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MORPHOLOGY, SYNTAX, AND SEMANTICS IN SPANISH AS A HERITAGE LANGUAGE  

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Introduction  
Heritage speakers of Spanish are bilingual individuals in places where Spanish is a minority language (Montrul 2016a; Rothman 2009), and the focus of this chapter is on grammatical aspects of their heritage language. The grammatical development of a heritage language cannot be understood without taking into account the minority status of the language and its perceived prestige and value. For example, Lambert (1977) introduced the terms additive and subtractive bilingualism to explain how language status affects the type and degree of bilingualism developed (see also Cummins & Swain 1986). Additive bilingualism results when the individual’s first language is a societally dominant and prestigious language and the individual learns another language, typically voluntarily, which can be another official language or a second language. As the bilingual develops full command of her native language, she adds knowledge of another language. In this case, the acquisition of the other language, even if it happens in childhood, does not interfere with the healthy development of the native language. The opposite of additive bilingualism is subtractive bilingualism. Subtractive bilingualism occurs most often when the first and native language is a minority language with little social prestige and value. Due to social pressure, negative attitudes, and often lack of educational opportunities, the acquisition of the societal language, especially at school, contributes to the gradual weakening or even replacement of the native minority language by the second majority language. The vast majority of heritage speakers find themselves in a subtractive situation by which they often become highly competent speakers of the majority language at the expense of the development of the heritage language. Research on heritage languages and their speakers since the late 1990s has been particularly concerned with understanding more fully the particular characteristics of such uneven development (Montrul 2016a).  

Heritage speakers’ degree of bilingualism is highly variable. By now it is widely accepted that bilinguals with perfectly balanced command of two languages are a myth, and that the majority of bilinguals use their languages in different contexts and for different purposes (Grosjean 2008). Thus, the linguistic competence of all bilinguals is fluid, changes along the lifespan, and is often unequal, as captured by the concept of dominance. The dominant language is the language that the bilingual uses the most or more often, and it also happens to
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be psycholinguistically stronger, with larger vocabulary, wider structural variety, and fluent production (see contributions in Silva-Corvalán & Treffer-Dallers 2016). The non-dominant language is used less often or in more restricted contexts and is psycholinguistically weaker, ranging from reduced fluency in production with high interference from the stronger language to merely receptive knowledge of it (i.e., comprehension without productive ability). Heritage speakers can exhibit functional proficiency in both productive and receptive abilities, or in receptive abilities only (Sherkina-Lieber 2011). Many Spanish heritage speakers in the United States are dominant in English, and consistent with the concept of subtractive bilingualism, Spanish is often their weaker language, as judged from patterns of language use reported in language background questionnaires, self-rating scales and self-reports, speech samples, and standardized or researcher-made vocabulary and proficiency measures (Montrul 2016b). The majority of studies of heritage speakers of Spanish in the United States have reported this type of subtractive bilingualism, especially studies whose participants attended either transitional bilingual programs or English-only elementary schools.

Several factors contribute to the observed variability in heritage language grammatical proficiency, such as the age at which the individual was exposed to the majority language (Montrul 2008), the degree to which the majority language was spoken at home together with the heritage language, whether the heritage language is spoken only by the parents or by other family members including siblings (size and density of social networks) (Hurtado & Vega 2004), access to the heritage language at school, in the public domain, and the size of the speech community beyond the home (Tse 2001), among many others.

As the minority language weakens, by the time heritage language speakers reach young adulthood, their linguistic systems often display structural differences in many grammatical areas when compared to the linguistic systems of heritage speakers who are dominant in the heritage language, monolinguals or bilinguals raised in a majority language situation, and Spanish-dominant bilinguals of the parental generation (adult immigrants). Just as heritage speakers display dissociations in proficiency by language skill, they also exhibit uneven mastery of different aspects of the grammar. This suggests that different aspects of grammar may require different thresholds of input to develop as they do in monolinguals, perhaps along the lines outlined by Yang’s (2016) variational learning model (space limitations do not allow further elaboration).

Understanding how grammatical outcomes are impacted by reduced input during childhood carries great practical significance. In the United States, many heritage speakers attending university seek to relearn or further develop their heritage language in a formal environment and often share the classroom with second language learners with less experience with the language and culture. It is important to know what classes for heritage speakers should be building on at the level of language structure. This chapter summarizes the results of experimental studies that investigated the linguistic knowledge of Spanish heritage speakers in the United States. Although in recent years there has been significant emphasis on aspects of grammar that do not reach full development and end up not fully mastered—such as inflectional morphology—not all areas of grammar eventually stabilize at non-target levels. In fact, we will see that some areas of the heritage grammar seem to be acquired at native-like levels, including complex structures. In the rest of the chapter I focus on these areas to illustrate the characteristics of the grammatical systems of many heritage speakers in morphology, syntax, and the related interfaces of semantics and pragmatics.

**Inflectional morphology**

Inflectional morphology is a very vulnerable area in heritage language grammars, and Spanish is no exception. Inflectional morphology carries grammatical information and is the locus of
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crosslinguistic variation driving syntactic differences between languages. Mature native speakers who grew up in a situation where Spanish was a majority language usually produce the appropriate morphological form of nouns, verbs, pronouns, and noun phrases in required contexts. When language learners do not produce morphological forms in all required contexts consistently (i.e., there are omissions) or use different forms and in variable ways, it is common in language acquisition to refer to these inconsistent forms as developmental “errors.” Inflectional morphology develops early in language acquisition, and although monolingual Spanish-speaking children make developmental errors, these errors eventually go away. By a certain age in childhood, depending on the developmental schedule of specific morphology, children eventually comprehend and produce inflectional morphology like adults. However, inflectional morphology is often partially acquired, without reaching full mastery, in young adult Spanish heritage speakers. Some morphological patterns displayed by heritage speakers are very similar to the patterns displayed by second language learners (Au et al. 2002).

Nominal morphology

Spanish nouns are marked by gender (masculine, feminine) and number (singular, plural). Gender and number are two affixal morphemes (word markers) (libr-o-s, malet-a-s). Determiners (el, un, este), subject pronouns (él, ella), and object pronouns (lo, la, le) are free morphemes, but can also contain gender and number information, as shown in (1) and (2).

(1) Ellas tienen unos libros nuevos. ¿Los quieres?
they-fem.pl have some-masc-pl book-masc.pl new-masc.pl. them-masc.pl want-2nd p. sg
“They have some new books. Do you want them?”

(2) Ellos vendieron estas maletas viejas. ¿Las ves?
they-masc.pl sold these-fem.pl. suitcases.fem.pl old.fem.pl. them-fem.pl see.2nd. sg.
“They sold those old suitcases. Do you see them?”

In Spanish masculine gender is considered the default (Harris 1991). Although about 90% of Spanish nouns have a regular ending for gender, there are irregular nouns that do not end in the canonical masculine –o and canonical feminine –a ending. They end in non-transparent endings like –e or a consonant. Gender, number, and case in nouns are mastered at an early age by monolingual Spanish-speaking children (Montrul 2004a). Children produce gender marking by age 3 or 4 with almost 95–100% accuracy, with the exception of irregular, less frequent, and marked forms (Pérez Pereira 1991).

Interestingly, inflectional morphology is noticeably affected in heritage language grammars, with non-target gender agreement being very common. There are several studies on gender assignment and agreement conducted with Spanish heritage speakers in the United States, both with adults (Alarcón 2011; Montrul, Davidson, de la Fuente, & Foote 2014; Montrul, de la Fuente, Davidson, & Foote 2013; Montrul, Foote, & Perpiñán 2008a) and with children (Anderson 1999; Montrul & Potowski 2007; Mueller Gathercole 2002a). All these studies found that, unlike monolingual gender assignment, it is as variable and inconsistent for heritage speakers with low to intermediate proficiency in Spanish, as it is among second language learners. When Spanish heritage speakers make gender errors, these are most frequent with feminine nouns and with nouns with non-canonical or non-transparent word endings (lápiz
“pencil,” nube “cloud,” papel “paper”). If masculine gender is the default and feminine is the marked form, clearly Spanish heritage language grammars also show simplification of marked forms and overapplication of the masculine default. Higher proficiency heritage speakers can achieve native like levels with gender assignment and agreement in production and processing (Alarcón 2011; Montrul et al. 2013).

Another grammatical area substantially affected in heritage grammars is case, which is also subject to systematic simplification. Case is a morphological category that marks the syntactic function of noun phrases in the sentence. Typically, in nominative-accusative languages like Spanish, subjects are marked with nominative, direct objects with accusative, and indirect objects with dative case. Nominative case is unmarked. Dative case is present in clitic pronouns and marked with the preposition “a,” as in (3) and (4), and so are some instances of accusative case with definite, specific animate direct objects, known as DOM marker as in (5).

(3) Juan le dio un abrazo a Pedro.
   Juan him.dat gave a hug to Pedro
   “Juan gave Pedro a hug.”

(4) A María le gusta ir al cine.
   to María her.dat like to go to the movies
   “María likes to go to the movies.”

(5) Miguel visitó a su prima.
   Miguel visited DOM his cousin
   “Miguel visited his cousin.”

Like gender agreement, erosion of case marking has been found in several heritage languages including Spanish in the United States (Montrul 2004b; Montrul & Bowles 2009; Pascual y Cabo 2013), and Spanish in Neuchatel, Switzerland (Grosjean & Py 1991). Case marking with animate, specific direct objects, as in (5), is highly susceptible to partial acquisition and non-native mastery in heritage language grammars. The only available study on monolingual Spanish-speaking children (Rodríguez-Mondoñedo 2008), which analyzed spontaneous production samples from the CHILDES database, indicated that by age 3.00 and earlier, young children mark animate specific direct objects with “a” with 85% accuracy. However, Ticio (2015), who examined the development of DOM in simultaneous bilingual children from the CHILDES database, found that by age 3.6, the bilingual children had not acquired DOM to the level of the monolingual children, reaching barely 26% accuracy. Montrul and Sánchez-Walker (2013) investigated production of DOM marking in child (mean age 11) and young adult heritage speakers (mean age 21), and found that the bilingual children reached 60% accuracy and the young adult heritage speakers about 80%. The adults were also consistent with previous studies of adult heritage speakers by Montrul (2004b) and Montrul and Bowles (2009), who also found that regardless of proficiency levels, young adult heritage speakers produced unmarked animate specific direct objects in oral production (for example, Sara vio ∅ la mujer) and judged them as acceptable in grammaticality judgment tasks. Montrul (2014, 2016c), Montrul, Bhatt and Girju (2015), and Montrul and Bowles (2009), showed that, when the dative marking of indirect objects, the dative marking of gustar-type verbs and the marking of animate, specific direct objects are taken into account, heritage speakers make fewer errors marking indirect objects,
which is assumed to be an instance of structural case (Butt 2006). However, when case is lexical or semantic—as with gustar-type verbs and animate, specific direct objects—it is more vulnerable to erosion in Spanish heritage speakers’ grammars.

To summarize, nominal morphology in Spanish, such as gender agreement and case, are very vulnerable and subject to morphological variability in heritage language grammars.

**Verbal morphology**

The verbal domain also shows differential levels of acquisition in heritage language speakers, although overall verbal morphology (subject verb agreement, complex tenses, aspect, and mood) appears to be more stable than nominal morphology.

**Agreement:** Spanish marks person and number agreement on the verb, which agrees with the subject (e.g., Yo sé “I know,” tú sabes “you know,” él sabe “he knows,” ellas/éllos saben “they know”). Montrul (2006) showed that intermediate and advanced proficiency heritage speakers of Spanish in the United States were highly accurate on subject verb-agreement in an oral narrative task (above 96%). Foote (2011) tested knowledge of verbal agreement in heritage speakers and L2 learners with intermediate and advanced proficiency in Spanish in language production, and also found very high accuracy by the experimental groups on agreement.

**Tense:** Tense locates the event in the time axis and signals the difference between present, past, and future. In general, there are few if any reports of errors with tense in heritage grammars. Silva-Corvalán (1994, 2014), who studied oral samples from first-generation Mexican immigrants and second- and third-generation Spanish heritage speakers in the United States, did not record errors with tense and temporality. The heritage speakers Silva-Corvalán interviewed used all the simple tense forms (present, preterit, imperfect, future), and distinguished between past, present, and future. However, with respect to the future, they used predominantly the periphrastic form (ir a + infinitive “go to”) instead of the simple future synthetic form (—ending in —r as in ama-r-é “I will love,” teme-r-é “I will fear,” vivi-r-é “I will live”), a pattern also found in Latin American varieties. Unlike the first-generation speakers in Silva-Corvalán’s study, the heritage speakers did not have productive use of the complex compound tenses, e.g., pluperfect indicative and subjunctive (hubo/hubiera visto “had seen”), future and conditional perfect (habrá/habrá visto “would have seen”), and analytic forms in Spanish (future llegare “I will arrive”) (Silva-Corvalán 1994, p. 30). The general observation is that errors with tense are rare with simple tenses, but many heritage speakers do not actually develop productive use of many complex forms, at least as judged by production data.

**Aspect:** Aspect is another verbal category concerned with the internal temporal constituency of a situation (state or event), such that these can be regarded as having an endpoint or not. Aspect can be expressed lexically by the inherent lexical semantics of the verb and its interaction with direct and indirect arguments and adjuncts (Dowty 1986; Verkuyl 1994). This is called lexical aspect (Smith 1991) and represents the way humans perceive and categorize situations. Lexical aspect is expressed in the verb or predicate. Some predicates are telic or perfective (with an inherent endpoint), such as achievements like llegar “arrive” and accomplishments like leer un libro “read a book,” while activities like correr “run” and states like ser “be” are atelic or imperfective. Aspect can also be expressed grammatically through the use of inflectional morphology on the verb, and in Spanish this morphology combines with accomplishments, achievements, activities, and states. In Spanish, grammatical aspect is marked by the preterit and imperfect: Ayer Juan salió de vacaciones “Yesterday Juan left on vacation” vs. A esta hora ayer Juan salía de vacaciones...
“At this time yesterday Juan left on vacation.” In the sentence with the preterit, the event is conceived as finished and bounded, whereas the sentence with the imperfect depicts the event in progress at the time and unbounded.

Aspectual morphology is quite vulnerable in heritage language grammars. Using very different methodologies and theoretical approaches, both Silva-Corvalán (1994, 2014) and Montrul (2002, 2009) found that young adult Spanish heritage speakers in the United States confuse aspectual distinctions between perfective and imperfective forms. Spanish heritage speakers use preterit for imperfect forms and vice versa in oral production, and have been shown to have difficulties interpreting the meaning of preterit and imperfect morphology in experimental tasks involving felicity judgments (Montrul 2002, 2009). A recent study of child and adult Spanish heritage speakers by Cuza et al. (2013) showed that compared to the monolingual comparison groups, the child and adult heritage speakers had lower production of imperfect and overextension of preterit to imperfect contexts, and that compared to the preterit, the imperfect is underdeveloped and incompletely acquired in Spanish heritage speakers. The imperfect is also mastered later than the preterit in Spanish monolingual children (Hodgson 2005). Similarly, Potowski (2007) found that heritage speakers in eighth grade attending a dual language school were slightly less accurate than native speakers in their distribution of preterite and imperfect morphology by aspectual category.

Mood: The verbal category that is most affected in Spanish as a heritage language is mood. All languages express modalities, but not all languages have mood. Mood is the grammatical expression of modality, marked by verbal morphology on verbs. Although monolingual Spanish-speaking children start using subjunctive forms with a restricted set of verbs that subcategorize for subjunctive and in negative command by age 3.00 (Gallo Valdivieso 1994), semantically and pragmatically conditioned uses of subjunctive, and subjunctive in relative and in adverbial clauses are not mastered until about age 12 (Blake 1983). First-generation Spanish-speaking immigrants in the United States retain the subjunctive in all these contexts, but second- and third-generation heritage speakers tend to replace indicative for subjunctive in contexts where subjunctive is required or strongly preferred by monolinguals, or misuse the subjunctive to signal different semantic and pragmatic meanings of a given expression based on context (Lynch 1999; Martínez-Mira 2009; Montrul 2009; Silva-Corvalán 1994). For example, Silva-Corvalán (1994) found that low proficiency speakers did not produce subjunctive forms, using the indicative exclusively in both obligatory and in variable contexts, as in (6) and (7) (Silva-Corvalán 1994, p. 42) (PI = present indicative, PS = present subjunctive).

(6) *I hope que no me toca (PI) la misma problema. (= toque PS)
   "I hope I don’t run into the same problem."

(7) Quizás vengo mañana (= venga (PS)).
   "Maybe I come tomorrow."

In some cases, the use of indicative or subjunctive depends on meaning and implicatures. The indicative implies a fact whereas the subjunctive implies a hypothetical situation. In a study with intermediate and advanced proficiency Spanish heritage speakers, Montrul (2007) found high error rates with subjunctive in a written task of morphological recognition and little discrimination between the semantic implicatures of indicative and subjunctive morphology in variable contexts in a written sentence meaning judgment task, such as with relative clauses (Busco a una profesora que enseña-indic./enseñe-subj. francés. “I am looking for a teacher who teaches/would
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teach French”). The indicative implies that the teacher exists whereas the subjunctive implies that such teacher might not exist. Thus, the simplification of the subjunctive in adult heritage speakers appears to extend to written comprehension as well.

Thus, comparing grammatical and morphological categories within the verbal domain, mood is significantly more affected than aspect. Montrul (2009) tested knowledge and use of tense/aspect and mood in Spanish heritage speakers of three proficiency levels: low, intermediate, and advanced, as well as a comparison group of monolingually raised native speakers. Although the heritage speakers used preterit/imperfect and indicative/subjunctive in two oral tasks, many of the errors evidenced in production also showed up in written recognition and in tasks of semantic discrimination. Montrul’s results reflect the same trends reported by Silva-Corvalán (1994). That is, many of the Spanish heritage speakers who exhibited unstable knowledge of mood displayed better command of grammatical aspect. The heritage speakers’ knowledge of grammatical aspect appears more solid with prototypical grammatical aspect-predicate type combinations, such as achievements and accomplishments (the telic classes) in the preterit or states and activities (the atelic classes) in the imperfect. By contrast, those conditions where the lexical semantic features of the verb and the semantic features of the aspectual form clash, such as achievements in the imperfect and states in the preterit, proved more problematic for the low proficiency speakers as well. Therefore, the results of Montrul (2009) are consistent with the attrition effects observed with tense/aspect and with mood in childhood (Merino 1983; Silva-Corvalán 2003, 2014), even when all these studies used very different research methodologies and tasks.

Hypotheticality: Naturally, the simplification of subjunctive, future, and conditional forms has consequences for the expression of hypothetical discourse, an area of difficulty for heritage speakers with low proficiency in the language. If . . . then conditional sentences are complex sentences, requiring specific combinations of tenses and moods depending on the degree of factuality or hypotheticality. In Spanish, as in many other languages, there are three types of conditional sentences that vary in their hypotheticality and (counter-)factuality. The first type is the simplest and takes simple present in the if clause (protasis) and simple future in the then clause (apodosis), as in (8).

(8) Si llueve mañana no regaré las plantas.
   “If it rains tomorrow I will not water the plants.”

The other two types, shown in (9) and (10), are more complex, and represent irrealis and hypothetical meanings. In Spanish, they require subjunctive and conditional forms, although there is dialectal variation in the use of the conditional in both clauses (Lavandera 1984), or the use of imperfect indicative instead of subjunctive (Silva-Corvalán 1985) in monolingual varieties:

(9) Si tuviera tiempo, terminaría de leer este libro hoy.
   “If I had time, I would finish reading this book today.”

(10) Si hubiera sabido que venías a las 4, te habría esperado.
   “If I had known you were arriving at 4 I would have waited for you.”
Several studies (Fairclough 2005; Gutiérrez 1996; Lynch 1999; Silva-Corvalán 1994) have found that while first-generation Spanish-speaking immigrants produce the three types of clauses with the most typical tenses as shown in (8–10), second- and third-generation heritage speakers show considerable variation in the use of verbal paradigms with the conditional clauses requiring conditional and subjunctive verbal forms, as in (9) and (10). The general tendency is to replace subjunctive and conditional forms with the indicative, and the compound tenses with simple tenses. Silva-Corvalán (1994) observed that the first-generation immigrants had a complex system of verb morphology that allowed them to convey different degrees of possibility, assertiveness, predictive certainty, etc. By contrast, second-generation heritage speakers exhibited a more restrictive set of choices, using almost exclusively indicative morphology to convey a strong degree of assertiveness and predictive certainty, without differentiating morphologically between more or less possible situations in the hypothetical world created. The two third-generation children studied longitudinally from ages 1 to 6 (Silva-Corvalán 2014), hardly used the future and the conditional forms, but retained the past tense.

To summarize the patterns of verbal morphology, the degree of erosion and simplification observed in different speakers seems to be related to the degree of proficiency of the heritage speakers and the complexity of the verbal forms. In general, heritage speakers develop and retain solid knowledge of agreement and tense, but the categories that interface with semantics and pragmatics (aspect and mood) are more prone to simplification, and more so if they require complex syntax, like subjunctive and conditional forms that must occur in complex sentences.

Morphosyntax-semantics-pragmatics interface

As just noted, interfaces are the most affected areas of heritage speaker grammars. In this section I summarize work on determiners, subject pronouns, and object clitics.

Determiners

Spanish has definite and indefinite articles inflected for gender and number, as in (11) and (12), which precede the noun. Definite determiners have anaphoric properties, referring to items introduced in discourse, and different semantic interpretations, which have to do with genericity and specificity. Montrul and Ionin (2010) investigated the interpretation of definite articles with plural noun phrases in Spanish heritage speakers in the United States. The syntactic and semantic distribution of definite and indefinite articles in Spanish and English is largely similar, but the two languages differ in the expression and interpretation of plural noun phrases.

Consider the English examples and their Spanish equivalents in (11–14). Spanish plural noun phrases with definite articles can express generic reference, as in (11), or specific reference, as in (12). English plurals with definite articles can only have specific reference, as in (14), while generic reference is expressed with bare plural noun phrases, as in (13). Bare nouns (nouns without articles) are ungrammatical in Spanish when they are in subject position, as in (15), unless they are modified. Bare nouns in object position are grammatical, as in (16).

(11) Los elefantes tienen colmillos de marfil. (generic reference)

(●)the elephants have tusks of ivory

(12) Los elefantes de este zoológico son marrones. (specific reference)

the elephants of this zoo are brown
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(13) Elephants have ivory tusks. (generic reference)
(14) The elephants in this zoo are brown. (specific reference)
(15) *Elefantes tienen colmillos de marfil.
(16) Vi elefantes con colmillos de marfil

“I saw elephants with ivory tusks.”

Misuse and omission of articles with noun phrases in subject position as in (15) are very common in Spanish heritage speakers with intermediate to advanced proficiency in Spanish, especially in written production. Montrul and Ionin (2010) used a written truth value judgment task, and an acceptability judgment task to test the generic/specific interpretation of plural determiners in Spanish. They found that the Spanish heritage speakers incorrectly accepted bare plural subjects with generic reference in Spanish (*Cebras tienen rayas “Zebras have stripes”) and interpreted definite articles as having specific rather than generic reference, as in English. While Spanish heritage speakers retain the determiner system of Spanish, they seem to adopt the determiner system of English, the majority language.

Subject pronouns

A phenomenon observed in Spanish and in a variety of heritage languages (Greek, Italian, Russian, Hindi, Arabic, and many others) concerns the licensing of null and overt subjects. In null subject languages, expressed and unexpressed subject pronouns are grammatical because the person and number information is recoverable from the agreement morphology, as in (17).

(17) Ella/ Ø llegó de Madrid.
She arrived-3rd sg from Madrid
“She arrived from Madrid.”

However, the distribution of null and overt subjects is licensed by discourse-pragmatic factors, such as topic continuation, topic shift, or switch reference. Overt subjects are strictly required when new information is introduced, and a contrast is established in discourse, as examples (18) and (19) show. The answer to question (18) requires a focused noun phrase and must be expressed by an overt subject. In (19), the overt subject él is a topic if unstressed, but it can also be a contrastive focus if it is stressed. The pronoun in this case can co-refer with the subject of the previous clause because it emphasizes the subject.

(18) ¿Quién vino? El/Mario/*Ø vino.
“Who came? He/Mario/*Ø came.”

(19) El periodista dijo que él/Él no había escrito ese reporte.
the journalist said that he (himself) not had written that report
“The journalist said that he had not written that report.”

The use of null and overt subjects is also relevant to establish reference in discourse. For example, when there is no switch in reference between a series of sentences, null subjects are appropriate when there is topic continuity, whereas overt subjects are pragmatically infelicitous, as in (20).
By contrast, overt subjects are appropriate when there is topic shift and a different referent is introduced, as in (21). Null subjects are infelicitous in these switch reference contexts (examples from Silva-Corvalán 1994, p. 148).

(20) Pepe no vino hoy a trabajar. *Pepe/?él/Ø estará enfermo.
    Pepe did not come today to work Pepe/?él/Ø will be sick
    “Pepe did not come to work today. He must be sick.”

(21) Hoy no fui a trabajar. Pepe/él/*Ø pensó que estaba enferma.
    today I no went to work Pepe/él/*Ø thought that I was sick
    “Today I did not go to work. Pepe/he thought I was sick.”

While the distribution of overt and null subjects in English may also be regulated by discourse-pragmatic factors, null subjects are rare in English (Torres Cacoullos & Travis 2015). Heritage speakers tend to use more overt subjects in pragmatically illicit contexts than monolingual speakers or speakers with a stronger command of Spanish than of English. Higher uses of overt subjects in lower proficiency heritage speakers may be related to the simplification of agreement morphology and more frequent use of canonical (SVO) word order. Sometimes, the features of the null pronoun cannot be reliably and consistently retrieved from overt agreement on the verb. However, the rate of null and overt subjects is also affected in heritage speakers who do not show problems with agreement and word order: lower rates of null subjects and overuse of overt subjects have been documented in several studies (Montrul 2004a; Montrul & Sánchez-Walker 2015; Otheguy & Zentella 2012; Silva-Corvalán 1994, 2014). It seems that the pragmatic features that regulate the use of null subjects erode, resulting in higher rates of overt pronouns in discourse contexts where a null subject would be more felicitous than an overt subject/pronoun (Sorace 2000). This phenomenon has been observed in production and in interpretation tasks (Keating, VanPatten, & Jegerski 2011). Finally, similar difficulties with the pragmatic constraints on null and overt subjects in null subject languages have been reported in studies of bilingual children of pre-school and school-age (Montrul & Sánchez-Walker 2015; Paradis & Navarro 2003; Silva-Corvalán 2014). This suggests that the pragmatic distribution of subjects is vulnerable to partial and incomplete acquisition during childhood.

Object clitics

Object pronouns in Spanish are clitics. Third person accusative pronouns like las and los, see examples (1) and (2), carry gender and number agreement, whereas the dative pronoun le/les only carries number marking. There is also the impersonal and reflexive clitic se, used with some verbs and some constructions. Clitics are syntactically and morphologically independent words, but unlike strong pronouns (él, ella) that have their own stress, clitics depend phonologically on a stressed host, like a verb. In Spanish, clitics precede finite verbs, as in (22). With imperatives, infinitives and participles (non-finite verbs) clitics appear after the verb, as in (23). When there is a sequence of a finite auxiliary and a participle or an infinitive, clitics stay low next to the nonfinite form or rise before the conjugated auxiliary, as in (24). Omission of clitics or null objects is usually not grammatical in Spanish (unlike in Brazilian Portuguese, for example), except in very restricted contexts like indefinite objects, as in (25). Furthermore, Spanish is a clitic doubling language, especially with datives, and the clitic can co-occur with the noun phrase it refers to. With indirect objects, clitic doubling is optional, as in (26), but in clitic left
dislocations—when the object is fronted as in (27)—dative and accusative clitic doubling is obligatory. Finally, there are other constructions that require obligatory dative clitic doubling, like inalienable possession, as in (28).

(22) María los compró.

Maria them-masc.pl. bought
“María bought them.”

(23) hazlo/ hacerlo/haciéndolo

do.imp it/do.inf. it/doing it
“do it/doing it”

(24) María quiso venderlo / María lo quiso vender.

Maria wanted to sell it/Maria it wanted to sell
“María wanted to sell it.”


brought 2nd sg money? yes brought
“Did you bring money? Yes, I brought (some).”

(26) María (le) dio un regalo a Pedro

Maria him-dat. gave a gift to Pedro
“Maria gave Pedro a gift.”

(27) Las carpetas las dejó Juan en la oficina.

the-fem.pl folder-fem.pl them.fem.pl left Juan in the-fem. office-fem
“The folders, Juan left them in the office.”

(28) Le quebraron la nariz a Pedro.

Him.dat broke the-fem nose-fem to Pedro
“They broke Pedro’s nose.”

Unlike Spanish, English does not have clitics, but this structural difference does not seem to affect Spanish as a heritage language. Silva-Corvalán (1994) found that, overall, clitics were very strong and resilient in heritage language grammars. All the participants produced clitics, the clitics were generally well placed with respect to the verb, and ungrammatical clitic omissions were very infrequent. Silva-Corvalán found that second-generation heritage speakers omitted less than 1% of clitics (0.8%), and the third generation, those with the weakest competence in Spanish, omitted 2.7% dative and accusative clitics and 6.6% reflexive clitics in different constructions. Montrul (2004b) analyzed the oral narratives of 24 heritage speakers and found that they produced accusative and dative clitics like the baseline group, at a rate of 30% of all objects. Only one participant exhibited three ungrammatical omissions of clitics. All the heritage speakers produced clitic doubling with indirect objects like the native speakers, and knew where to place the clitics with respect to the finite verb. Lower proficiency heritage speakers, however, did not produce clitic doubling in inalienable possession constructions (like example 28) and produced possessive pronouns as in English (su nariz “his nose”). In another study, Montrul
Silvina Montrul (2010) investigated knowledge of clitics in a grammaticality judgment task and a comprehension task. Sentences with clitics and different word orders, including clitic left dislocations as in (27) and preverbal objects, were the target of this study. Montrul found that, in general, the heritage speakers tested had more-native-like knowledge of all these structures compared to the L2 learners of similar proficiency in Spanish, confirming that knowledge of clitics is quite robust in Spanish heritage speakers. Leal Méndez, Rothman, and Slabakova (2015) tested the semantics of clitic left dislocations in Spanish heritage speakers of advanced and intermediate proficiency, finding that the heritage speakers did not differ from the group of native speakers to which they were compared. In general, it seems that the morphosyntax of clitics, clitic placement and clitic doubling, and the referential properties of clitics, are very resilient in Spanish heritage language grammar and acquired at native-like levels.

Complex syntax

In this section I discuss aspects of complex syntax, like relative clauses, passives, and questions, which involve movement of constituents and referential dependencies. These structures are acquired later in the acquisition process, after age 3. Many of these structures are also more frequent in written discourse, especially verbal passives, and it is likely that heritage speakers do not fully master these structures, especially if they were not schooled in Spanish. Pascual y Cabo (2013), who included passive sentences with transitive verbs and unaccusative verbs in a test whose main objective was to test the syntactic properties of psych verb constructions, found that adult heritage speakers generally exhibited monolingual-like judgments, demonstrating knowledge of the syntactic and semantic restrictions of the passive voice in Spanish. For example, they accepted passive sentences with canonical transitive verbs and class II psych-predicates (La casa fue diseñada por los arquitectos “The house was designed by the architects,” *La niña fue asustado [sic] por los perros “The girl was frightened by the dogs”) and were generally sensitive to ungrammatical sentences with unaccusative predicates in passive constructions (*El libro fue desaparecido por Pedro “*The book was disappeared by Pedro”).

Another complex structure is relative clauses, which are adjectival clauses that modify a noun phrase. Relative clauses involve long-distance dependencies because they connect the noun it modifies with a relative pronoun. Depending on the syntactic analysis, this is accomplished through movement of constituents and a gap, or through a binding relationship between the head of the relative clause and the referent of the relative clause. O’Grady, Lee, and Choo (2001) tested comprehension of subject and object relative clauses by Korean heritage speakers, and Polinsky (2011) conducted a similar study with Russian heritage speakers using a picture sentence-matching task. Both studies found that heritage speakers had more difficulty with the comprehension of object relative clauses (The cat that the dog is chasing) than with the comprehension of subject relative clauses (The dog that is chasing the cat). Sánchez-Walker (2013) tested written comprehension of subject and object relative clauses with inanimate objects and subjects in young adult Spanish heritage speakers in the United States. Subject relative clauses in English have V-O order within the relative clause, as in (29). Spanish has the English order, as in (30a), but also has object-verb inversion and displays O-V, as in (30b).

(29) The submarine that sank the boats (V-O)
(30) a El submarino que hundió los barcos (V-O)
    b El submarino que los barcos hundió (O-V)
In object relative clauses, the complementizer *that* is optional in English, and the word order within the relative clause is S-V, as in (28). In Spanish, the complementizer *que* is not optional, and both S-V and V-S word orders are possible within the relative clause, as in (32a, 32b).

(31) The submarine (that) the boats sank. (S-V)
(32) a. El submarino que los barcos hundieron. (S-V)
   b. El submarino que hundieron los barcos. (V-S)

Sánchez-Walker (2013) found that, in general, the Spanish heritage speakers were quite accurate comprehending relative clauses, probably because they were of higher proficiency than the heritage speakers of Russian and Korean tested in other studies. At the same time, she found that the Spanish heritage speakers were very accurate with the sentences whose word order was like in English, yet inaccurate interpreting the sentences with the word order that is different from that of English (30b and 32a).

Question formation with wh-movement is another complex syntactic structure that has received attention in Spanish as a heritage language, especially because there are some syntactic differences with English regarding subject-verb inversion and the use of complementizers. The subject wh-questions in (33) and (34) differ in the grammaticality of the complementizer. In English, complementizers are not required and are actually ungrammatical if expressed, as in (33a, 33b). In contrast, the complementizer is required in Spanish, as in (34a, 34b). In some syntactic approaches this difference is called the *that-t effect*.

(33) a. *Who do you think that came?
   b. Who do you think came?

(34) a. ¿Quién crees que vino?
   b. *¿Quién crees vino?

Mueller Gathercole (2002b) tested bilingual school-age children in Miami on their knowledge of the *that-t effect* (examples 33 and 34) with a grammaticality judgment task. She found that the children performed better with the grammaticality judgment task in Spanish than in English, and recognition of ungrammatical sentences improved from 2nd grade to 5th grade. The children who attended dual immersion schools and came from homes where Spanish was the only language spoken performed better than children attending English-only schools and children of homes where English and Spanish were spoken.

Montrul et al. (2008b) investigated knowledge of wh-movement, subject-verb inversion, and the use of complementizers in heritage speakers of intermediate proficiency in Spanish and monolingually raised native speakers of Spanish. The two groups rated grammatical and ungrammatical sentences with subject and object questions in a written grammaticality judgment task. Despite significant differences between native and heritage speakers, the heritage speakers were quite accurate with subject-verb inversion and complementizers even though Spanish and English differ in this regard. Therefore, this area of syntactic knowledge shows developmental effects and improvement with age when bilingual children and heritage speakers are compared.
Cuza and Frank (2011) investigated the syntax-semantics interface by focusing on the meaning associated with embedded interrogatives. Embedded interrogatives have two complementizers in Spanish differ and from statements which have only one. Consider the sentences in (35) and (36).

(35) María le dijo a Juan adonde fueron los niños. Statement
    “Maria told Juan where the children went.”

(36) María le dijo a Juan que a dónde fueron los niños. Question
    “Maria asked Juan where the children went.”

In (35) the sentential complement [adonde fueron los niños] is interpreted as a reported assertion whereas in (36) [a dónde fueron los niños] is a reported question introduced by the complementizer que “that.” The main verb is the same in both sentences (decir “say”) and the complementizer que introduces the question. Of course, the same sentence in (36) could be introduced with the verb preguntar “ask,” in which case the complementizer que would be optional. In English, two complementizers are not possible, and the meaning of a complex sentence as assertion or indirect question is marked by the meaning of the main verb. Cuza and Frank tested 32 low-advanced proficiency heritage speakers of Spanish on their knowledge of the meaning of these sentences. The main tasks were a written sentence completion task, an acceptability judgment task, and a preference task. The results showed that the heritage speakers used indirect questions with two complementizers very infrequently in the completion task (23%) compared with the comparison group of fluent speakers of Spanish (60%). In the acceptability judgment task, unlike the native speakers, the heritage speakers were not sensitive to the semantic difference between structures with two complementizers and structures with one complementizer. A few heritage speakers with advanced proficiency showed sensitivity to the semantic distinction between the two types of sentences in the preference task, but they were still less inclined to accept these options than the comparison group of native speakers. Therefore, this aspect of syntax-semantics appears to not be fully developed in Spanish heritage speakers.

On the nature of grammatical development

Heritage languages develop from childhood and into adulthood, like any other language in native speakers. In every language, different aspects of the language have developmental schedules. For example, phonetics and phonology develop in utero and during the first year of life, while morphosyntax emerges at about age 2, and complex syntax after age 3 or 4. Early acquisition and mastery refers to the pre-school period (up to age 4), while later language development is considered from age 4–5 and later (late childhood). This period coincides with the onset of schooling, and many heritage speakers do not receive schooling in the heritage language (see Lindholm-Leary, this volume).

The acquisition of heritage languages deals with the study of the developmental stages and outcome of learning a heritage language from childhood and into adulthood, as well as the wax and wane of the heritage language in response to input factors (Montrul 2016a). As a socio-politically minority language, the heritage language is acquired as a first language during the first years of life, as in sequential bilinguals, or simultaneously with the majority language since birth, as in simultaneous bilinguals. The morphosyntax of the Spanish language is vast and complex, and the descriptive review presented here is hardly exhaustive. The aim of this chapter was to
synthesize most recent research on the morphological and syntactic abilities of Spanish heritage speakers. As this chapter shows, some grammatical areas have been studied more than others, other areas need to be investigated in more depth since the review here is based only one study, and other areas have not yet been investigated. Nonetheless, some preliminary conclusions can be reached about the vulnerability or resilience of different aspects of morphology, syntax, and semantics in the context of established developmental schedules for Spanish. Table 10.1 presents a summary of the main findings.

Table 10.1 shows that even though Spanish is the weaker language in heritage speakers of Spanish, different aspects of the structure of Spanish show differential levels of mastery by the time heritage speakers reach young adulthood. In general, we see that inflectional morphology, which is highly dependent on input factors and frequency, is vulnerable to simplification and loss, especially in heritage speakers of lower proficiency in Spanish. Yet, within this broad area, there are differences. In general, nominal morphology (gender, case) is more affected than verbal morphology. Within verbal morphology, there are very few studies on agreement, but it looks like agreement and tense morphology are more resilient than aspectual and mood morphology, which are also more related to meaning and syntactically more complex. Mood emerges very early in child acquisition (about age 2 with commands and verbs that subcategorize the subjunctive (Valdivieso 1994), but is not mastered until age 12 in monolingual children (Blake 1983). It is therefore not surprising that insufficient input and use of the heritage language during late childhood affects this verbal category more than any others.

In terms of morphosyntax that interfaces with semantics and pragmatics, there are also important dissociations. We see that clitics, which do not exist in English, are acquired robustly by child and adult heritage speakers and used in the appropriate syntactic positions depending on verb finiteness. Heritage speakers also know and use clitic doubling at native levels. Clitic omissions are minimal, and the errors observed have to do with case and agreement mismatches, but not with the syntax or semantics of clitics. In contrast, the use of definite determiners is

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highly influenced by the majority language (English) at the semantic level, and so is the dis-
tribution of overt subjects in Spanish, which appear to not respect pragmatic constraints on their
use. The different developmental schedules and degree of vulnerability of different structures are
less related to time of acquisition and appear to depend on the grammatical complexity of the
particular category as a function of the architecture of language (syntax, morphology, semantics,
discourse) and its frequency and transparency in the input.

Finally, compared to the study of inflectional morphology and overt subject distribution,
the acquisition of complex syntax has been much less studied. The few studies covered in
this chapter show that the syntax of verbal passives, relative clauses, and wh-questions are
not in general problematic for heritage speakers of Spanish, while the semantics of embedded
interrogatives, a quite subtle and perhaps infrequent phenomenon, is not properly mastered.
However, these conclusions are based on a handful of studies and should be further pursued
in future research.

At the same time, there are still many areas of morphosyntactic knowledge that have not
been studied in heritage speakers that will give us a more nuanced picture of how the overall
grammar is affected under fluctuating input conditions. For example, heritage speakers appear
to show robust knowledge of clitic pronouns at the syntactic level, but do they also develop full
knowledge of their referential properties in discourse, as in the difference between pronouns
and reflexives (for example, in sentences like Sara vio a María y la saludó. Sara se/la sorprendió,
who do la and se refer to?) Although the review presented here suggests that complex sentences
are not very much affected in heritage grammars, more experimentation with different struc-
tures involving complementation and subordination and using tests and techniques targeting
comprehension, processing, oral and written production are in order, since many of these
structures in particular are fully mastered, integrated, and used productively during the school
age period.

Conclusion

Investigating the morphosyntactic abilities of Spanish heritage speakers is important for theo-
retical views of language and language acquisition and for practical considerations related to
pedagogical applications, language therapy interventions, and language policies. Theoretically,
we need a better understanding of how different aspects of morphosyntax are partially acquired
or mastered depending on quantity of input and use. Unfortunately, space limitations do not
allow me to elaborate further on the theoretical significance of these findings (but see Montrul
2016a, in press). Results from studies of morphosyntax can inform pedagogical practices as to
what to focus on in the classroom and how to support the development of particular structures.
Beyond the classroom, they can inform language policies to promote academic support of the
heritage language throughout the entire school age period until the end of high-school, not
just elementary school (for those schools that offer bilingual education). For speech patholo-
gists, these results can offer guidelines of what to expect typically developing bilinguals to
achieve by certain ages and how to understand what children with speech delays may need
help with. As we have seen, many semantic and pragmatic aspects of morphosyntax, which are
crucial to extract meaning and implications from texts, are vulnerable to incomplete acquisi-
tion when the language is not used enough and not supported at school. Professional use of
the language, which is a desired goal of many Spanish heritage speakers who seek to improve
their academic proficiency in the language, requires command of complex syntax, semantics,
and pragmatics.
Morphology, syntax, and semantics

Note

All native speakers of English, for example, acquire that the rule for the past tense is the addition of the morpheme -ed to a verb stem and do so productively with above 90% accuracy in obligatory contexts. They reach ceiling performance and they converge on that performance with little variation, as opposed to L2 learners and young monolingual children who make errors with the application of this rule during development. Ceiling performance with an obligatory rule would be considered native ability in morphology, for example.

References


Morphology, syntax, and semantics


