerville, MA: Cascadilla Proceedings Project, pp. 44-55.

Crain, S. (2012). *The emergence of meaning*. Cambridge, UK: Cambridge University Press.

Cuza, A., Guijarro-Fuentes, P., Pires, A. and Rothman, J. (2013a). The syntax-semantics of bare and definite plural subjects in the L2 Spanish of English natives. *International Journal of Bilingualism*, *17*(5), 634-652.

Cuza, A., Pérez-Leroux, A. T. and Sánchez, L. (2013b). The role of semantic transfer in clitic-drop among Chinese L1-Spanish L2 bilinguals. S*tudies in Second Language Acquisition*, *35*(1), 93-125.

Demonte (1999). A minimal account of Spanish adjective position and interpretation. In J. Franco, A. Landa and J. Martín (eds.), *Grammatical Analyses in Basque and Romance Linguistics: Papers in honor of Mario Saltarelli*. Amsterdam/Philadelphia: John Benjamins.

Demonte, V. (2008). Meaning-form correlations and adjective position in Spanish. In C. Kennedy and L. Mcnally (eds), *The Semantics of Adjectives and Adverbs*. Oxford, UK: Oxford University Press, pp. 71–100.

Dietrich, R., Klein, W. and Noyau, C. (1995). *The Acquisition of Temporality in a Second Language*. Amsterdam: John Benjamins.

DeKeyser, R. M. (2000). The robustness of critical period effects in second language acquisition. *Studies in Second Language Acquisition, 22*(4), 499-533

Domínguez, L., Tracy-Ventura, N., Arche, M. J., Mitchell, R. and Myles, F. (2013). The role of dynamic contrasts in the L2 acquisition of Spanish past tense morphology. *Bilingualism: Language and Cognition, 16*(3), 558-577.

Dorado, D. (2011). *Second Language Variation of Ser and Estar: A Comparative Analysis of Advanced Second Language Learners.* PhD Dissertation, University of Florida.

Dussias, P. E., Valdés Kroff, J. R., Guzzardo Tamargo, R. E., and Gerfen, C. (2013). When Gender and Looking Go Hand in Hand. *Studies in Second Language Acquisition*, *35*(2), 353-387.

Eubank, L. (1993). On the transfer of parametric values in L2 development. *Language Acquisition, 3*(3), 182-208.

Ellis, N. C., Römer, U. and O'Donnell, M. B. (2016). *Usage-based Approaches to Language Acquisition and Processing: Cognitive and Corpus Investigations of Construction Grammar*. Hoboken, NJ: Wiley-Blackwell.

Farley, A. P. and McCollam, K. (2004). Learner readiness and L2 production in Spanish: Processability theory on trial. *Estudios de Lingüística Aplicada, 22*, 47-69.

Fernández–García, M. (1999). Patterns of gender agreement in the speech of second language learners. In J. Gutiérrez-Rexach and F. Martínez-Gil (eds.), *Advances in Hispanic linguistics: Papers from the 2nd Hispanic Linguistics Symposium*. Somerville, MA: Cascadilla Press, pp. 3-15.

Franceschina, F. (2002). Case and Φ-feature agreement in advanced L2 Spanish grammars. *EUROSLA Yearbook, 2*, 71-86.

Franceschina, F. (2005). *Fossilized second language grammars: The acquisition of grammatical gender.* Amsterdam: John Benjamins.

Gabriele, A., Fiorentino, R. and Alemán Bañón, J. (2013). Examining second language development using event-related potentials: A cross-sectional study on the processing of gender and number agreement. *Linguistic Approaches to Bilingualism, 3*(2), 213-232.

Gass, S. M. (1996). Second language acquisition and linguistic theory: The role of language transfer. In W. C. Ritchie and T. K. Bhatia (eds.), *Handbook of Second Language Acquisition*. London: Academic Press, pp. 317-348.

Geeslin, K. L. (2003). A comparison of copula choice: Native Spanish speakers and advanced learners. *Language Learning, 53*(4), 703-764.

Geeslin, K. L. f(ed.) (2014a). *The Handbook of Spanish Second Language Acquisition*. Oxford, UK: Blackwell.

Geeslin, K. L. (2014b). The Acquisition of the Copula Contrast in Second Language Spanish. In K. L. Geeslin (ed.), *The Handbook of Spanish Second Language Acquisition*. Oxford, UK: Blackwell, pp. 219-234.

Geeslin, K. L., García-Amaya, L. J., Hasler-Barker, M., Henriksen, N. and Killam, J. (2010). The SLA of direct object pronouns in a study abroad immersion environment where use is variable. In C. Borgonovo, M. Español-Echevarría and P. Prévost (eds.), *Selected proceedings of the 12th Hispanic linguistics symposium*. Somerville, MA: Cascadilla Proceedings Project, pp. 246-259.

Geeslin, K. L., García-Amaya, L. J., Hasler-Barker, M., Henriksen, N. and Killam, J. (2012). The L2 Acquisition of Variable Perfective Past Time Reference in Spanish in an Overseas Immersion Setting.

In K. L. Geeslin and M. Díaz-Campos (eds.), *Selected proceedings of the 14th Hispanic linguistics symposium*. Somerville, MA: Cascadilla Proceedings Project, pp. 197-213.

Geeslin, K. L. and Gudmestad, A. (2008). Variable subject expression in second-language Spanish: A comparison of native and non-native speakers. In M. Bowles, R. Foote, S. Perpiñán and R. Bhatt, *Selected Proceedings of the 2007 Second Language Research Forum*. Somerville, MA: Cascadilla Proceedings Project, pp. 69–85.

Geeslin, K. L. and Gudmestad, A. (2011). Using sociolinguistic analyses of discourse-level features to expand research on L2 variation in forms of Spanish subject expression. In L. Plonsky and M. Schierloh (eds.), *Selected Proceedings of the 2009 Second Language Research Forum: Diverse Contributions to SLA*. Somerville, MA: Cascadilla Proceedings Project, pp. 16-30.

Geeslin, K. L. and Guijarro-Fuentes, P. (2006). A longitudinal study of copula choice: Following development in variable structures. In N. Sagarra and A. J. Toribio (eds.), *Selected proceedings of the 9th Hispanic linguistics symposium*. Somerville, MA: Cascadilla Proceedings Project, pp. 144-156.

Geeslin, K. L., and Guijarro-Fuentes, P. (2008). Variation in contemporary Spanish: Linguistic predictors of *estar* in four cases of language contact. *Bilingualism: Language and cognition, 11*(3), 365-380.

Gillon Dowens, M., Guo, T., Guo, J., Barber, H. A., and Carreiras, M. (2011). Gender and number processing in Chinese learners of Spanish - Evidence from Event Related Potentials. *Neuropsychologia*, *49*(7), 1651-1659.

Gillon Dowens, M., Vergara, M., Barber, H. A., and Carreiras, M. (2010). Morphosyntactic processing in late second-language learners. *Journal of Cognitive Neuroscience*, *22*(8), 1870-1887.

Grice, P. (1975). Logic and conversation. In P. Cole and J. L. Morgan (eds.), *Syntax and Semantics III: Speech Acts.* New York, NY: Academic Press, pp. 41-58.

Grice, H. P. (1989). *Studies in the way of words*. Cambridge: Harvard University Press.

Grüter, T., Lew-williams, C. and Fernald, A. (2012). Grammatical gender in L2 : A production or a real-time processing problem? *Second Language Research, 28*(2), 191-215.

Guasti, M., Chierchia, G., Crain, S., Foppolo, F., Gualmini, A. and Meroni, L. (2005). Why children and adults sometimes (but not always) compute implicatures. *Language and Cognitive Processes, 20*(5), 667-696.

Gudmestad, A. (2012). Acquiring a variable structure: An interlanguage analysis of second-language mood use in Spanish. *Language Learning, 62*(2), 373-402.

Guijarro-Fuentes, P. (2012). The acquisition of interpretable features in L2 Spanish: Personal *a. Bilingualism: Language and Cognition, 15*(4), 701-720.

Guijarro-Fuentes, P. (2014). Adjectival modification in L2 Spanish Noun Phrases. *EUROSLA Yearbook*, *14*, 143-172.

Guijarro-Fuentes, P., Judy, T. and Rothman, J. (2009). On transfer, proficiency and cross-individual/aggregate SLA differences: Examining adjectival semantics in L2 Spanish. In A. Benati (ed.), *Issues in Second Language Proficiency*. London: Continuum Publishing, pp. 233-253.

Guijarro-Fuentes, P. and Marinis, T. (2007). Acquiring phenomena at the syntax/semantics interface in L2 Spanish. *EUROSLA Yearbook, 7*, 67-87.

Gutiérrez-Rexach, J. (2001). The semantics of Spanish plural existential determiners and the dynamics of judgment types. *Probus*, *13*(1), 113–154.

Gutiérrez-Rexach, J. (2003). *La semántica de los indefinidos*. Madrid: Visor.

Halloran, B. and Rothman, J. (2015). The acquisition of clitics in L2 Spanish. In J. Smith and T. Ihsane (eds.), *Romance Linguistics 2012: Selected papers from the 42nd Linguistic Symposium on Romance Languages*. Amsterdam: John Benjamins, pp. 3-16.

Hasbún, L. M. (1995). *The role of lexical aspect in the acquisition of the tense/aspect system in L2 Spanish*. PhD Dissertation, Indiana University.

Hawkins, R. and Chan, C. Y.-H. (1997). The partial availability of Universal Grammar in second language acquisition: The "failed functional features hypothesis." Second Language Research, 13, 187–226.

Hawkins, R. and Franceschina, F. (2004). Explaining the acquisition and non-acquisition of determiner-noun gender concord in French and Spanish. In P. Prévost and J. Paradis (eds.), *The acquisition of French in different contexts.* Amsterdam: John Benjamins, pp. 175-205.

Hengeveld, K. (2004). Illocution, Mood and Modality. In G. Booij, C. Lehmann and J. Mugdan (eds.), *Morphology: An International Handbook on Inflection and Word-Formation, Vol. 2*. Berlin: Mouton de Gruyter, pp. 1190-1201.

Herschensohn, J. and Young-Scholten, M. (eds.) (2013). *The Cambridge Handbook of Second Language Acquisition*. Cambridge/New York: Cambridge University Press, 2013.

Hijazo-Gascón, A. (2011). *La expresión de eventos de movimiento y su adquisición en segundas lenguas*. PhD Dissertation, University of Zaragoza.

Horn, L. R. (1972). *On the semantic properties of logical operators in English*. University of California, Los Angeles.

Ibarretxe-Antuñano, I., Cadierno, T. and Hijazo-Gascón, A. (2014). La expresión de los eventos de colocación en danés y español. *Scripta, 18*(34), 63-84.

Ionin, T., Montrul, S. and Crivos, M. (2013). A bidirectional study on the acquisition of

plural noun phrase interpretation in English and Spanish. *Applied Psycholinguistics 34*(3), 483-518.

Iverson, M. (2009). N-drop at the initial state of L3 Portuguese: Comparing simultaneous and additive bilinguals of English/Spanish. In A. Pires and J. Rothman (eds.), *Minimalist inquiries into child and adult language acquisition: Case studies across Portuguese*. Berlin: Mouton de Gruyter, pp. 221-244.

Iverson, M. (2010). Informing the age of acquisition debate: L3 as a litmus test. *International Review of Applied Linguistics in Language Teaching (IRAL), 48*(2-3), 221-243.

Iverson, M., Kempchinsky, P. and Rothman, J. (2008). Interface vulnerability and knowledge of the subjunctive/indicative distinction with negated epistemic predicates in L2 Spanish. *EUROSLA Yearbook, 8*(1), 135-163.

Iverson, M. and Rothman, J. (2015). Object Drop in L2 Spanish, (Complex) Feature Reassembly and L1 Pre-emption: Comparing English, Chinese, European and Brazilian Portuguese Learners. In T. Judy and S. Perpiñán (eds.), *The Acquisition of Spanish in Understudied Language Pairings*. Amsterdam: John Benjamins, pp. 255-280.

Judy, T., Guijarro-Fuentes, P. and Rothman, J. (2008). Adult accessibility to L2 representational features: Evidence from the Spanish DP. In M. Bowles, R. Foote, S. Perpiñán and R. Bhatt (eds.), *Selected Proceedings of the Second Language Research Forum 2007*. Somerville, MA: Cascadilla Press, pp. 1-21.

Judy, T. and Perpiñán, S. (eds.) (2015). *The Acquisition of Spanish in Understudied Language Pairings*. Amsterdam: John Benjamins.

Keating, G. D. (2009). Sensitivity to Violation of Gender Agreement in Native and Nonnative Spanish. *Language Learning*, *59*(3), 503-535.

Keating, G. D. (2010). The effects of linear distance and working memory on the processing of gender agreement in Spanish. In B. VanPatten and J. Jegersky (eds.), *Research in second language processing and parsing*. Amsterdam: John Benjamins, pp. 113-34.

Lardiere, D. (2009). Some thoughts on the contrastive analysis of features in second language acquisition. *Second Language Research, 25*(2), 173-227.

Lee, F. (1987). Comprehending the Spanish subjunctive: An information processing perspective. *The Modern Language Journal, 71*(1), 50-57.

Lee, F. (2003). Anaphoric R-Expressions as Bound Variables. *Syntax, 6*(1), 84-114.

Lew-Williams, C., and Fernald, A. (2007). Young Children Learning Spanish Make Rapid Use of Grammatical Gender in Spoken Word Recognition. *Psychological Science*, *18*(3), 193-198.

Lew-Williams, C., and Fernald, A. (2010). Real-time processing of gender-marked articles by native and non-native Spanish speakers. *Journal of Memory and Language*, *63*(4), 447-464.

Liceras, J. M. (1985). The value of clitics in non-native Spanish. *Second Language Research, 1*(2), 151-168.

Liceras, J.M. (1989). On some properties of the 'pro-drop' parameter: Looking for missing subjects in non-native Spanish. In S. Gass and J. Schachter (eds.), *Linguistic Perspectives on Second Language Acquisition*. Cambridge, UK: Cambridge University Press, pp. 109-133.

Liceras, J. M. and Díaz, L. (1999). Topic-drop versus pro-drop: null subjects and pronominal subjects in the Spanish L2 of Chinese, English, French, German and Japanese speakers. *Second Language Research, 15*(1), 1-40.

Liceras, J. M., Díaz, L. and Mongeon, C. (2000). N-Drop and Determiners in Native and Non-Native Spanish: More on the Role of Morphology in the Acquisition of Syntactic Knowledge. In R. P. Leow and C. Sanz (eds.), *Current research on the acquisition of Spanish.* Sommerville, MA: Cascadilla Press, pp. 67-96.

Liceras, J. M., Fernández-Fuertes, R., Perales, S., Pérez-Tattam, R. and Spradlin, K. T. (2008). Gender and gender agreement in bilingual native and non-native grammars: a view from child and adult functional-lexical mixings. *Lingua, 118*(6), 827-851.

Liceras, J. M., Maxwell, D., Laguardia, B., Fernández, Z., Fernández, R. and Díaz, L. (1997). A Longitudinal Study of Spanish Non-Native Grammars: Beyond Parameters. In A. T. Pérez-Leroux and W. R. Glass (eds.), *Contemporary perspectives on the acquisition of Spanish, Volume 1*. Sommerville, MA: Cascadilla Press, pp. 99-132.

Liskin-Gasparro, J. (2000). The use of tense-aspect morphology in Spanish oral narratives: Exploring the perceptions of advanced learners. *Hispania, 83*(4), 830-844.

Long, M. (2007). *Problems in SLA*. Mahwah, NJ: Erlbaum.

Long, D. and Rothman, J. (2013). Generative approaches and the Competing Systems Hypothesis: Formal acquisition to practical application. In. J. Schweiter (ed.), *Theoretical and pedagogical innovations in SLA and bilingualism*. Amsterdam: John Benjamins, pp. 63-83

Lopez, L. (2012) - *Indefinite Objects. Scrambling, Choice Functions and Differential Marking*. Linguistic Inquiry Monograph 63. Cambridge: MIT Press.

Lozano, C. (2002a). Knowledge of expletive and pronominal subjects by learners of Spanish. *ITL Review of Applied Linguistics, 135*, 37-60.

Lozano, C. (2002b). The interpretation of overt and null pronouns in non-native Spanish. *Durham Working Papers in Linguistics, 8*, 53-66.

Lubbers Quesada, M. (1998). L2 acquisition of the Spanish subjunctive mood and prototype schema development. *Spanish Applied Linguistics, 2*, 1-23.

Malovrh, P. A. (2008). *A multifaceted analysis of the interlanguage development of Spanish direct-object clitic pronouns observed in L2-learner production.* PhD Dissertation, Indiana University.

Malovrh, P. A. and Lee, J. F. (2010). Connections between processing, production and placement. In B. VanPatten and J. Jegersky (eds.), *Research in second language processing and parsing*. Amsterdam: John Benjamins, pp. 231-256.

McCarthy, C. (2008). Morphological variability in the comprehension of agreement: An argument for representation over computation. *Second Language Research, 24*(4), 459-486.

Miller, D., Giancaspro, D., Iverson, M., Rothman, J. and Slabakova, R. (2016). Not just *algunos*, but indeed *unos* L2ers can acquire scalar implicatures in L2 Spanish. In A. Alba de la Fuente, E. Valenzuela and C. Martínez-Sanz (eds.), *Language acquisition beyond parameters: Studies in honour of Juana M. Liceras*. Amsterdam: John Benjamins, pp. 125-145.

Montrul, S. (2001). First-language-constrained variability in the second-language acquisition of argument-structure-changing morphology with causative verbs. *Second Language Research, 17*(2), 144-194.

Montrul, S. (2002). Incomplete acquisition and attrition of Spanish tense/aspect distinctions in adult bilinguals. *Bilingualism: Language and Cognition*, *5*(01), 39-68.

Montrul, S. (2004). Psycholinguistic evidence for split intransitivity in Spanish L2. *Applied Psycholinguistics* 25(2), 239-267.

Montrul, S. (2010a). How similar are L2 learners and heritage speakers? Spanish clitics and word order. *Applied Psycholinguistics, 31*(1), 167-207.

Montrul, S. (2010b). Dominant language transfer in Spanish L2 learners and heritage speakers. *Second Language Research, 26*(3), 293-327.

Montrul, S. (2011). Morphological errors in Spanish second language learners and heritage speakers. *Studies in Second Language Acquisition, 33*(2), 155-161.

Montrul, S. and Bruhn de Garavito, J. (1999). The L2 acquisition of Spanish: Generative perspectives. *Second Language Research, 15*(2), 111-114.

Montrul, S., Foote, R. and Perpiñán, S. (2008). Gender agreement in adult second language learners and Spanish heritage speakers: The effects of age and context of acquisition. *Language Learning 58*(3), 503–553.

Montrul, S., de la Fuente, I., Davidson, J. and Foote, R. (2013). The role of experience in the acquisition and production of diminutives and gender in Spanish: Evidence from L2 learners and heritage speakers. Second Language Research 29, 1, 87-118.

Montrul, S. and Gürel, A. (2015). The acquisition of Differential Object Marking in Spanish by Turkish speakers. In T. Judy and S. Perpiñán (eds.), *The Acquisition of Spanish in Understudied Language Pairings*. Amsterdam: John Benjamins, pp. 281-308.

Montrul, S. and Ionin, T. (2012). Dominant language transfer in Spanish heritage speakers and L2 learners in the interpretation of definite articles. *The Modern Language Journal, 96*(1), 70-94.

Montrul, S. and Rodríguez Louro, C. (2006). Beyond the syntax of the null subject parameter. In V. Torrens and L. Escobar (eds.), *The acquisition of syntax in Romance languages*. Amsterdam: John Benjamins, pp. 401-418.

Montrul, S. and Slabakova, R. (2003). Competence similarities between native and nearnative speakers: An investigation of the preterite/imperfect contrast in Spanish. *Studies in Second Language Acquisition 25*(3), 351-398.

Navarro, S. and Nicoladis, E. (2005). Describing motion events in adult L2 Spanish narratives. In D. Eddington (ed.), *Selected Proceedings of the 6th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages*. Somerville, MA: Cascadilla Proceedings Project, pp. 102-107.

Negueruela, E., Lantolf, J. P., Jordan, S. R. and Gelabert, J. (2004). The "private function" of gesture in second language speaking activity: A study of motion verbs and gesturing in English and Spanish. *International Journal of Applied Linguistics, 14*(1), 113-147.

Ortega, L. (2009). *Understanding second language acquisition*. London: Hodder Education. [distributed in the United States by Oxford University Press; Understanding Language Series, Bernard Comrie and Greville Corbett, Series Editors; ISBN-13: 978-0340905593].

Ortega, L. (2013). SLA for the 21st century: Disciplinary progress, transdisciplinary relevance, and the bi/multilingual turn. *Language Learning, 63*(Supplement 1), 1-24. doi: 10.1111/j.1467-9922.2012.00735.x

Papafragou, A., & Musolino, J. (2003). Scalar implicatures: experiments at the semantics – pragmatics interface. *Cognition*, *86*, 253–282.

Perales, S. and Liceras, J. M. (2010). Looking for universals in the acquisition of L2 Spanish object clitics. In P. Guijarro-Fuertes and L. Domínguez (eds.), *New Directions in Language Acquisition: Romance Languages in the Generative Perspective*. Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 323-355.

Pérez-Leroux, A. T. and Glass, W. R. (1997). OPC effects on the L2 acquisition of Spanish. In A. T. Pérez-Leroux and W. R. Glass (eds.), *Contemporary perspectives on the acquisition of Spanish, Volume 1*. Sommerville, MA: Cascadilla Press, pp. 149-165.

Pérez-Leroux, A. T. and Glass, W. R. (1999). Null anaphora in Spanish second language acquisition: probabilistic versus generative approaches. *Second Language Research, 15*(2), 220-249.

Prévost, P. & White, L. (2000). Accounting for morphological variation in L2 acquisition: Truncation or missing inflection? In M.A. Friedemann & L. Rizzi (Eds.), *The acquisition of syntax: Issues in comparative developmental linguistics*, pp. 232-235. London: Longman

Ramsay, V. (1990). *Developmental stages in the acquisition of the perfective and the imperfective aspects by classroom L2 learners of Spanish.* PhD dissertation, University of Oregon, Eugene.

Roby, D. B. (2009). *Aspect and the Categorization of States: The case of* ser *and* estar *in Spanish*. Amsterdam: John Benjamins.

Rosch, E. H. (1973). Natural categories. *Cognitive Psychology*, 4, 328–350

Rosch, E. H. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), *Cognition and categorization*, pp. 27– 48. Hillsdale. NJ: Lawrence Erlbaum.

Rothman, J. (2007). Pragmatic Solutions for Syntactic Problems: Understanding Some L2 Syntactic Errors in Terms of Pragmatic Deficits. In S. Baauw, F. Dirjkoningen and M. Pinto (eds.), *Romance Languages and Linguistic Theory 2005*. Amsterdam: John Benjamins, pp. 299-320.

Rothman, J. (2008). Aspect selection in adult L2 Spanish and the Competing Systems Hypothesis: When pedagogical and linguistic rules conflict. *Languages in Contrast, 8*(1), 74-106.

Rothman, J. (2009). Pragmatic deficits with syntactic consequences?: L2 pronominal subjects and the syntax–pragmatics interface. *Journal of Pragmatics, 41*(5), 951-973.

Rothman, J., Guijarro-Fuentes, P., Iverson, M. and Judy, T. (2009). Noun-raising and adjectival Interpretative reflexes in the L2 Spanish of Germanic and Italian learners. In J. Chandlee, M. Franchini, S. Lord, and G-M. Rheiner (eds.), *Proceedings of the 33rd Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, pp. 444-455.

Rothman, J. and Iverson, M. (2013). Islands and objects in L2 Spanish. *Studies in Second Language Acquisition, 35*(4), 589-618.

Rothman, J., Judy, T., Guijarro-Fuentes, P. and Pires, A. (2010). On the (un)-ambiguity of Adjectival interpretations in L2 Spanish: Informing debates on the mental representations of L2 syntax. *Studies in Second Language Acquisition, 32*, 47-77.

Sagarra, N. and Herschensohn, J. (2010). The role of proficiency and working memory in gender and number agreement processing in L1 and L2 Spanish. *Lingua, 120*(8), 2022-2039.

Sagarra, N. and Herschensohn, J. (2011). Proficiency and Animacy Effects on L2 Gender Agreement Processes During Comprehension. *Language Learning, 61*(1), 80-116.

Sagarra, N. and Herschensohn, J. (2013). Processing of gender and number agreement in late Spanish bilinguals. *International Journal of Bilingualism, 17*(5), 607-627.

Salaberry, R. (1999). The development of past tense verbal morphology in classroom L2 Spanish. *Applied Linguistics, 20*(2), 151-178.

Salaberry, R. (2005). Evidence for transfer of knowledge about aspect from L2 Spanish to L3 Portuguese. In Ayoun and Salaberry (eds.), *Tense and Aspect in the Romance Languages: Theoretical and applied perspectives.* Amsterdam/Philadelphia: John Benjamins.

Salaberry, R. (2003). Tense aspect in verbal morphology. *Hispania, 86*(3), 559-573.

Salaberry, R. (2008). *Marking past tense in second language acquisition: A theoretical model*. London, UK: Continuum.

Salaberry, R. (2011). 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), 184-202.

Sánchez-Alonso, S., Deo, A. and Piñango, M. (2016). Copular Variation in Spanish: Implications for the Study of Heritage Speaker Spanish. Paper presented at the *Workshop on Heritage Language Acqusition*, UiT The Arctic University of Norway, Tromsø, Norway. 19 September 2016.

Schwartz, B. and Sprouse, R. (1996). L2 cognitive states and the Full Transfer/Full Access model. *Second Language Research, 12*(1), 40-72.

Shirai, Y. (1993). Inherent aspect and the acquisition of tense/aspect morphology in Japanese. In H. Nakajima & Y. Otsu (Eds.), *Argument structure: Its syntax and acquisition*, pp. 185–211. Tokyo: Kaitakusha.

Shirai, Y. (1995). Tense-aspect marking by L2-learners of Japanese. In D. MacLaughlin & S. Mc.Ewen (Eds.), *Proceedings of 19th Annual Boston University Conference in Language Development*, pp. 575–586. Somerville, MA: Casacadilla Press.

Shirai, Y., & Kurono, A. (1998). The acquisition of tense aspect marking in Japanese as a second language. *Language Learning*, 48, 245–279.

Slabakova, R. (2006). Learnability in the second language acquisition of semantics: A bidirectional study of a semantic parameter. *Second Language Research, 22*(4), 498–523.

Slabakova, R. (2010). Scalar implicatures in second language acquisition. *Lingua*, *120*(10), 2444-2462.

Slabakova, R., Leal, T., and Liskin-Gasparro, J. (2014). We Have Moved On: Current Concepts and Positions in Generative SLA. *Applied Linguistics, 35*(5), 601-606.

Slabakova, R. and Montrul, S. (2003). Genericity and aspect in L2 acquisition. *Language Acquisition 11*(3), 165-196.

Slabakova, R. and Montrul, S. (2007). L2 acquisition at the grammar-discourse interface: Aspectual shifts in L2 Spanish. In, J. Liceras, H. Zobl and H. Goodluck (eds.), *The Role of Formal Features in Second Language Acquisition*. Mahwah, NJ: Lawrence Erlbaum Associates, pp. 452-483.

Snyder, W., Senghas, A. and Inman, K. (2001). Agreement morphology and the acquisition of N-drop in Spanish. *Language Acquisition, 9*, 157-173.

Syrett, K., Austin, J., Sánchez, L., Germak, C., Lingwall, A., Perez-Cortes, S., Arias-Amaya, A. and Baker, H. (2016). The influence of conversational context and the developing lexicon on the calculation of scalar implicatures: Insights from Spanish-English bilingual children. *Linguistic Approaches to Bilingualism.* Epub ahead of print, 29 Feb 2016, doi: 10.1075/lab.14019.syr

Torrego, E. (1998). *The dependencies of objects*. Cambridge, MA: MIT Press.

Tsimpli, I. M., and Dimitrakopoulou, M. (2007). The Interpretability Hypothesis: Evidence from wh-interrogatives in second language acquisition. *Second Language Research*, *23*(2), 215-242.

VanPatten, B. (1985). The acquisition of ser and estar by adult learners of Spanish: A preliminary investigation of transitional stages of competence. *Hispania*, *68*(2), 399-406.

VanPatten, B. (1987). Classroom learners' acquisition of ser and estar: Accounting for developmental patterns. In B. VanPatten, T. Dvorak and J. F. Lee (eds.), *Foreign Language Learning: A Research Perspective*. Cambridge: Newbury House, pp. 61-75.

VanPatten, B. (1990). Attending to form and content in the input. *Studies in Second Language Acquisition, 12*(3), 287-301.

VanPatten, B. and Rothman, J. (2014). Against "rules". In A. Benati, C. Laval and M. Arche (eds.), *The Grammar dimension in instructed SLA: Theory, Research, and Practice*. London, UK: Bloomsbury Press, pp. 15-35.

Vargas-Tokuda, M., Grinstead, J. and Gutiérrez-Rexach, J. (2009). Context and the scalar implicatures of indefinites in child Spanish. In J. Grinstead (ed.), *Hispanic Child Languages: Typical and impaired development*. Amsterdam: John Benjamins, pp. 93-116.

Wexler, K. (1994). Optional infinitives, head movement and the economy of derivations. In D. Lightfoot & N. Hornstein (Eds.), *Verb movement*, pp. 305-363. Cambridge: Cambridge University Press

White, L., Valenzuela, E., Kozlowska-Macgregor, M. and Leung, Y. K.-I. (2004). Gender and number agreement in nonnative Spanish. *Applied Psycholinguistics, 25*(1), 105-133.

Woolsey, D. (2008). From theory to research: Contextual predictors of "estar+ adjective" and the study of the SLA of Spanish copula choice. *Bilingualism: Language and Cognition, 11*(3), 277-295.

Wulff, S., Ellis, N. C., Römer, U., Bardovi-Harlig, K. and LeBlanc, C. J. (2009). The acquisition of tense-aspect: Converging evidence from corpora and telicity ratings. *The Modern Language Journal, 93*(3), 354-369.

Zyzik, E. (2004). *Encoding meaning with polyfunctional forms: The acquisition of clitics in L2 Spanish.* PhD dissertation, University of California at Davis.

Zyzik, E. (2006). Learners' overgeneralization of dative clitics to accusative contexts: Evidence for prototype effects in SLA. In C. A. Klee and T. L. Face (eds.), *Selected Proceedings of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages*. Somerville, MA: Cascadilla Proceedings Project, pp. 122-134.

Zyzik, E. (2008). Null objects in second language acquisition: Grammatical vs. performance models. *Second Language Research*, *24*(1), 65-110

Zyzik, E. and Gass, S. (2008). Epilogue: A tale of two copulas. *Bilingualism: Language and Cognition, 11*(3), 383-385.

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[1] For ease of exposition, we will present structures in one or another section as if they are purely related to a given "topic", i.e., a property of the verbal domain. Of course, most properties do not sit so neatly in one given "topic". For example, clitics can be viewed as part of the verbal domain because they are the overt expression of the argument structure of a verb, that is, its required accusative or dative complement. However, clitics can also be viewed as part of the nominal domain because they are themselves DPs/NPs and are subject to nominal agreement. We are aware of this oversimplification, but put it aside while noting it for the purpose of greater explanatory clarity. Moreover, although this chapter regards morphosyntax primarily, many, if not most of the structures we refer to relate to interfaces—by the very nature of language, this is unavoidable—with other modules such as semantics, pragmatics and phonology. We will, however, discuss primarily the morphosyntactic exponents of these properties.

[2] We are putting aside the question of whether reduced pronominal forms in English can be taken as a type of clitic, for example, whether "'(e)m" in a sentence such as I see '(e)m vs. I see them is a proper syntactic clitic.

[3] Iverson and Rothman (2015) present a meta analysis of the type we are advocating. They examine together the results of three independent studies (Bruhn de Garavito and Guijarro-Fuentes, 2002; Rothman and Iverson, 2013; Cuza, Pérez-Leroux and Sánchez, 2013b), on the same domain of grammar (null objects) in L2 Spanish with speakers of various L1s: English, European Portuguese, Brazilian Portuguese and Mandarin. They discuss the similar patterns and explain, on the basis of the distinctions in the L1 baseline, why the differences across the groups are likely to have obtained.