Commentary: Pedagogical Implications of Experimental SNS Research

Maria Carreira, California State University, Long Beach
Kim Potowski, University of Illinois at Chicago

This special issue of the *Heritage Language Journal*, guest edited by Silvina Montrul, unites four papers on different aspects of heritage Spanish speakers’ linguistic abilities. In this commentary, we reexamine these important contributions with an eye toward implications for instruction and toward general trends for the field. In particular, we discuss the contributions of Montrul and Perpiñán and of Bowles as they relate to classroom instruction of heritage speakers, and those of Bolger and Zapata in terms of current and future trends in the field. In the discussion that follows, we abbreviate heritage speaker as HS and second language learner as L2 learner.

The article by Montrul and Perpiñán examines whether the developing knowledge of L2 learners is similar to the knowledge of HS. This question bears on important theoretical and pedagogical issues. Regarding the latter, a longstanding assumption of the profession is that HS and L2 learners are best taught in separate classes. The findings of Montrul and Perpiñán shed light on pedagogically important differences between the learners that suggest that separate tracks may in fact be the best course of action. At the same time, they suggest how to approach the teaching of these two types of learners when they are together.

Earlier research by Au et al. (2002) found that the early language experiences of HS confer an advantage in phonology/phonetics, but not in morphosyntax. Montrul’s recent research program (see Montrul, 2008) has been examining this claim. In their article, Montrul and Perpiñán focus on the interpretation of tense-aspect and mood by L2 and HS of comparable written proficiencies. As attested by the research literature and countless Spanish instructors, tense-aspect and mood are particularly difficult areas of the grammar for L2 learners and HS (Silva-Corvalán, 1994, 2003; Montrul, 2002). Montrul and Perpiñán shed light on the specific challenges presented by these topics and speak more broadly to teaching practices and curriculum development in Spanish departments enrolling HS. Given the number of issues involved, the present discussion will focus on issues and findings with high pedagogical value. Moreover, given the technical nature of the material, some background information from the article will be restated in an effort to maximize the accessibility of this material for non-linguists. In contrast to Au et al. (2002), Montrul and Perpiñán found significant differences between L2 learners and HS regarding their knowledge of tense-aspect and mood. Two tasks were used to assess learners’ knowledge of these areas of morphosyntax: 1) a morphology recognition task, which sought to determine whether students recognized the appropriate inflectional morphology in required contexts, and 2) a sentence conjunction task, which sought to determine students’ knowledge of semantic implications of tense-aspects and mood morphology. In the first task,
participants were asked to read a passage and choose from two options, as illustrated for tense-aspect in example 1a below. Students’ knowledge of mood was also tested using this format. For the second task, students were asked to evaluate minimal pairs of sentences for their logical value using a scale, as shown in example 1b. Knowledge of tense-aspect was tested in the same way.

1a. Morphology Recognition Task: Tense-aspect

El jefe le (1) daba/dio el dinero a la empleada para depositarlo en el banco. La empleada (2) trabajó/trabajaba para la compañía pero no (3) estuvo/estaba contenta con su trabajo y (4) quiso/quería otro trabajo.

1b. Sentence conjunction task: mood

<table>
<thead>
<tr>
<th>Cada año, Ana se alegra cuando le aumentan el sueldo.</th>
<th>indicative (logical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2  2  0  1  2</td>
<td></td>
</tr>
</tbody>
</table>

*Cada año, Ana se alegra cuando le aumenten el sueldo. subyunctive (contradictory)*

| 2          | 0          | 1          | 2          |

Overall, L2 learners were more accurate than HS in the two morphology recognition tasks (tense-aspect and mood). The authors attribute L2 learners’ superiority to their experience learning Spanish in a classroom setting, which trains them to manipulate explicit metalinguistic knowledge, as the morphology recognition task entails. As Montrul and Perpiñán explain, HS, having acquired Spanish primarily in a naturalistic setting and aurally, have substantially less practice with this type of task. Their lower performance in the morphology recognition task relative to L2 learners, therefore, is not surprising, given their language learning experience. By the same token, HS’ better performance (relative to L2 learners) for tense-aspect in the sentence conjunction task is also expected, since this task focuses on meaning and interpretation and taps into the type of intuitive and implicit knowledge that HS have of their language. These findings underscore the importance of giving careful consideration to the types of tools used to assess language proficiency. Assessment tools that make use of the type of skills that develop in a classroom setting are more likely to favor L2 learners. On the other hand, tasks that tap into intuitive knowledge may favor HS.

However, in an apparent contradiction to the above generalization, the HS did not perform better than L2 learners for mood in the sentence conjunction task. In fact, HS and L2 learners at the intermediate level were unable to discriminate between the indicative and subjunctive, and advanced L2 learners outperformed advanced HS. To make sense of these results, it is important to consider the developmental order of acquisition of different grammatical areas in morphosyntax and the effects of context of acquisition, input modality, and literacy.
As Montrul and Perpiñán explain, different areas of the grammar have different acquisition schedules. Agreement, clitics, and grammatical aspect are acquired by children early in life, while mood, relative clauses and other complex structures are acquired later. In early childhood, many HS make exclusive or nearly exclusive use of Spanish in the home environment. This makes it possible for them to acquire the areas of grammar that are learned during this time of life. Once they start school however, HS’ exposure to Spanish diminishes significantly, as their exposure and use of English increases dramatically.

A recent survey of 1800 HL learners from various language backgrounds illustrates the extent to which the home environment provides input in the first years of childhood as well as the extent to which that input diminishes upon the start of school. The survey indicates that the overwhelming majority of Spanish-speaking respondents (78%, 393/400) make exclusive use of Spanish up until the age of five. After that, they split into two distinct groups with regard to their linguistic practices. A large majority (65% - 73%) continue to use Spanish alongside English during different periods of their lives, while the rest use English to the exclusion of Spanish (Carreira & Kagan, 2011).

With reduced Spanish input, HS’ ability to continue the developmental schedule of acquisition is compromised and grammatical areas that are acquired during the school years, such as mood and relative clauses, are not fully mastered. From this, it follows that if early exposure to Spanish represents an advantage to HS over L2 learners, it will be for areas of the grammar that are acquired early in life. The results of the sentence conjunction task for tense-aspect bear out this prediction: HS had an advantage over L2 learners because this area of grammar is learned early in life. No such advantage held for the subjunctive, which is acquired late in childhood. These findings point to the unhelpful nature of wholesale categorizations and comparisons of HS and L2 learners such as “L2 learners are better at grammar but HS can do more with the language.” Comparisons, to the extent that they are useful for instructional purposes, should be made with respect to specific areas of grammatical knowledge and specific tasks. The findings also underscore the critical role that age plays in the development of HS grammars. The earlier in life that HS acquire English, the more likely they are to have grammatical gaps in Spanish (Montrul, 2008). Far from being random, these gaps follow developmental trends observed for L1 and L2 acquisition.

This knowledge proves helpful for placement and curriculum design. For example, the findings suggest that intensive instruction on tense-aspect, clitics, and gender may not be warranted for HS who learned English after age 8, as by then these areas of the grammar have been acquired. On the other hand, simultaneous bilinguals (i.e., individuals who learned English and Spanish at the same time, as first languages) or very early bilinguals (i.e., individuals who learned Spanish first and then English before the age of 5) will likely need instruction in these areas of the grammar. All three types of learners (late, simultaneous, and early bilinguals) will need
instruction on mood, as research indicates that the full gamut of uses of the subjunctive may not be acquired until around age 13.

Other developmental effects obtained by Montrul and Perpiñán provide further pedagogical insights. L1 and L2 acquisition research indicates the preterit is acquired before the imperfect. This trend was also found to hold for HS acquisition in the current study. Specifically, HS across all proficiency levels were more accurate with preterit than with the imperfect. Also in keeping with developmental trends, both HS and L2 learners performed better with so called “prototypical” combinations of lexical predicate classes and preterit or imperfect morphology. As Montrul and Perpiñán explain, the preterit and imperfect forms can appear with the four lexical predicate classes proposed by Vendler (1967); accomplishments, achievements, activities, and states. However, some combinations – the so-called prototypical combinations – are more natural or coherent than others. Specifically, because the preterit denotes completion in the past, it is naturally associated with accomplishments (verbs describing actions that go on for a period of time and have an endpoint, e.g. pintar, escribir, construir) and achievements (verbs describing actions that occur instantaneously, e.g. salir, llegar, desmayarse). Likewise, the imperfect, which denotes incompletion or unbounded events, is naturally associated with statives (verbs that describe cognitive, emotional or physical states, e.g. saber, estar, tener) and actions (verbs describing actions that can go on for an indefinite period of time, e.g. trabajar, observar, crecer). Concretely, this means that the first sentence in each pair below, which denotes a prototypical combination of the main verb, will be acquired before the second sentence, which denotes a non-prototypical combination.

2. a. Salió temprano. Prototypical
   b. Salía temprano. Non-prototypical

3. a. Tenía mucha paciencia. Prototypical
   b. Tuvo mucha paciencia. Non-prototypical

Pedagogical treatments of tense-aspect in Spanish textbooks generally do not distinguish between prototypical and non-prototypical combinations. Rather, they focus on categorical differences between the preterit and the imperfect, without much consideration of the lexical predicate classes (though the so-called meaning-changing preterits include non-prototypical combinations, for example, conocí, which is a stative verb in the preterit). Crucially, Montrul and Perpiñán’s findings show that not all uses of the preterit or the imperfect are equally challenging for learners. Non-prototypical combinations are more difficult and may thus require more time and practice to learn, particularly for achievements in the imperfect (e.g. salía, llegaba, se desmayaba), which were found to be especially challenging for both HS and L2 learners. Once again, these findings illustrate the discrete nature of grammatical knowledge. A command of some uses of the preterit and the imperfect by learners does not imply a complete command of this multifaceted area of morphosyntax. For assessment, this means that the selection of test
items for any given topic of grammar must take into consideration developmental trends if the goal is to gain as complete a picture as possible of learners’ proficiency.

It is also important to take into consideration context of acquisition, input modality, and literacy, as the findings for mood indicate. As previously noted, advanced L2 learners performed better than advanced HS for mood in both tasks. Montrul and Perpiñán explain this finding in terms of L2 learners’ extensive experience learning Spanish in school. What makes the schooling experience so important is that it provides input to complex structures and verbal forms (typically in the written language) that facilitate learning uses of the subjunctive that are not widely attested in informal day-to-day interactions (see also Montrul and Potowski (2007) and Muller Gathercole (2002) for other effects of instruction). By comparison to L2 learners, HS have substantially less exposure to this type of input, by virtue of their limited experience learning Spanish in school. Also, as previously noted, their exposure to Spanish in their day-to-day interactions is greatly diminished once they start school in English. This situation—the limited exposure to academic Spanish combined with the reduction in input at a developmental time when mood is being acquired—results in a failure to develop full mastery of mood and accounts for HS’ poor performance, relative to L2 learners, on the morphology recognition and sentence conjunction tasks. Of course, most monolingual Spanish-speaking children, being raised in Spanish-speaking countries, are exposed to the formal registers of the written language in school, in addition to being exposed to the informal registers in their everyday interactions. This exposure allows them to master the full range of uses of the subjunctive.

Once again, survey results by Carreira and Kagan (2011) prove useful in this regard. To the extent that they are representative of SHL learners as a group, they point to low rates of schooling in Spanish. Specifically, nearly one half (46%) of respondents had no experience studying Spanish either in their country of origin or in a community or religious school in the U.S. Furthermore, of those who attended school abroad (20% of all respondents), only about 5% did so for five or more years. Of those who attended a community or religious school in the US (47.5% of all respondents), the largest group (21%) engaged in this activity for two years or less. Given their limited schooling in Spanish, HS stand to benefit from exposure to the academic registers and instruction on reading and writing. Montrul and Perpiñán suggest that HS instruction should also incorporate tasks that help learners develop their metalinguistic knowledge, as this will likely help with the acquisition of mood. This recommendation, however, may not be warranted for areas of the grammar that are acquired early in life and do not require the type of input that schooling provides. Of course, as Montrul and Perpiñán point out, “if the aim of HL instruction is to help HL learners develop fluid and spontaneous use of their heritage language, then their knowledge should be assessed with tasks that minimize the need to rely on metalinguistic knowledge (p. 124). We will return to the issue of assessment and, more specifically, the use of DELE for such purposes, after discussing Melissa Bowles’ study.
In all, the results of Bowles’ paper show the complementary nature of the knowledge that HS and L2 learners bring to the study of Spanish at the college level. Broadly speaking, HS have an advantage with areas of the grammar that are acquired early in life, while L2 learners, particularly advanced ones, have the advantage with later-acquired structures that benefit from schooling. HS are better at tasks involving implicit/intuitive knowledge, while L2 learners have an advantage in tasks involving metalinguistic knowledge. HS are more fluid and spontaneous when speaking Spanish, while L2 learners have a better command of the written registers. Ideally, these differences should be addressed in separate courses or tracks. Where specialized HS courses are not available, and HS and L2 learners sit in the same language classes, Montrul and Perpiñán suggest using a variety of tasks that serve the two types of learners.

Whether or not they offer specialized HS courses, all Spanish programs with HS have classes at higher levels that serve both HS and L2 learners (mixed classes). For programs that don’t have HS courses, all Spanish classes are potentially mixed classes. On the other hand, for programs that offer HS courses, any class that is not an HS course and that enrolls HS and L2 learners together will be mixed. Since the large majority of programs with a HS track have only one or two HS courses (Beaudrie, forthcoming), it follows that many courses that count towards the Spanish major and/or minor, including advanced language and composition courses, will be mixed whenever HS are present. Notwithstanding the ubiquitoussness of mixed classes, the bulk of the research on HS teaching, not to mention pedagogical materials, assume separate classes at the beginning levels of instruction.

Placing much needed focus on mixed classes, Bowles’ article explores interactions between HS and L2 learners. Specifically, the study examines how mixed pairs of HS and L2 learners resolve language-related episodes (LREs) – i.e., interactions that focus on form such as vocabulary, spelling, pronunciation, verbal conjugations, etc. – in the course of completing both oral and written tasks. The student pairs (matched for proficiency by the DELE test) completed an oral task, which involved spotting the differences between two sets of pictures, and two written tasks, which involved a) completing a crossword puzzle where each learner had just half of the clues, and b) filling in blanks in a story and writing different endings for it.

While earlier studies on HS-L2 interactions concluded that they are more beneficial to L2 learners (Blake & Zyzik, 2003; Bowles, in press) the present study found that both types of learners derive benefit from such interactions. This is evidenced by the fact that both types of learners raised LREs and had them resolved with the same frequency and also that both learners’ LREs were equally likely to be resolved in a targetlike manner. However there were important differences between the two types of learners. In the written tasks, the HL learners initiated the majority of spelling and accentuation LREs, while the L2 initiated most LREs concerning grammar (often some issue of aspect) and vocabulary. In addition, when raising or resolving questions about grammar, L2 learners typically referred to grammatical rules or categories, while HS tended to rely on intuition.
These results are not surprising, in light of our discussion of Montrul and Perpiñán’s study. HS were uncertain about issues of spelling and accentuation and relied on intuition to arrive at their answers because they have little formal schooling in Spanish, having learned Spanish in a naturalistic setting. On the other hand, L2 learners were strong in spelling and accentuation and framed their questions using grammatical categories because of their background learning Spanish in school.

Both types of learners evidenced a keen awareness of their particular strengths and weaknesses as well as those of their partner, and showed great appreciation for how their complementary skills contributed to the tasks. One student in particular noted: “Put us together and we’re a great Spanish team, aren’t we?” The positive attitudes generated by the student interactions may account for an important difference between this study and Potowski (2002), which found that both HS and L2 learners in mixed classes felt embarrassed and intimidated. It seems that a critical feature of successful mixed classes is that they foment a sense of individual and collective empowerment, and that both HS and L2 learners feel that they bring something valuable to the class and also derive something valuable from it.

Bowles’ and Montrul and Perpiñán’s findings underscore the importance of selecting tasks for HS-L2 interactions that require intuitive as well as metalinguistic knowledge so as to be inclusive of both types of learners. The three tasks designed by Bowles meet this criterion. On the other hand, the morphology recognition task or the sentence conjunction task by themselves do not, because they tap into only one kind of knowledge. Blake and Zyzik (2003) and Bowles (in press) point to another important consideration. As mentioned earlier, these studies found that HS-L2 interactions benefited L2 learners more than HS learners. Specifically, Blake and Zyzik (2003) found that it was more common for HS to assist the L2 learners than the other way around and Bowles (in press) found that HSs’ LREs were resolved in a more targetlike fashion than those of L2 learners. These results likely stem from the nature of the paired interactions in both studies, which targeted areas of expertise of HS, namely home vocabulary and the spoken language. While these interactions put the HS in the position of “experts” (and explains why some learners felt that it was a “confidence boosting experience”), it also prevented them from benefiting from the L2 learners’ reservoir of knowledge in areas such as orthography and grammar rules.

How, specifically, do both Bowles’ and Montrul and Perpiñán’s findings translate into practice? More research on the effects of modality is clearly needed before definite answers can be provided. However, emerging research suggests that if the instructional unit targets something like home vocabulary where HS have an advantage, the tasks should involve a written task so as to tap into the expertise of L2 learners and provide learning opportunities for HS. Similarly, activities involving prototypical verb combinations should have a writing component.
What, if anything, can be gleaned from this research about the use of like pairings (i.e., HS + HS and L2+L2 learners) in mixed classes? Neither study provides answers about how to form such pairings so as to maximize learning – i.e., whether the learners should be matched for proficiency, background, goals, etc. However, they do suggest a role for such pairings in mixed classes. Using Bowles’ crossword puzzle activity by way of example, like pairings could take a first pass through this task, pooling their common strengths. Then, a second pass could involve groups of two HSs and 2 L2 learners, thereby maximizing the effects of the complementary strengths of the two types of learners. Alternatively, a second pass could involve the entire class, pooling the resources of all learners. Future research should yield information on these and other practices.

This line of research also can inform the design of pedagogical materials for HS classes as well as for mixed classes. Traditionally, the approach of textbook writers and publishers has been to create separate materials for HS classes, emphasizing different instructional topics from those of L2 classes. The research presented shows that it is just as important to attend to the design of activities and exercises as it is to attend to instructional topics. Moreover, given the preponderance of mixed classes, there is a critical need for materials specifically designed for such classes. As mentioned earlier, the activities and exercises for mixed classes should be varied and should take advantage of the complementary strengths of each type of learner. Critical factors to take into consideration include input modality, developmental effects, context of acquisition, literacy, and proficiency level. In addition, it is important to pay attention to pedagogically significant grammatical distinctions, such as the distinction between prototypical and non-prototypical verb combinations.

Next, we briefly review Bolger and Zapata’s article. These authors cast an eye on possible future areas of research with HS. They note that the vast majority of linguistic research with HS has utilized offline methods, meaning that they do not tap into actual processing. Thus, we know a good deal about how HS grammars are similar to and different from L2 grammars and from monolingual grammars, for example, but we know much less about how these groups actually process Spanish. Online methods that measure processing include computer-delivered stimuli that measure reaction times (as well as other methods to be discussed ahead). Bolger and Zapata offer a clear and concise review of four psycholinguistic studies that have used online research methods with heritage speakers: Schwieter (2008), Moreno and Kutas (2005), Foote (2010), and Montrul, Foote, and Perpiñán (2008). Schwieter (2008), using computer-delivered translation and picture naming tasks, found that proficiency (not HS or L2 status) was correlated with how participants performed, concluding that higher proficiency mediates language directly at the conceptual level, and lower proficiency mediates language selection at the lexical level. Moreno and Kutas (2005), using event-related potentials (or ERPs, which laypeople often erroneously refer to as “brainwaves”), found that HS’ processing can look like that of L2 learners if their exposure to English begins relatively early. Foote’s (2010) study of grammatical processing found that HS made more errors than late L2 with the same proficiency level, which supports
many studies to date claiming that the type of learning, naturalistic versus instructed, leads to differences in linguistic systems. Montrul and Perpiñán (2006) found that HS were slower overall in processing both English and Spanish than monolinguals in each language, but they processed Spanish unaccusatives and unergatives equally as quickly as monolinguals.

The rest of Bolger and Zapata’s article describes five online techniques that the authors recommend can be used profitably in researching HS. These include (1) syntactic priming, in which participants listen to a sentence in one language and produce a sentence in another; (2) An eyetracker, which tells us how long the eyes looked at a given word, whether they jumped around, etc.; (3) Self-paced reading, particularly for syntactic ambiguity resolution of features like attachment. Attachment refers to the following ambiguity: In a sentence like “Someone shot the maid of the actress that was on the balcony,” who was on the balcony? English speakers tend to attach the relative clause to the lower noun, *actress*, while in the comparable sentence in Spanish, Spanish speakers generally prefer the attachment to be to the higher noun, *maid*; (4) A maze task, in which participants indicate which of two words presented on alternate sides of a screen is the more grammatical continuation of the sentence in progress, and (5) ERPs, which are measured through nodes attached to the scalp and report on electroencephalograms that measure real-time changes in brain activity. Overall, the article offers helpful practical advice to researchers about software and variables to keep in mind (such as timing of stimuli, distracter items, etc.) and an encouraging tone both for novice researchers and those seeking to explore new research methodologies.

Given the authors’ assertion that ERPs “offer a window into mental processes with a temporal precision unmatched by any other experimental paradigm” (p. 30), we now take a moment to discuss ERP studies in a bit more depth. Semantic processing has been shown to be similar in both L1 and L2, eliciting what is called an N400 (Ullman, 2004). Syntactic processing, however, looks different in L1 (where it usually elicits a LAN-P600) than in an L2 (where it does not reliably elicit a LAN-P600). However, the LAN-P600 response has been found in L2 learners at high proficiency (Morgan-Short, Steinhauer, Sanz, & Ullman, 2007) and at advanced experience and proficiency (Bowden, Sanz, Steinhauer, & Ullman, 2007). Therefore, it appears that as late L2 learners increase in proficiency and experience with the L2, their syntactic processing may become more L1-like.

But what about heritage speakers? Does their brain activity resemble that of L1 or L2 learners when processing syntactic violations? The Moreno and Kutas (2005) study cited by Bolger and Zapata, as mentioned above, was the first to examine heritage speakers using ERP methods, finding that HS process semantic violations like L2 learners if their exposure to English began early in life. Bowden, Potowski, and Morgan-Short (2010) utilized ERPs to test for various types of syntactic violations as well as semantics, comparing HS to L1 and L2 Spanish speakers. Behavioral results from that study (Bowden, Potowski, and Morgan-Short, 2010) found that HS generally did not perform as well as L1 or advanced L2 speakers on acceptability judgments of
the written sentences. HS performed better than low-proficiency L2 speakers on semantics and phrase structure, and equal to or less well than low L2 speakers on morphosyntax and morphophonology. Consistent with previous research (e.g., Montrul, Foote & Perpiñán 2008), HS scored less well than L2 on gender. These findings confirm Montrul’s work over the past several years suggesting that L2 learners usually have an advantage on written tasks, particularly when those tasks elicit metalinguistic knowledge.

All three of these studies have important implications for assessment. Besides the particular implications already discussed, they demonstrate the value of biographical data for purposes of placement and curriculum design. HSs’ place of birth, age of acquisition of English, use of Spanish in the home, and amount of schooling in Spanish prove to be fairly good indicators of proficiency and may provide a quick, albeit rough method, for sorting students into categories and laying out curricular goals at the program level. The studies also raise questions about the use of the Diploma de Español como Lengua Extranjera (DELE) for assessment purposes. The DELE tests vocabulary and morphology, and typically a reduced version of the DELE is used to measure Spanish proficiency in language-related research projects (see Montrul 2008). Given that Polinsky (1997) found a correlation between lexical proficiency and grammatical proficiency among heritage Russian speakers, it may be true that people who score similarly on the DELE have some kind of similar general Spanish proficiency. But when groups of individuals supposedly matched for proficiency on the DELE perform significantly differently on a Spanish linguistic task, as they did in Montrul and Perpiñán, it is valid to question whether they were in fact matched for proficiency. Thus, care should be exercised when using the DELE or any other assessment tool. The field may need to think about including an oral component in proficiency tests when comparing L2 learners and HS. The ACTFL Oral Proficiency Interview, although criticized as not suitable for heritage speakers (Valdés, 1989), may be adjusted and therefore more appropriate after we have findings from current research by the National Heritage Language Resource Center on how heritage speakers of Spanish, Chinese, and Russian perform on the OPI.

Of course, even assuming perfect matching by linguistic proficiency for any given purpose, it is important to keep in mind that HS and L2 learners differ in terms of their affective and social needs vis-a-vis Spanish. As Hornberger and Wang (2008) and others have noted, HS exert considerable effort in finding their place within their heritage language and culture. Many study their heritage language to connect with family and friends and nearly all bring to the classroom a reservoir of cultural knowledge and skills that exceed that of most L2 learners. In addition, as Potowski and Carreira (2004) observe, some Latinos have academic deficiencies and affective considerations that may negatively impact their study of Spanish. Heritage language teaching should be responsive to these and other issues, in addition to attending to linguistic issues.

Given our focus on what these chapters contribute to pedagogical practices with heritage speakers, it is important to pause to consider the pedagogical goals in teaching heritage speakers.
Authors such as Valdés (1997) have noted that bilinguals are not two monolinguals in one, so, it is *not* reasonable to expect that HS will speak, write, or exhibit Spanish grammatical systems like monolinguals. What, then, do we seek to have them acquire in the Spanish classroom? The answers depend in part on the course level and topic. In terms of broader programmatic goals, Valdés (1997) proposed that HS instruction should focus on language maintenance, the acquisition of a prestige variety, the transfer of literacy skills from English to Spanish, and the expansion of the bilingual range. In addition, various researchers have argued that instruction should prepare students to confront issues of linguistic and cultural prejudice. To this end, advocates of the Critical Approach propose teaching about the functions, distribution, and evaluation of dialects and raising awareness of language, power, and social inclusion (Fairclough, 2005; Leeman, 2005; Martinez, 2003; Webb & Miller, 2000).

Other common answers to the question of what to teach in heritage speaker courses include that students should develop grammar, writing (including spelling and accents), formal speaking, and cultural knowledge. Given the focus of the research articles just reviewed, we will focus briefly on just one of these bodies of knowledge – grammar – in the following section.

**Grammar**

Many heritage program directors and instructors state that they want students to “study/learn grammar,” and many students share that sentiment. However, it is not always clear what is meant by “grammar” in this context. Does it refer to learning the labels for all verb tenses and moods? Being able to identify the parts of a sentence? Understanding grammatical explanations of the differences between the preterite and the imperfect and using the two tenses as monolinguals do?

As we have pointed out elsewhere (Potowski & Carreira, 2004), foreign language programs typically benefit from implicational hierarchies about which grammar points are acquired before others. For example, foreign language students who know how to form the imperfect subjunctive probably also know how to conjugate the preterit and imperfect forms of the indicative. However, to our knowledge, no implicational hierarchies of heritage Spanish grammars have been proposed, making it more challenging to design grammatical instruction that is linked to students’ actual grammatical systems. Those students who have trouble with basic gender-number agreement, for example, probably also have trouble with verbal morphology, but students who can use the imperfect subjunctive may or may not have problems with certain prepositional uses.

Other answers about what it means for heritage Spanish speakers to study grammar are found in the textbooks commonly used to teach them. A perusal of recent textbooks for HS reveals a wide range of grammar topics. The eight most common among them are displayed in Table 1.
Table 1
Most Common Grammar Topics in Eight College
Spanish Heritage Speaker Textbooks

<table>
<thead>
<tr>
<th>Topic</th>
<th>Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditional</td>
<td>8</td>
</tr>
<tr>
<td>Imperfect subjunctive</td>
<td>8</td>
</tr>
<tr>
<td>Present subjunctive</td>
<td>8</td>
</tr>
<tr>
<td>Imperfect &amp; preterit</td>
<td>7</td>
</tr>
<tr>
<td>Future (morphological)</td>
<td>7</td>
</tr>
<tr>
<td>Pluscuamperfect subjunctive</td>
<td>6</td>
</tr>
<tr>
<td>Definite &amp; indefinite articles</td>
<td>5</td>
</tr>
<tr>
<td>Participles</td>
<td>5</td>
</tr>
</tbody>
</table>

There seems to be a good deal of agreement among textbook authors that HS need to work on the conditional, the subjunctive, the imperfect versus preterit distinction, and the morphological future; based on Montrul and Perpiñán’s findings in this issue, it would seem that the non-prototypical uses of the imperfect and preterit (imperfect with achievement verbs and preterite with stative verbs) would be an ideal area for classroom focus. However, the truth is, we have no idea how heritage speakers acquire any of these forms and uses. The only experimental studies of heritage speaker acquisition to date are Potowski, Jegerski and Morgan-Short (2009) and Montrul and Bowles (2009).\(^2\) In Potowski, Jegerski and Morgan-Short (2009), heritage speakers were instructed on obligatory past subjunctive\(^5\) contexts with indefinite referents. They evidenced moderate linguistic improvement on interpretation and production, but no statistical improvement on the grammaticality judgment task. In Montrul and Bowles (2009), students seated at a computer read an explicit grammatical explanation of the uses of the indirect object marker a with gustar-type verbs and then completed three practice exercises with immediate explicit feedback, including negative evidence. Posttest results revealed highly significant gains in both production and intuitions.

Thus, we currently enjoy a large and growing body of empirically based descriptions of heritage speaker grammars, but as educators – and based in part on this body of descriptions – we need: (a) to decide which grammar forms and uses to focus on in the classroom, and (b) experimental research on how HS best acquire those forms and uses. Regarding the first point, which forms and uses to teach, it is probably not feasible for educators across the nation to arrive at the same conclusions, as evidenced by the wide variety of topics in the textbooks we examined (which were not included in Table 1). In some programs, for example, the use of the past subjunctive with indefinite referents may not be a top priority in their HS courses. Course level will play a role in these decisions as well. For example, the University of Illinois at Chicago offers a two-course sequence for HS that does not teach parts of speech or verb conjugations, but all students
in the Spanish major or minor (HS and L2 learners alike) must study these topics in a more advanced grammar course.

Another relevant factor in the decision about what to teach in HS courses comes from the field of sociolinguistics. It is important to understand that certain forms and uses exhibited by heritage speakers are the product of language change, which is often accelerated by language contact. It is widely attested around the world that subordinate languages undergo simplification of forms, of grammatical categories, and of meanings. Thus, certain uses of U.S. Spanish like those found by Silva-Corvalán (1994), including incorporation of a new meaning into a structurally or semantically similar form (e.g., ¿Cómo te gustó la película?), the higher frequency of a form (e.g., greater use of overt subject pronouns, or the extension of estar at the expense of ser) or the loss of a category or form (e.g., semantic-pragmatic constraints on tense, mood, and aspect) may constitute the linguistic systems of large communities of bilinguals, and careful consideration is required when deciding whether to teach alternative forms and uses. By way of example, Potowski (2011) devotes a grammar unit to the use of the infinitive in subject position and after prepositions, where many heritage speakers use the gerund instead (e.g. Estudiando es importante and Le castigaron por robando). However, this lesson repeatedly fails, even among relatively advanced proficiency HS, because the use of the gerund is quite ingrained in many contexts. At what point should we conclude that a particular structure/use is a legitimate part of U.S. Spanish and should not be a target of instruction? One criterion might be the level of stigmatization that a form or use suffers at an international Hispanophone level, although some may argue that only the U.S. context and the communication patterns of local communities should be taken into account. In any case, it is not a reasonable goal of instruction for HS to pass as Spanish monolinguals.

Regarding the second point — experimental research on how students best acquire the forms and uses that we decide to teach them — one pedagogical approach that has fallen into disfavor in second language acquisition research but that may prove fruitful with HS is contrastive analysis. Contrastive analysis, the presentation of two forms side by side and exercises that exemplify the differences between them, has been found to be beneficial with speakers of African American Vernacular English in increasing the written production of various mainstream U.S. English features such as the third person singular –s (Taylor, 1989; Harris-Wright 1999; Rickford & Rickford 2000). Although some argue that the study of Spanish by heritage speakers is not a case of second dialect acquisition (Potowski, 2010), this approach may prove useful in HS instruction. In addition, approaches that draw from second language acquisition and from native language arts should be tested.

Regardless of the approaches and grammatical forms that instructors prioritize in their own teaching, it should be made clear to students that judgments about correctness are often made on the basis of non-linguistic considerations such as social prestige and power. This information
will empower students to make informed choices about their own use of language and react appropriately to criticism.

Conclusions
In addition to fine-grained linguistic analyses of heritage speakers’ grammars, the field clearly needs pedagogically oriented research. Although we have moved forward, educators are unfortunately still stymied by a lack of empirically tested methods. And grammar, while important, is not the only topic in need of research. We still await answers to basic questions about how different grammatical, discursive, pragmatic, and register features are acquired through formal study by heritage speakers, as well as how affective factors and Spanish language maintenance are influenced by instruction. We especially need research into the development of written Spanish; a recent survey conducted in Illinois revealed that, after increasing vocabulary, the second most common goal cited by students was improving their writing (Bowles & Montrul, n.d.).

There also is a critical need for work that connects research findings to the realities of the classroom. We all understand the importance of making highly technical research findings accessible to instructors who may not have the background in theoretical linguistics. However, it is also important for research to be informed by classroom realities. For example, it would be valuable to determine whether the types of exercises actually employed by Spanish textbooks to reinforce grammar – as opposed to exercises constructed for experimental purposes – favor one type of learner over another.

Given that most HS are currently being taught in mixed classes, we need to put resources into understanding the dynamics of these classes and designing suitable strategies that are anchored in research. For example, Bowles (this issue) went to great lengths to find HS and L2 learners who were perfectly matched on the DELE. However, this kind of pairing may be nearly impossible or impractical to achieve in most classes. Future research should test whether less-perfectly matched parings can also achieve similar results.

The kind of research advocated for by Bolger and Zapata (this issue) may also contribute to classroom pedagogy. Understanding how heritage speakers process language may provide insights into testable hypotheses of how to effect classroom acquisition.

References


**Notes**

1. The excellent paper in this issue by Cuza and Frank about double *que* constructions reveals interesting facets of heritage speaker competence, but does not in our mind have direct pedagogical implications.

2. There currently is debate over whether to refer to the grammatical knowledge of heritage speakers as “incomplete.” Given the pervasive fact of language change in all natural speech communities, a sociolinguistic perspective would describe the grammatical knowledge of bilingual heritage speakers as simply “different” from that of monolinguals.

3. Eighty-four percent of the respondents were from California.
4. According to Beaudrie (forthcoming) 40% of college-level Spanish programs offer specialized HS courses. This figure varies considerably by region. For example, 51% of programs in the Southwest have such courses. In California, Valdés et al (2006) and Carreira (2011) put this figure at 67%.

5. The authors good-naturedly refer to self-paced reading as “the poor man’s eyetracker” and as “a clever researcher’s inexpensive alternative to eyetracking” (p. 22).

6. In alphabetical order by title: *Conozcámonos* (Mark & Aponte, 2007); *Conversaciones escritas* (Potowski, 2010); *Entre mundos* (Lyrintzis & Zaslow, 2004); *Español escrito* (Valdés, Teschner, & Enríquez, 2008); *La lengua que heredamos* (Marqués, 2005); *Nuestro idioma, nuestra herencia* (García, Carney, & Scandoval, 2011), *Nuevos Mundos* (Roca & Alonso, 2005); and *Sí se puede* (Carreira & Vinci, 2008).

7. Fairclough (2005) examined classroom development of the conditional, but no description of the pedagogy used was provided.

8. Given the high ranking of the imperfect subjunctive among the topics in Table 1, more research into how this form is acquired by HS would be beneficial.

9. Silva-Corvalán (1994) emphatically argues that many of the traits of U.S. Spanish are *not* due directly to influence from English, but rather that contact with English accelerates or emphasizes certain “innate” tendencies of Spanish.