

UNIT I

**Formal approaches to Spanish as a  
Heritage Language**



# Formal linguistic approaches to heritage language acquisition

## Bridges for pedagogically oriented research

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The goal of this chapter is to lay out the central themes of heritage language acquisition research adopting a formal/theoretical linguistic perspective. Specifically, we aim to provide a detailed discussion of the nature of heritage language grammars. In doing so, we will address the debates on how to explain heritage speaker competence differences from monolingual baselines and more. This chapter will not be limited to discussions of Spanish as a heritage language, but rather will highlight the important role that Spanish has played and will continue to play in the development of heritage language acquisition studies. Finally, we will offer some comments/insights on how the information covered regarding the formal linguistic properties of heritage speaker knowledge should be considered for and implemented in heritage language pedagogies and thus dealing with heritage speakers in the classroom setting.

### 1. Introduction

As is true of all cases of language acquisition, Heritage Language (HL) acquisition can be studied from multiple traditions. The questions that motivate research programs from different perspectives are therefore necessarily destined to be only partially overlapping. The fields of study to which this book makes a significant contribution illuminate this statement. Although there is a justifiable need for some level of independence between (abstract) theory and practice, strict independence in HL studies runs antithetical to everyone's goals. It is fair to say that researchers interested in HL pedagogy would achieve better results if their endeavours built on knowledge obtained from HL acquisition in naturalistic contexts. Equally, heritage language development in the classroom setting provides an indispensable testing laboratory for questions and hypotheses formulated by formal linguistic HL theorists. The connections that

the two sides should have cannot be overstated. However, at present, there is little connection between formal linguistic and pedagogically oriented HL researchers, despite compelling reasons to the contrary. Within this context, the purpose of this chapter is threefold: (i) to provide the reader with a brief introduction to formal linguistic studies of heritage language acquisition; (ii) to serve as a bridge between the two subfields of study so as to invite greater collaboration as we have laid out the need for above; and (iii) to introduce the chapters included in this unit.

Formal linguistic studies examining HL acquisition in the “wild” have mostly focused on describing the grammatical competence of adult heritage speakers, and on theorizing about how/why these grammars developed in the ways they did. That is, formal linguistic studies look at the (mostly adult) outcomes of naturalistic language acquisition in a very specific sociolinguistic situation that defines the parameters of HL bilingualism. In the past decade or so, there has been a proliferation of research of this type. On the whole, this research has consistently shown that HL bilinguals – especially under favourable conditions of access to ample input of high quality – have sophisticated HL grammars; however, they are to various degrees and in various domains significantly different from age-matched monolinguals (see e.g., Montrul, 2008, this volume; Benmamoun, Montrul & Polinsky, 2013 for review). Details aside for now, such a consistent result is very appealing to formal linguists for the conundrum it presents. After all, HL bilinguals are native speakers of the HL since, like monolinguals, they acquired the HL naturalistically in early childhood (see Rothman & Treffers-Daller, 2014). So, why should they be significantly different from monolingual controls? There are obvious variables that will at least partially factor into any reasonable ultimate answer to this question. For example, the fallacy of comparing bilinguals and monolinguals (e.g., Bley-Vroman, 1983), the role of formal education and literacy in monolingual knowledge, the comparability of the quantities and qualities of the inputs each group receives are all factors which could contribute to differences of HL speakers from monolingual controls (see Pascual y Cabo & Rothman, 2012 for discussion). Equally clear, however, is that none of the aforementioned variables alone or even in combination would explain the range of differences seen in HL competences. For the theoretical linguist then, HL bilinguals in the “wild” provide a naturally occurring laboratory to test important questions of considerable debate. For example: (i) Under reduced input, what parts of grammar seem particularly robust and what parts of grammar are more affected? (ii) What does this reveal about the nature of language and its mental constitution? (iii) What do HL bilingual outcomes tell us about the nature vs. nurture debates in linguistics?

More pedagogically focused studies of HL acquisition necessarily focus on other questions, precisely because they deal with similar sets of bilinguals outside of the “wild.” In a way, HL bilinguals in the classroom are a proper subset of all HL bilinguals

since they necessarily include only those that seek formal training and literacy of the HL in the classroom. By definition, assuming the focus is on the traditional questions, formal linguistic researchers have tended not to be primarily interested in what happens in the classroom context since the classroom itself constitutes an additional, specific variable (but see, e.g., Montrul & Bowles, 2010). Such a mindset, however, has largely resulted in a missed opportunity for the typical formal linguist. Studies in the classroom setting, when carefully constructed, could be very productive towards adjudicating between various proposals of how and why heritage grammars differ from monolingual ones, a point to which we will return in greater detail. Classroom HL studies must deal with a different reality than formal linguistic studies do. As is true of all language classrooms, the HL classroom brings together a heterogeneous population. Even though all students are HL bilinguals, it is very unlikely that any given cohort will be of the same linguistic proficiency level. This heterogeneity produces linguistic challenges similar to those of the L2 classroom, but distinct from monolingual language classes. Pedagogically oriented HL studies often seek to examine what particular interventions do for HL bilinguals, what their specific needs are, and the like. In this respect, HL pedagogy can shed light on the areas of HL grammar which are more vulnerable, benefit more or less from intervention, and, perhaps, belong more to the periphery than the core.

Ideally, a mutually beneficial relationship could exist between pedagogically oriented treatments of HL acquisition and formal descriptions from the HL “wild.” For example, specific classroom interventions designed on the basis of what formal linguistic studies reveal about HL competence can test theoretical questions within language pedagogy. A very good example of such good practice can be seen in Potowski, Jegerski and Morgan Short’s (2009) study of the development of past subjunctive in Heritage bilingual Spanish, using testing between two teaching methodologies. Our point here is not to suggest that there are no connections between formal linguistic and pedagogical oriented approaches to HL bilingualism, but rather that there is room for more profitable and more pervasive connections. For such connections to be maximally beneficial, an open dialogue of understanding must be established. This means that formal linguistic discussions need to be accessible to HL pedagogy by presenting the research itself and the debates within their sub-field in an appropriate and theory-neutral way. The main purpose of this chapter, then, is a concise first attempt at building this bridge. Beyond briefly covering the basics of what formal linguistic studies have described related to HL bilingual grammars as well as the theoretical positions within formal linguistic theory on how and why HL grammars take the shape they do, we will inject our views in terms of what is at stake from a formal linguistic perspective related to these positions. Specifically, we will discuss the consequences of the terminology that derives from such perspective for pedagogically oriented researchers and teachers.

We see this discussion as the first building block of the bridge between formal HL approaches and HL pedagogy in view of the possible far-reaching implications that clarity and specificity in theoretical approaches can bring to the implementation of research in teaching practice. In particular, misunderstanding findings which reveal HS differences from monolingual norms can promote a pedagogical point of departure that is unintended by formal linguists as it is linguistically inaccurate. Similarly, the view of “fixing” heritage grammars from a broken state to an unbroken one via pedagogical intervention in no way derives from formal linguistic concepts or empirical data sets.

## 2. Formal linguistic approaches to HL bilingualism: The data trends and the debates

### 2.1 Who qualifies as a HL bilingual?

As pointed out in the introductory chapter of this volume, it is perhaps prudent to start this section by defining what a HL bilingual is taken to be in the context of (most) formal linguistic studies. It might seem evident that all researchers would agree on and thus use the same profile characteristics when determining which individuals qualify as HL bilinguals. However, this is not immediately clear in practice. Indeed, for certain purposes and research questions, a broad, inclusive definition might be useful. For example, a HL learner – note that *learner* is used purposefully – might be anyone who has (strong) familial ties to a particular language and/or culture, for example, a second or third generation Korean-American. This person might not speak Korean, but has been somewhat exposed to the language indirectly all her life and very much brought up in the traditional culture. Under a situation where this individual matriculates in a Korean class at University-level, understanding that this individual brings motivations and some linguistic/cultural knowledge that the non-Korean-descendant learner has is useful and might justify treating this person as a HL learner for teaching and pedagogically-oriented research purposes. However, given the questions that formal linguistic studies focus on, such an individual is not a HL bilingual, at least not in the sense we typically understand for heritage speakers. A heritage speaker (HS) – emphasis on the *speaker* – usually refers to HL bilinguals that have – to various degrees – naturally acquired communicative competence in the HL.

Within the framework of formal linguistics which seeks to describe and explain the grammar of HSs, some grammatical competence in the HL is presupposed. Thus, despite the fact that different formal linguistic studies examine various levels

of HS proficiency – usually assessed in comparison to age-matched monolinguals (see Pascual y Cabo & Rothman, 2012; Putnam & Sanchez, 2013; Bullock & Toribio, this volume for issues with this practice) all these studies investigate speakers of a HL acquired naturalistically in a home setting. Although various formal linguistic definitions of HS and HL exist (see e.g., Montrul, 2008; Benmamoun et al., 2013), we offer the one below taken from Rothman (2009) as the one we follow herein, noting that all available definitions accord with the basic characterizing descriptors.

A language qualifies as a *heritage language* if it is a language spoken at home or otherwise readily available to young children, and crucially this language is not a dominant language of the larger (national) society... the *heritage language* is acquired on the basis of an interaction with naturalistic input and whatever in-born linguistic mechanisms are at play in any instance of child language acquisition. Differently [from monolingual acquisition], there is the possibility that quantitative and qualitative differences in *heritage language* input, influence of the societal majority language and differences in literacy and formal education can result in what on the surface seems to be arrested development of the *heritage language* or attrition in adult bilingual knowledge. (Rothman, 2009: 156)

In light of the above, we can summarize a HS as a bilingual speaker of the HL who developed knowledge of the HL naturalistically. A HS is either a simultaneous bilingual (2L1) of both the HL and the societal language or initially a monolingual of the HL who became an early child L2 learner of the societal language. More often than not, the HS becomes dominant in the societal language, which often corresponds to the sole language of her formal education throughout her lifespan and the language in which she primarily socializes outside the home, starting in early childhood. As obvious as it should be that eventual dominance in the societal language does not change the fact that the HSs are L1 acquirers of the HL (uniquely or the HL is one of two L1s), it is not always clear that HSs are treated, as they should be, as a sub-type of native speakers of the L1 (see Leal Mendez, Rothman & Slabakova, 2014; Rothman & Treffers-Daller, 2014).

## 2.2 What do formal linguistic studies reveal?

Rather than delve into too many details with respect to individual data sets, we will endeavour to concisely explain the general trends that formal linguistic research has revealed with respect to HS competence. Inevitably, this means we will oversimplify complex issues. We refer the reader to two sources that comprise in-depth and accessible state-of-the-science reviews of much of the empirical work on formal linguistic HS studies that are very exhaustive to the date of their publications, (a) Montrul (2008), and (b) Benmamoun, Montrul & Polinsky (2013).

A survey of HS studies overwhelmingly shows that HS competence tends to differ from matched monolinguals in the following ways:

1. HL grammatical competence and performance differ from monolingual norms to various degrees in various domains.
2. HSs often show partial knowledge as opposed to an utter lack of knowledge.
3. Heritage language competences can differ significantly from one another whereby some are much more “proficient” holistically (and in various domains) than others.

Observation (1) refers to the fact that HSs often perform on a continuum across different domains of grammar. For example, generally speaking HSs tend to show better conformity in the phonological domain than in some areas of morphology and syntax (but see Rao, this volume). We could further divide trends within a single domain. Within morpho-syntax, for example, it has been observed that HSs are more likely to parallel monolingual native speaker knowledge in core syntactic properties as opposed to interface-conditioned properties (e.g., Sorace, 2011). Take for example, gender assignment and agreement. In Spanish, assignment/agreement of gender is both a lexical and syntactic property. Gender assignment on the noun itself is a lexical process that specifies the gender value (masculine or feminine for Spanish) as part of the entry of the word. Gender agreement within the D(eterminer) P(hrase) involves the matching process of the lexical gender feature of the noun with the gender features of articles, demonstratives quantifiers and adjectives that co-occur with that noun. This matching process is a syntactic operation with morphological and phonological implications on the form of all the agreeing items (e.g., ‘el’ vs. ‘la’ etc). HSs are accurate with gender agreement, meaning the syntax of gender is in place, whereas they have some issues with lexical gender assignment (see Montrul, Foote & Perpiñán, 2008).

Observation (2) seemingly overlaps with the final example offered for observation (1). That is, HSs often show partial knowledge of particular properties of grammar as opposed to utter lack of knowledge. Consider subjunctive mood in Spanish. Unlike English, Spanish has a complex system of mood encoded in specific morphology on the verb. HSs of Spanish exhibit differences from monolingual Spanish speakers with use of subjunctive mood morphology (e.g., Montrul, 2009; Montrul & Perpiñán, 2011). However, some uses of the subjunctive are much more variable than others. In fact, HSs at high levels of proficiency are quite accurate with the subjunctive when it is syntactically obligatory, as is the case with volitional contexts introduced with the verb *querer* ‘to want’ (e.g., Pascual y Cabo, Lingwall, & Rothman 2012). In other contexts where the subjunctive is possible but not obligatory and in which the choice of indicative vs. subjunctive depends on semantic-pragmatic properties HSs tend to differ more significantly from monolingual controls. In a study

comparing subjunctive mood in purpose clauses (i.e. after *para que* ‘in order to’) with relative clauses where the use of subjunctive depends on the absence of presupposition, Giancaspro (2015) shows that HSs perform just like native monolinguals in the former but not in the latter context. This study indicates that at least partial knowledge of subjunctive is available to HSs since in certain (semantic) contexts they too, like monolingual controls, are sensitive to mood distinctions, while in other contexts their knowledge differs from that of controls.

Observation (3) refers to the fact that HSs’ knowledge of the HL is not as consistent across individuals as one expects of other sets of native speakers, particularly monolinguals. This fact is not at all surprising when one considers the continuum of exposure type (quantity and quality), their individual patterns of use of the HL, the level of literacy they have in the HL, the status of the HL in the society in which they live, or their access to other speakers of the HL. These differences do not normally pertain to native monolinguals, at least not in the same way. While we typically do not use terms like intermediate and advanced levels to describe monolinguals, these terms are used in HS studies to equate their relative level as compared to matched monolingual norms. It is worth pointing out that one could, using the same rubric of an idealized standard comparison, observe such differences across monolinguals (see Dąbrowska, 2012), although this is beyond the scope of this article. Suffice it to say, that HSs even when seemingly under very comparable input conditions do not always show the same level of conformity that one expects in monolingual contexts. Although variables must conspire to explain this, it is possible in a HS context to have members of the same family differ significantly from one another despite the fact that key indicators such as Socio Economic Status (SES) that normally explain differences in monolinguals are controlled for. Proficiency tendencies for particular HL groups, at least in the US where HSs have been studied most prolifically, have been noted. Whereas Spanish and Portuguese HSs in the US tend to be at the intermediate to advanced proficiency levels, HSs of Russian and Korean tend to achieve lower levels of proficiency. This observational fact is likely a by-product of the sociolinguistic realities of particular languages in a particular environment. One can imagine that Russian HSs, for example, in another context such as the Ukraine will differ in this regard to those studied in the US.

### 2.3 How and why: The debates on sourcing different outcomes

As alluded to above, it is not the case that HSs’ knowledge of the HL is entirely different from that of monolinguals. Indeed, for some domains of grammar HSs perform indistinguishably from some monolinguals (e.g., Leal Méndez et al., 2014, 2015). Much of the focus of the field, however, has been on the differences HS grammars often present. The reason for this is two-fold: (a) differences are abundant enough to be considered representative and (b) differences are theoretically relevant on various

planes. By abundant, we are referring to the fact that it is not at all difficult to uncover some degree of difference between native monolinguals and even the most proficient of HSs at various grammatical points. By significant and theoretically relevant, we are referring to one of the core questions of HS studies from a formal linguistic perspective: How and why does early naturalistic acquisition of a native language result in differences between native monolinguals and HS populations in adulthood? Answers to this question promise to have far-reaching implications for linguistic and acquisition theories. To name just a few, uncovering the variables that conspire to explain these differences will shed light on the role input has (e.g., quantity and quality) for acquisition more generally and specifically for the acquisition of particular properties, on the selectively vulnerable domains of grammar in bilingualism, and on the role of age of acquisition on grammatical outcomes (see Tsimpli, 2014 for a critical overview).

A major focus of formal linguistic HS studies – probably the main source of debate as well – regards various proposals that attempt to answer the question above regarding the source of differences between the end-state grammars of monolingual vs. HS bilingual early native acquisition. Although it is clear that bilingualism itself is a factor and influence from the societal language – typically the dominant language of HSs – can explain some of the differences, it is equally apparent that these two considerations alone or together could not explain the gamut. There are four hypotheses that are formalized in the literature. To our mind, none of them are mutually exclusive to the others. In other words, it is possible – likely in our view – that each of these proposals explains in part a subset of the differences and that all contribute to HS end-state differences.

The first proposal is that arrested development is a main contributor (see Montrul, 2008). Arrested development refers to a point in the developmental sequence of HL acquisition where development ceases, that is, at a point in child language acquisition short on convergence on the adult variety of the HL. Presumably, arrested development correlates with reductions in input and the start of shifts in dominance towards the societal language at which point further development in the HL does not occur. This view is often referred to by the label *incomplete acquisition*. The general idea of incomplete acquisition is that HSs, for a myriad of reasons, do not fully acquire the HL. The second proposal is that of HL *attrition*, the non-pathological loss or erosion of previously acquired linguistic representations (Polinsky, 2011). The idea is that HSs have acquired a HL grammar not qualitatively different from monolinguals but with certain properties lost or eroded as the HS shift in dominance towards the societal language.

Note that both of these proposals, in our view, make some presuppositions about the input available to HSs. Something can only be incompletely acquired or acquired and lost – the case of attrition – if the exposure to the HL that the HSs receive

provided the cue within the input that could lead to convergence on the monolingual variety in the first place. The third proposal, alternatively, focuses more on the qualitative nature of the input to which HSs are exposed, offering the possibility that some of the differences in HSs might be traced back to qualitative differences in the input provided to them by speakers of the HL who themselves might be undergoing attrition or as a result of not having been exposed to certain structures given a lack of formal education in a standard monolingual variety (Sorace, 2004; Rothman, 2007; Pires & Rothman, 2009; Montrul & Sanchez-Walker, 2013). This approach is known as *input delimited differences* in the literature. Under such a view, systematic differences between HS and monolingual varieties are viewed as dialectal differences. As such HSs can be said to fully acquire the HL, just a different variety than the one monolinguals acquire. The fourth proposal is that HSs differences reflect a different path of acquisition than monolinguals (Putnam & Sanchez, 2013). Like proposal three, such a view sidesteps the issue of labelling HS as incomplete. Instead, the idea is that HS grammars are complete grammars of a different kind than monolinguals. Differently from arrested development or attrition, there is no stopping of development or reversal. Instead, there is a change in path, which is a point at which HS children diverge from monolingual children as they both continue to develop towards a steady state grammar.

Of these four proposals, the most influential to date has been *incomplete acquisition*. The term incomplete acquisition to describe the state of HS grammars is almost a ubiquitous term. Disentangled from any evaluative meaning that one might assign to the term, to which we return in the next section, it is clear why this view is the most accepted. In the first place, provided one accepts the monolingual comparison against which incompleteness is benchmarked, it is descriptively accurate. Secondly, if it is used, as it often is, as an umbrella term referring to differences as opposed to being linked exclusively to arrested development then the other three proposals could be subsumed under it as contributing factors that give rise to incomplete acquisition. Although no linguists who have used this term – ourselves included historically – have intended to convey any evaluative innuendo, it is not clear that this term is either descriptively accurate or especially useful for non-linguists (see Pascual y Cabo & Rothman, 2012 for discussion). In the next section, we will develop this further, specifically linked to how it relates to HL classrooms.

### 3. The classroom is not a locus of completion

As stated from the outset, our goals herein are to summarize the research that formal linguists have carried out and link this research to scholarship and practice in HL pedagogy. We now turn to our second goal.

Formal linguistic studies can contribute to HL pedagogy if there is properly contextualized dissemination and translation of findings, specifically for pedagogically oriented purposes. Formal linguistic studies provide descriptions of loci of differences between monolinguals and HSs. For pedagogical purposes, explaining how and why differences obtain is of little use (unless the source of said differences may be metalanguage or literacy development), but knowing what those differences are can be very useful. Formal linguistic research also endeavours to correlate variables that might explain why some HSs are relatively less divergent from monolinguals than others. Knowing how HSs differ from the monolingual standard and which variables reliably correlate to intragroup differences across HSs of the same HL can facilitate the creation of empirically-informed pedagogies for HSs of any given HL and also for specific subsets of HSs of that particular profile.

As just described, one might get the wrong impression that HL education is meant to complete an incomplete process. In other words, formal linguistic studies can inform where the “holes” in knowledge are, so that specific interventions can be designed to fill in the gaps. As always, context is extremely important. In the situation of a HL classroom, HSs are being taught a particular standard variety. For many, this will also be their first exposure to literacy in the HL. As we see it, HSs need instruction on literacy, the standard grammar, and cultural knowledge. Thus, HL teaching ought to be viewed as akin to language arts education in monolingual settings, geared at age and context appropriate levels of maturity, meta-linguistic and meta-cognitive knowledge. In many places, to be sure, this is happening. A key piece to the success of educating HSs in their HL is to understand that HSs are not linguistically broken simply because they are different from monolinguals, and so the goal of HL education is not to fix them but to consolidate developed or developing knowledge of the HL. Communicatively competent HSs are native speakers of a dialect of the HL, however different from a monolingual standard. Seen this way, adult HSs who take classes in the standard variety of the HL might be better viewed as a specific type of third-language learners, as suggested by Polinsky (2015). In any case, just like the goal of teaching standard American English across the United States in language arts classes is not intended to replace dialectal variation, but rather to provide educated pupils with another variety/register that in certain contexts might be expected and more appropriate, so too is the case of teaching standardized varieties to HSs.

Formal linguistic studies that repeatedly show differences between HSs and monolingual norms are simply documenting in real time a naturally occurring process of emerging dialect formation. HL speakers are thus speakers of a variety whose characteristics are primarily defined by bilingualism itself, namely by external factors (input quality and quantity) that have been repeatedly shown to affect language development in bilinguals, and developmental patterns which affect the timing of emergence and mastery of specific phenomena in monolingual and bilingual children alike

(Tsimpli, 2014). As we mentioned, it is because HSs provide a unique glimpse into processes that are integral to many questions of importance to language and cognitive sciences that so many formal linguists and psycholinguists have studied them in the past two decades in particular. In our choice of labels, such as incomplete acquisition, we might have given the impression that the job of HS teaching is to complete a stunted (incomplete) acquisition process. We challenge this approach by suggesting that a promising relationship between formal linguistics and HL pedagogy is one of informing what the specific needs are of HSs who already speak a closely related variety to the new standard one the classroom seeks to provide.

Up to this point, we have addressed two of the three goals we posited at the outset of this chapter: we have provided an introduction to the formal/theoretical study of heritage speaker bilingual development and we have underscored the importance of building bridges between theory and practice. Next, to address our final aim, we present an integrated summary of the four chapters included in this unit.

#### 4. Reviewing the chapters in this section

Our earlier claim that heritage languages are not *incomplete* is not meant to deny the seemingly ever-present differences observed with regards to HS knowledge and use of the HL (e.g., Pascual y Cabo & Rothman, 2012). Such differences have been documented in a variety of properties and domains, with those found in the area of morphosyntax being singled out as most vulnerable (e.g., Montrul, 2008, 2010; Rothman, 2009; Pascual y Cabo, 2015). Although to date many developments have been made and have allowed the field to move forward in our understanding of HS bilingual development, there remain open theoretical and empirical issues which require additional research. Thus, to further advancements in the field, the four chapters included in this section analyse new data on a variety of properties and provide different viewpoints on current debates.

In line with the general spirit of advancement and development that this volume aims to convey is the effort to build bridges between different methodological approaches, perspectives and even (sub)disciplines. In this sense, Jacqueline Toribio and Barbara Bullock's proposal (Chapter 3) aims to close in on the distance between HL formal/theoretical research and language variation studies by presenting a corpus-based approach as a new form of observation for characterizing Spanish as a HL. The integration of this novel approach into the general HL research program allows for new analyses, which, in turn, can make new and meaningful connections between the HL, its speakers, and the HL input they are exposed to.

While most previous research on HSs has examined knowledge and use of morphosyntactic properties, the areas of phonetics and phonology remain largely

understudied (but see e.g., Amengual, 2012; Au, Knightly, Jun & Oh, 2002, Rao, 2014). Filling an important gap in the literature is, therefore, Rajiv Rao's experimental study on Spanish HS nuclear tonal configurations (Chapter 4). Rao's data indicate that utterance type (statements and questions) and pragmatic meaning influence nuclear intonation differently for HSs than for native speakers. According to Rao, the differential nature of the (intonational) input to which HSs are exposed seems to be responsible for the outcomes observed.

In Chapter 5, Jegerski, VanPatten, and Keating examine ambiguous relative clause attachment preferences among HSs and adult L2 learners. Employing a computerized off-line sentence interpretation task, they found that while late bilinguals favored a single attachment strategy in both of their languages, as in Dussias and Sagarra (2007), heritage bilingual participants exhibited distinct attachment preferences in each of their languages. Jegerski et al. take this to indicate that early bilinguals may be more likely to use language-specific sentence comprehension strategies, which is more in line with a two-processor model of bilingual sentence comprehension.

In an examination of structural simplification and case erosion of Spanish indirect objects and dative experiencer verbs (*gustar*-like), Silvina Montrul (Chapter 6) observes that not only HSs, but also first generation immigrants, and (to some extent) native speakers from the same linguistic background show a tendency to accept ungrammatical sentences without the required preposition "a." Consistent with previous research (e.g., Silva Corvalán, 1994; Pascual y Cabo, 2013; Pires & Rothman, 2009) she contends that in addition to limited exposure to input during late childhood, the structural changes observed can also be related to the individual grammars of some of the HSs' input providers (i.e., first generation immigrants), who may have undergone attrition.

## 5. Some concluding remarks

In an effort to provide a broad base for the discussions that will follow in this thematic section, we started our contribution by laying out the central topics and main research trends in the field of HS acquisition from a formal/theoretical linguistic perspective. Some of the issues included in this discussion were (i) the definition of HS, (ii) the differential nature of HS linguistic outcomes, and (iii) the source of the HS differences. Additionally, we have provided a rationale for linking formal linguistics to HL pedagogical approaches. Specifically, our goal was to raise awareness about the inadequacy of the label *incomplete acquisition* to describe the documented HS competence differences from monolingual baselines on the basis that its use may encourage unwarranted misinterpretations and misgeneralizations.

Lastly, we have summarized the four chapters included in this section. As we see it, the wide-reaching discussions included therein are good examples of the kind of

research needed to yield a more fine-grained understanding of the issues of interest to field of HS acquisition/bilingual development. To be sure, such an understanding is needed to continue to gain insights which will shape (and constrain) future research and practice in the field.

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