Looking Ahead

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1 Introduction

Concluding chapters are expected to reflect on prior content and summarize the work done. This chapter departs from that tradition; instead, I would like to direct our attention to what lies ahead, for the studies of Spanish as a heritage language in the U.S. and for understanding heritage language as a general phenomenon.

The study of heritage languages is an emerging field, but heritage languages have existed throughout human history. There have been heritage speakers as long as immigration has moved families across language borders and as long as bilingual communities have been divided into dominant and minority language settings. Heritage speakers generally feel a cultural or familial connection to their heritage language, but in terms of actual linguistic competency, they are more proficient in another language – the language dominant in their (new) community. Although heritage speakers often receive extensive exposure to the heritage language during childhood, they typically do not reach their parents' or grandparents' level of fluency. In fact, according to some broad definitions, a heritage speaker might have no proficiency at all in the heritage language; in this case, the language is a "heritage language" primarily in a cultural, rather than linguistic, sense as argued in the work by Fishman (2001) and Van Deusen-School (2003). In the language classroom, these broadly defined heritage speakers have familial or cultural motivation to master the language of their ancestry, but no particular language skills which set them apart from their peers. Linguistically speaking, they are essentially indistinguishable from other second language learners. Most of the papers in this volume, my chapter included, concentrate on those heritage speakers who are bilingual in the home and dominant language, albeit to a different degree. My overall goal in this chapter is to present some observations on the state of knowledge amongst the special population of bilinguals and to outline possible avenues of research and teaching (thus echoing the points made in the chapter by Rothman and Tsimpli and the chapter by Beaudrie).

This volume concentrates on Spanish as a heritage language and advances in its study. Heritage speakers of Spanish are a sizeable group, and work on Spanish sets the standard for research on other heritage languages. However, it is important to remember that what unites diverse heritage languages is greater than what divides them. Heritage languages share a number of recurrent structural features – their speakers face similar challenges; the learning and relearning of heritage languages follows similar milestones, and the attention paid to heritage languages makes linguists, sociologists, educators, and policymakers partners in an enterprise larger than the sum of its parts. If we adopt this view, the importance of heritage Spanish becomes even greater because it is a distillation of different heritage languages and heritage populations. By learning more about one of the large heritage languages, we also learn about its siblings all over the world, not just in the United States.

The remainder of this chapter is structured as follows. In section 2, I argue for a tight link between research-based and classroom-based approaches to heritage languages and outline possible areas where these approaches could achieve a stronger dialogue. I subsequently expand on some of these areas in sections 3 through 5. In particular, I discuss the reasons for variance among heritage speakers and possible ways of modeling such variance (section 3). In section 4, I present some common ways of assessing heritage speakers, and in section 5 I offer some considerations on the progress of heritage speakers in the classroom. Section 6 summarizes my general conclusions.

2 A much-needed dialogue about heritage languages: Educators sit down with language scientists

The larger point of this paper addresses the interdependence between research on and teaching of heritage languages. The link between research on heritage languages and heritage language pedagogy is often stated but is yet to be taken beyond the level of lip service. The two sides respect each other but continue on their respective paths, in part because there are only so many hours in the day, because the vocabularies of the two fields are different, and because of inertia. Meanwhile, as the material in this book attests, the two fields genuinely need each other. Researchers need educators to know what the baseline languages of heritage speakers are (see especially the chapters by Ducar and by Potowski who recognize the heterogeneity of heritage Spanish learners) and what particular properties of the baseline present recurrent challenges to heritage speakers, often in comparison to L2 learners. Without the rich input from the classroom,

researchers may fail to systematically identify vulnerable and stable domains in heritage languages. But educators need researchers too, for many reasons, especially in understanding what constitutes the knowledge of a language. This knowledge is conceived of as language competence, viz., the mental representation of language in a speaker's mind, which allows that speaker to produce an infinite number of segments in their language, to recognize things s/he has never heard before, and to reject what is ungrammatical. Language competence is thus an idealized representation of knowledge, different from language performance--the way language is used in communication—which can be affected by memory limitations, shifts of attention, and many other non-linguistic factors. Linguists study both competence and performance, and only some linguistic theories draw a sharp line between the two; regardless of a particular theory, the opposition is critical for our understanding of how language works. Accessing competence is a difficult task because we can only observe it in an indirect way - by studying performance on a mass scale (corpus studies are an important tool — consider the chapter by Bullock et al.), by giving language speakers experimental comprehension tasks (see the chapters by Montrul and by van Petten et al.), and by combining several methodologies in a series of studies (see the chapter by Rao).

The competence/performance distinction is particularly important because heritage speakers often characterize in extremes. Some say that they understand everything, making a radical statement about their competence, while others downplay their knowledge and emphasize errors in their production, focusing entirely on performance. A cursory look at work on heritage speakers demonstrates that much attention is paid to their *comprehension*, in a research model intended to complement the *production* data assembled in corpora and in reports from the classroom. Once researchers know what is affected, they can incorporate this information into pedagogical theory. In teaching, it is important to know the source of an error to structure classroom activity in such a way that corrects this error.

If an error is the result of a grammatical difference in the syntax of relative clauses, (see the chapter by van Petten et al. and also Polinsky 2011) then structured grammatical intervention,

¹ Another advantage of experimental studies in comprehension is that they allow us to include those heritage speakers who may stay away from language classrooms, often because their proficiency is either too low or too high.

with explicit explanation of the grammar, is necessary. This intervention is needed because heritage speakers have a different grammatical mechanism for constructing filler-gap dependencies as compared to native speakers. Unlike native speakers, they do not permit the extraction of objects with a gap, in sentences such as (1). When they encounter such sentences, they interpret them erroneously as containing the subject gap—the preferred or the only possible gap in *their* grammar.²

(1) ¿Dónde está el caballoi que el toro está pateando i? where kicking is horse that DET bull is DET 'Where is the horse that the bull is kicking?'

Likewise, patterns in word order, especially the ones with verb-subject order, differ across the native and heritage varieties. Monolingual Spanish, as other Romance languages, has extensive verb-movement, which allows Spanish speakers to produce sentences such as (2) or (3) (Torrego 1984; Suñer 1994; Goodall 2011). Meanwhile, heritage speakers either lack verb movement or their grammar has strong limitations on its application, consistent with increased constraints on moving constituents in heritage grammars (Benmamoun et al. 2013a). Thus we are again facing entrenched differences in the two grammars, namely, to the absence of or severe limitation on verb movement in heritage grammar.

- (2) Hay una niña en el jardín.
 there-is DET girl in det garden
 'There is a girl in the garden.'
- (3) ¿Que compró Ana? what bought Ana 'What did Ana buy?'

² A real test of long-distance dependency grammar is in sentences such as (1), which are ambiguous because they denote reversible actions. When faced with two participants differing in animacy, heritage speakers may interpret the relevant segments correctly based on pragmatics, which in turn may obscure their grammatical deficits.

In the examples presented above, we have an idea of what causes divergence in heritage grammars, but such is not always the case. For example, in our ongoing study of heritage Spanish production (Parra et al. 2012; 2015), we found that heritage speakers overuse the reflexive *se*, putting it in contexts where it is absolutely impossible, as in the following example, which is completely ungrammatical in baseline Spanish:

The reasons for this overuse of the reflexive are still to be determined, but it seems that this overextension is systematic, suggesting it needs to be countered by explicit grammatical instruction in the classroom. In each of these cases, the content of the grammatical instruction must vary to reflect the nature of the phenomenon, but it is invariably important to understand that heritage speakers may have developed a different grammar, one that is divergent from the baseline, and need explicit instruction for the nature of the baseline phenomenon.

On the other hand, if an error is less systematic and more production-based, for example slowing down when a speaker looks for a word or simply does not know the word, heritage speakers have an excellent opportunity to tap into their existing lexical resources—instead of insisting they use a particular word, one could suggest they try to explain a given concept using circumlocution and deploying other lexical material. Here is where heritage speakers differ from L2 learners (up to a stage), because they have a richer vocabulary and can use it to fill lexical gaps. Being able to use circumlocution empowers heritage speakers and gives them the much-needed confidence in their production ability.

Likewise, errors due to the transfer from English may be remedied by different educational means than those entrenched grammatical errors. For example, it is not surprising that a heritage speaker, whose dominant language is English, may use *actualmente* 'today' when meaning 'actually' or *librería* 'bookstore' in the meaning of 'library'. Such misuse is inevitable to a certain point in language mastery and can be anticipated based on false parallels between English and Spanish.

In sum, linguistic research on different sources of errors and special uses observed in heritage language has much to offer to language educators; the linguistic findings allow us to categorize and even predict errors which in turn leads to more effective teaching. Against this backdrop, it is critical that language scientists and language teaching specialists establish a steady dialogue.

One of the possible ways to maintain the much-needed dialogue is through recognizing our shared challenges and goals among which are the immense variance among heritage speakers, the need for better assessment methodologies, and the desire to develop effective relearning principles from which heritage speakers could benefit. In the following sections, I will discuss each of these three issues.

3 Variability among heritage speakers

Heritage speakers are famous (or notorious, depending on the perspective) for being a heterogeneous group, which manifests itself in a number of ways. In this section, I will focus on two aspects of this variability: *individual differences* and *differences in the baseline*.

By definition, a heritage speaker's exposure to the heritage language centers around the home and family expanding the possibility for much variation in the language experiences of different individuals. The length and manner of home exposure determine the development of the child's heritage language. Imagine a scenario in which five-year-old Diana moves with her family from Argentina to Los Angeles. Before moving, Diana was immersed in Argentinian culture and the Spanish language not only at home, with her parents and older siblings, but also in the wider community. In California, she continues to use Spanish with her family and also practices her language skills in an extensive, local Spanish-speaking community. The language used in her school is English, and Diana speaks English increasingly with friends as she grows older; but her parents choose to continue using Spanish at home and consider it an asset to their children's future career prospects.

Now imagine another child, Carlos, born and raised in rural Maine, exposed to English and additionally to some French in the wider community. His mother, who moved from Colombia before he was born, speaks some Spanish with him at home and on the phone with family. Carlos has no siblings and uses only English with friends. His Spanish exposure is essentially limited to one person (with occasional input from others), and the time he spends with his Spanish-speaking parent is his only chance to develop his Spanish skills.

And as our last example, let us take a bilingual child, Nico, born and raised in rural Guatemala, where his parents spoke a local Mayan language and Spanish. Nico grows up bilingual and considers Spanish the language of upward mobility—which it certainly is in the Guatemalan society (French 1999; 2008; Helmberger 2006). The family moves to Kansas when Nico is three, and suddenly, not only does he need to acquire a third language, but he and his entire family discover, to their astonishment, that Spanish is no longer associated with a higher socio-economic status. For Nico's family, it is an open issue whether they should continue using Spanish or should encourage the child to abandon it completely, in favor of English (of course, the family faces the same choice with respect to their Mayan language).

For these three hypothetical children, the manner and length of exposure to Spanish are clearly not equivalent, and this discrepancy will inevitably have an effect on their eventual language abilities. The Spanish language has been an active and encouraged presence in the lives of Diana and Nico, whereas Carlos has been exposed to Spanish only incidentally. Diana's family may not experience their perception of Spanish's social standing change, whereas for Nico's family, the change in perception may have been a major source of turmoil. Biographical differences, as well as differences in family attitudes toward the heritage language and culture, have been found to correlate with heritage speakers' ultimate success in maintaining and relearning the heritage language (Au and Oh 2005).

Regardless of such differences, the type of informal exposure typically received by heritage speakers results in their strongest language skill being aural comprehension. Stories abound about the second or third-generation children of an immigrant family who understand their grandparents when they speak to them in Spanish but must, or choose to, respond in English. Naturally, the strength of these speakers will be in understanding others rather than in producing any language. However, even aural exposure alone has been found to confer some amount of language ability (Au and Romo 1997).

Beyond comprehension skills, the ability to successfully reply to those Spanish-monolingual grandparents will vary greatly from speaker to speaker and will largely depend on the child's access to a larger baseline language community where s/he may find more opportunity to hear and use the heritage language. For those speakers whose heritage language exposure and use is limited to the home, the opportunities to practice those linguistic skills are much more limited. Unfortunately, a heritage speaker's confidence in her own heritage language

skills is largely determined by the ability to speak, and less on comprehension. A cycle may develop in which the heritage speaker will try to say something in his heritage language but fail to sound quite like a native speaker, reinforcing his already low language confidence and discouraging him from using it again in the future. The stability of the heritage speaker's confidence and positive attitude toward the language is fundamental to buoying proficiency in the heritage language; without this stability, there is little motivation for the speaker to maintain the language, and his skills may stagnate.

Whether a heritage speaker possesses any reading and writing abilities will depend on the amount of formal instruction s/he has received in the heritage language. Generally speaking, a heritage speaker's exposure to the heritage language is unlikely to have included formal instruction. As home learners or young immigrants, formal schooling in the heritage language is rarely a component of the heritage speaker's personal history. Very often, heritage speakers only become literate in their dominant language, and those literacy skills are not always transferable to the heritage language, especially if that language uses a different orthography or requires knowledge of a formal written register. Children who immigrated after some amount of formal schooling will have an advantage in this regard, but adult-level literacy does not follow straightforwardly from a basic understanding of the connections between sounds and symbols on the page. Exposure to literary composition comes gradually, and one's own literary style continues to develop into adulthood. It is unreasonable to expect a speaker with elementary-level literacy to understand the literary language of her heritage culture. If a heritage speaker possesses literacy skills at all, s/he is likely to be more proficient at reading than writing. This tendency also appears for comprehension over production skills which is observed in the spoken language.

Let us now turn to the other source of variation in the heritage population - the baseline variety to which a given heritage speaker was exposed. When researchers plan to study a heritage language, their first challenge is to identify an appropriate "baseline" language against which to compare heritage speech. The baseline language must be the precise variety of the language that the heritage speaker was exposed to during childhood, as spoken by native speakers in natural situations. Importantly, the baseline language is not necessarily the standard language variety of the native-speaking population or the variety that is taught in the language classroom. The home language of the heritage speaker is most likely a regional dialect, and exposure to other dialects or a formal standard is unusual. For example, it is only reasonable to expect that a child raised

by Mexican Spanish-speaking parents will have been exposed primarily to Mexican Spanish, and moreover, to a particular dialect of it (see Foote and Bock 2012; Benmamoun et al. 2013b for the emphasis on such dialectal distinctions). Often the only exposure the heritage speaker has to his heritage language is through the speech of the same, small group of close relatives during childhood. This home speech is surely not representative of the speech of the entire nativespeaking population, nor does it cover all the possible contexts of language use. These limitations inevitably shape the form of the language produced by heritage speakers. Establishing the baseline for a given heritage language is not always obvious or easy, but identifying precisely the target language of exposure is essential for establishing how close the learner came to achieving complete acquisition. Using the standard of the language rather than the baseline for comparative purposes would be counterproductive. Since Spanish is spoken in a large number of countries with millions of users, the acknowledgement of the baseline is of utmost importance. Crucially, recognizing the role of the baseline will have immediate dividends not only for heritage language studies but also for our understanding of global versions of Spanish and Spanish dialectology; it is not always the case that the variety spoken by first-generation Spanish immigrants in the U.S. has been known.

A related issue, one that is much in need of further investigation, pertains to understanding changes in the language of first-generation immigrants, whose speech serves as the main source of input for heritage speakers. A large body of work on heritage languages shares the assumption that first-generation immigrants speak relatively the same language spoken in their homeland. However, a number of studies show that this assumption is incorrect. For example, first-generation Spanish speakers in the U.S. overextend the preterite, which leads to a less frequent use of the imperfect (Montrul 2002; Silva-Corvalán 1994; Zentella 1997); first-generation Russian speakers outside Russia lose the restricted pro-drop found in the Russian spoken in their homeland—regardless of the language they speak as their L2 (Dubinina and Polinsky 2013). Comparative studies of the homeland language and language of input are needed because they would allow us to identify those changes that are already inherent in the baseline and therefore arise independently of the universal mechanisms intrinsic to heritage grammar (Benmamoun et al. 2013a,b).

The variance discussed here poses a significant challenge to researchers and educators alike. We do not have yet appropriate tools to handle this variance in a comprehensive way, and

it is therefore important to develop and test models that would allow us to recognize patterns within heterogeneous groups and account for variance in a successful way. The "continuum model," a concept developed in the study of creole languages, is one such model which lends itself well to the description of this variation (Polinsky and Kagan 2007). Rather than imagining the same level of proficiency for all heritage speakers, we should expect each speaker to fall somewhere along a continuum that stretches from those who can almost pass as native speakers to those who can barely string a few words together in the heritage language. Those on the higher end of this continuum are highly proficient speakers with only slight deviations from the norms set by fully native speakers; those on the lower end of the continuum may have had only very limited exposure to the language during childhood and perhaps never spoke it themselves. Heritage speakers will differ as to where they fall along this continuum, and there are many factors involved in determining the ultimate abilities of a bilingual; nevertheless, there are common patterns in their language abilities that unite heritage speakers as a single category within bilinguals. Essentially, the continuum model implies that heritage speakers are divided into subgroups based on certain characteristics, and each subgroup within the larger group is expected to be homogenous in that heritage speakers within each subgroup would show similar strengths and weaknesses.

While this approach is promising, it shifts the onus for establishing homogenous subgroups on the methodology of assessing proficiency and distance from the baseline. It is obvious that assessment, for research and pedagogical purposes, is critical to heritage language study; although this is a lively area of investigation, as attested to by several chapters in this volume, we are still searching for efficient, one-size-fit-all assessment techniques. I will survey some of the existing approaches in the next section.

4 Assessment

Assessment is a large issue in heritage studies, and I would like to refer the reader to the chapter by Sara M. Beaudrie who addresses it from the standpoint of language-class placement. In continuing the theme of this chapter, it is important however to consider ways research assessment and classroom placement are compatible with each other. In an ideal world, the two paradigms should be able to use the same methodologies, and although this has not happened yet, I would like to offer some considerations.

Let us start with classroom-placement assessment. Heritage speakers' strengths often emerge in initial assessment for classroom placement, while the gaps in their linguistic knowledge are not always obvious at the beginning of a language course. A good accent and a sprinkling of regional vocabulary, which would indicate a very proficient second language learner are just par for the course with heritage speakers. When the appropriate classroom-placement level needs to be determined for these types of learners, a quick, reliable method is required that tests in a different and deeper manner than traditional placement exams. Typically, a placement exam relies on textbook-based language knowledge, which is unsuitable for someone like a heritage language learner who probably has not been exposed to such textbook language. The result is a contradiction – subjecting heritage speakers to a textbook-based assessment results in an unexpectedly low placement level, but on the other hand, heritage speakers are frequently considered for placement into higher-level classrooms due to their accent and access to regional vocabulary.

Given the heritage language learner profile, a three-component testing procedure has been suggested - (i) an oral test, (ii) a short essay, and (iii) a biographic questionnaire (Kagan 2005). Such an examination could potentially be time consuming, however, as well as impractical for testing speakers whose abilities are on the lower end of the heritage speaker continuum. Methods for a quicker yet still reliable test of both high and low-level speakers are presently being investigated. A measure of the speech rate of a heritage speaker—i.e. words-perminute output—has been found to correlate with the deeper grammatical abilities of the speaker, making it a good indicator of overall language level (Kagan and Friedman 2004; Polinsky 2006; 2008a). Of course in measuring speech rate, we also need to compare each subject's speech rate in their dominant language (say, American English) with their speech rate in the heritage language to ensure that their heritage language speech rates are normal; if a speaker's speech rate in the dominant language is also low, then a low speech rate in the heritage language would not necessarily reflect anything about their proficiency. Overall, speech rates are quite predictive of proficiency and in heritage speakers, vary more than speech rates in the dominant language of the same speakers or speech rates in a monolingual population. For example, Viswanath (2013: 24-25) investigated speech rates of heritage English speakers whose dominant language is Hebrew; he found the spread in the heritage population (40 subjects) to be between 80.09 and

156.74 words per minute, whereas age-matched monolingual controls had a spread between 121.88 and 175.02 words per minute—a higher rate overall and a smaller delta.

Next, a simple vocabulary test of 50 to 200 words has been found to be a similarly helpful and easily measurable test of heritage language ability (Polinsky 1997; 2000; 2006). For the purposes of placement in a language class, these tests are extremely useful. Still, however, once placed in the appropriate classroom, heritage speakers will be best served if researchers are able to establish the nature of heritage languages more precisely. This work depends on developing further appropriate methods capable of testing the bounds of a heritage speaker's language knowledge in a timely and accurate manner.

A common testing method in linguistic research is the so-called "grammaticality judgment task" (GJT), in which the participant is asked to decide whether he finds a given bit of language grammatically acceptable. Such tasks may be fine-grained beyond a simple yes/no option; for instance, one variant of the GJT allows the participant to use a scale from one to five to rate the acceptability of the language sample (see more on this below). Heritage language speakers consistently demonstrate higher performance on GJTs than do early second language learners, although they still provide non-native judgments. Thus, heritage speakers, like second language learners, seem to be poorly evaluated by GJTs. Why?

GJTs have also been criticized as an inappropriate evaluation method for second language learners for the same reasons they are inadvisable as an evaluation tool for heritage speakers – the anxiety caused by the testing context will prevent the production of results that are representative of the speaker's true language knowledge (McDonald 2006). This shortcoming follows from their reluctance to reject or rate forms that are ungrammatical in the baseline; they are aware of limitations in their knowledge (constantly being reminded how little they know—see section 5 for more discussion) and are therefore unprepared to reject unfamiliar grammatical structures, assuming they are observing a grammatical form that they have simply not encountered yet. The ability to rate forms as unacceptable or ungrammatical requires greater metalinguistic awareness that heritage speakers can develop in the process of re-learning their home language but is not readily available simply because of childhood heritage language exposure.

In addition to the lack of metalinguistic awareness, several other factors seem to influence how heritage speakers perform on GJTs, including use of the language at home

(Bylund and Diaz 2012; Bylund et al. 2012; Schmid 2007), the age of acquisition, and the age at which the heritage language was replaced by the new dominant language (Ammerlaan 1996; Hakuta and D'Andrea 1992; Montrul 2008). As mentioned above, one of the typical (although not universal) characteristics exhibited by heritage speakers is low literacy; in fact, some researchers attribute most of heritage speakers' deficits to their lack of schooling (Pascual y Cabo and Rothman 2012; Rothman 2007). As GJTs are often presented to subjects visually, one initially promising avenue to explain the comparatively higher performance of heritage speakers versus second language learners on GJTs might be the modality of presentation. Heritage language speakers do consistently perform better on aural perception tasks than on written ones—the exact opposite of the pattern found with second language learners (Montrul et al. 2008). However, despite their comparative advantage on aural tasks, heritage language speakers still provide non-native judgments on aural GJTs for a range of phenomena (e.g. Knightly et al. 2003; Sherkina-Lieber 2011; Sherkina-Lieber et al. 2011), suggesting that while literacy may make written tasks more difficult for heritage language speakers, it does not explain all the difficulties they experience with the GJT.

If we look more closely at heritage speakers' performance on GJTs, it becomes clear that their pattern of GJT mistakes is skewed in the same principled way as the data from second language learners, revealing what can be called the "yes-bias" (over-acceptance). Both heritage and second language learners tend to correctly identify acceptable grammatical structures but are rather reluctant to reject the ungrammatical ones. In a large survey of 70 native and 70 heritage speakers of Russian, Polinsky (2006: 196-200) elicits grammaticality judgments on binding, gender agreement, gerund control, and irregular verbal morphology. In each of these areas, heritage speakers provided the same non-native pattern of responses, accepting the majority of the grammatical sentences *and* also many of the ungrammatical ones. For example, in response to the violation of gender agreement (masculine adjective used with a feminine noun, feminine adjective used with a masculine noun), heritage speakers rejected only 32% of the 100 ungrammatical sequences compared to 97% rejection by native speakers. Common responses to ungrammatical conditions from the heritage speakers included "maybe", "I don't know", etc. (Polinsky 2006: 198-199).

A similar finding can be seen in a series of rating tasks targeting the knowledge of the morphological marking in Labrador Inuttitut. Sherkina-Lieber (2011) found that Inuttitut

heritage speakers were generally similar to native-speaker controls in accepting grammatical structures but were off-target in rejecting ungrammatical sequences. As she notes, "[t]he most common error for [higher proficiency speakers] was to accept both the grammatical and ungrammatical sentences in a pair" (Shekina-Lieber 2011: 181). The lowest comprehension group of Inutitut heritage speakers were able to "detect ungrammaticality only when the most basic properties of Inuttitut grammar were violated" (Sherkina-Lieber 2011: 188). Overacceptance on part of heritage speakers is observed on both binary and scalar GJTs (cf. Laleko and Polinsky 2013 for a scalar GJT).

The tendency for heritage language speakers to rate ungrammatical utterances higher than the native controls may result from a sense of linguistic insecurity. In a GJT comparing judgments of English relative clauses with and without resumptive pronouns, Vishwanath (2013) asked native speakers of English and Hebrew-dominant heritage speakers of English (all age-matched teenagers) to rate sentences such as (5a,b) on a seven-point scale:

- (5) a. My uncle has a neighbor [that my cousin helps on weekends].
 - b. My uncle has a neighbor [that my cousin helps *her* on weekends].

Although heritage speakers of English generally rated sentences with resumption (5b) lower than grammatical sentences without resumption (5a), they nevertheless rated the resumptive sentences significantly higher than did the native controls. Crucially, proficiency (as measured by speech rate in words-per-minute, WPM, discussed above) predicted heritage speakers' judgments. Subjects from the high proficiency group (>110 WPM) found sentences like (5b) to be significantly less acceptable than did subjects from the low proficiency group (<110 WPM). The ratings by the two groups and by the native speaker controls are shown in Table 1.

Table 1. Sentence rating results, English relative clauses, 1-7 scale (Vishwanath 2013)

	No resumption (1a)	Resumption (1b)
Heritage high proficiency	6.03	5.01
Heritage low proficiency	5.81	5.17
Native controls	5.71	3.4

In addition to providing grammaticality judgments, Sherkina-Lieber's Innuttiut participants also participated in a task measuring comprehension of tense morphemes and three measures of production fluency (the morphosyntactic diversity measure and two measures of morphological complexity – mean length of utterance and mean length of words). In striking contrast to their poor performance on the GJT items with tense-related violations, the heritage language speakers performed similarly to native speakers on the comprehension task, suggesting that they have a native-like representation of tense. Furthermore, heritage speakers' performance on the tense/agreement production metrics did not correlate with their performance on the tense/agreement GJT (Sherkina-Lieber 2011: Ch. 7). Taken together, the contrast between native-like production and comprehension of tense versus metalinguistic knowledge of tense supports the conclusion that the mistakes or deviation on the GJT, including the pattern of overacceptance, have an extra-grammatical cause.

Direct testing of heritage language knowledge, in the form of comprehension tasks, avoids the complications introduced by unnatural testing situations such as the grammaticality judgment task. Turning toward testing methods designed for other populations with limited language abilities (e.g. child speakers) has been recommended (Polinsky 2006; Potowski et al. 2009), and tasks which assess comprehension ability rather than grammatical judgment are proving to be a viable alternative. An example of such a test is the truth-value judgment in which the participant sees or hears a short story and is afterwards asked to judge whether a sentence is true or false within the context of that story. Sentence-picture matching, in which the participant is asked to match a picture with a previously heard sentence, has also proven to be quite useful as an evaluation tool.

Comprehension tasks test the heritage speaker's understanding of their heritage language grammar, but tasks in which the speaker speaks in the heritage language are also valuable to the researcher. To search for patterns that merit further investigation, comparisons across large corpora of language samples must be possible. Such language samples can be elicited through a number of methods. Some language samples take the form of narratives in which the participant tells the story of a short video clip s/he has just seen or narrates the story depicted through pictures (Frog Stories, based on Mayer 1967; 1969, are particularly popular because there are already a sizeable body of data elicited from different populations using these pictures—cf. Berman and Slobin 1994; see also Polinsky 2008b, Boon 2014 for the use of Frog Stories in

heritage populations). Other methods for sample collection involve the heritage speaker participant directing a native speaker to move figures around on a map (see Polinsky 2013 for the details of that methodology).

From the variance and assessment to the classroom

A research agenda which includes in-depth investigation of heritage language will result in an understanding that goes beyond the anecdotal suggestions of the language teacher and ascertains the underlying workings of the heritage language grammar. One hopes that efficient classroom methodologies will naturally follow from such an understanding. Recall that heritage speakers grow up surrounded by their baseline language but experience formal instruction in that language rarely, if at all. There is a growing trend in the U.S. for heritage speakers to start relearning their home language in college; for many, this will be their first-ever exposure to literacy in that language. This situation creates significant pedagogical challenges, and in addressing these challenges, it is important to educate both heritage-speakers-turned-learners and their teachers who are familiar with second language learners, a different population than the heritage learner. In addressing these challenges, I would like to focus on the following issues: educators' expectations, interaction between heritage learners and L2 learners, and collection of language-learning data. This list is not exhaustive; rather, it is a set of observations that arose from reading the chapters in this volume and discussions with people who know the classroom situation more intimately.

Let us begin with the *expectations* on the part of the educators. Ironically, these expectations are contradictory at times. On the one hand, there is an expectation that heritage speakers should already know everything. Indeed, heritage speakers often give an inflated impression of fluency since their accent will be close to that of a native speaker (Au and Romo 1997). For reasons which are still unknown, even speakers on the low end of the heritage speaker continuum sound native-like. Unfortunately, in the language classroom, this misperception of fluency can place the heritage speaker in an inappropriate language level and subject them to unreasonable expectations from language instructors (Peyton et al. 2001). Heritage speakers' seemingly near-native pronunciation often belies an incomplete or divergent underlying grammatical knowledge. Their strengths and skill gaps will not necessarily match those of their

classroom peers who are most likely second language learners with an entirely classroom-based knowledge of the language. The heritage speaker will excel at pronunciation and aural comprehension, but without previous formal instruction, their overt knowledge of grammar may lag behind that of traditional language students who seem to be at the same level.

At the other extreme, we find the expectation that heritage speakers do everything wrong, speak "corrupted" language, and sound "uneducated" or "childish". This perception of the worldgone-wrong arises from the variety to which heritage speakers have been exposed and from their absence of schooling. Since heritage speakers' baseline language is often not the same variety as the linguistic standard being taught in the classroom (see the discussion above), it would be unreasonable to expect heritage speakers to know the standard. If the emphasis is on speaking "correctly", heritage language learners may feel stigmatized because of their dialect-heavy language skills and may lose motivation to continue a language course (Wiley 2008). The situation is worsened in cases where the instructor is biased in favor of one dialect over another, whether consciously or unconsciously. This problem of "instructor bias" appears frequently in a number of language classrooms, but because of the predominance of Spanish in foreign language classrooms in the U.S., this problem has been highlighted in the study of attitudes held by members of university Spanish departments in the U.S. toward academic Spanish as spoken by Spaniards, Mexicans, Latin Americans, and Chicanos. A study found that the educators' views on literacy and prestige dialects resulted in prejudices, which favor certain varieties of academic Spanish and disfavor others (Valdés et al. 2008). Although the language used in the classroom is a dialect of their home language, heritage re-learners are constantly reminded by their instructors of the differences between the way they speak and the way they should be speaking. An emphasis on the standard, or prestige, variety of the language is still prevalent in many heritage classrooms. Consider the following remarks made by a heritage speaker of Spanish who was enrolled in re-learning classes while in high school (interview reported in Leslie 2012: 16-17), "[W]e all got the idea that Spanish was this very formal thing that we learned and that we presented on, but we liked to relax and enjoy ourselves with our friends and speak English." As long as teachers' attitudes to non-standard varieties remain dismissive, heritage language relearners will continue to be discouraged. It is, of course, unreasonable to expect that every variety or dialect be given its own course materials, but language instructors can better accommodate simply by recognizing that heritage language learners' use of non-standard

language is often dialectal and not erroneous.

Educators also have a vastly different perception of heritage speakers and L2 learners, which colors the approach to these two groups in the classroom. L2 learners are allowed and even expected to make mistakes as well as celebrated for what they already know. Heritage speakers, on the other hand, are often assessed on the basis of what they do not know, which does not lead to a positive view of them (even regardless of the expectations discussed in the previous paragraph). The result is a clash of perceptions and expectations; the glass is always half full for L2 learners and always half empty for heritage speakers. Meanwhile, despite their shortcomings, heritage speakers often know a great deal. Like a native speaker, a heritage speaker will speak a dialect rather than the standard language, and quick, casual speech may even seem to come naturally to a highly proficient heritage speaker. Such speakers may also share a certain cultural fluency because of their family connection to the heritage language. Recognizing all these advantages can empower both the educator and their heritage students; but before we arrive at that point, it is important to become cognizant of the widespread double standard to which heritage speakers and L2 learners are held.

Setting aside the perceptions on the part of educators, should heritage speakers and L2 learners be placed in the same classroom? This is an important issue addressed by several researchers in this volume. The general consensus seems to be that there is no easy answer. Heritage speakers' advantages can be intimidating to the heritage speakers' classroom peers who generally have a different set of strengths and weaknesses. For example, because of their classroom-based exposure, second-language learners are more likely to perform better on written tasks than on aural reception tasks, whereas the strengths of the heritage speaker are the exact opposite. With their exposure to the language mostly confined to speech, they excel at aural reception and struggle with written tasks. Fundamental differences in the needs of heritage speakers as learners have led to the rapid development of dedicated heritage language classes, such as "Spanish for heritage speakers." Generally, these classes are adapted from the traditional courses designed for teaching foreign languages and encourage a more learner-centered approach (Carreira 2004; Carreira's chapter in this volume). The goals of heritage language learners are primarily related to maintaining the language abilities they already possess, expanding those abilities, developing literacy skills, and learning the standard or prestige variety (Valdés 2000: 390). Some overlap clearly exists between these goals and those of traditional language learners,

but a dedicated heritage language class might achieve those goals more efficiently.

On the other hand, similarities exist in the skill sets of the heritage language learner and the second language learner that can make a shared classroom possible in cases where the development of a dedicated heritage language track is not feasible. Both types of learners tend to prefer simpler grammatical structures, such as those without subordinate clauses, which require less sentence planning, and they tend to avoid using structures that require the speaker to remember and connect words across distances within a sentence (for example, pronouns or reflexives referring to a previous noun). In tasks designed to test a learner's judgment on the acceptability of a given language structure, both heritage speakers and second language learners are reluctant to reject ungrammatical options. Both types of learners share an uncertainty about their own intuitive understanding of the language's grammar and are shaky on what may or may not be permissible. On the lower end of the heritage speaker continuum, the advantage of a good accent may be the only characteristic differentiating the heritage language learner from her classroom-educated peers, but even speakers higher on the continuum will have learning objectives in common with traditional students. Both types of students will benefit from additional and varied contact with the language, classroom conversational practice, the development of literacy and exposure to literature, the learning of a written register, and discussion of complex grammatical principles. The heritage language learner is certainly a different type of learner, as the heritage speaker is a different type of bilingual, but those differences are not necessarily an obstacle to achieving their learning objectives in a shared classroom.

Thus, a mix of heritage language and traditional language learners in the same classroom can be an asset, provided that the situation is handled with sensitivity (see the chapters by Ducar and especially by Carreira). After all, understanding the culture attached to a particular linguistic community is one of the primary goals of a language course; language learners are able to bring their own cultural insight into the language classroom, and in return, the interest of their classroom peers can encourage them to maintain a positive attitude toward their heritage language (see also the chapter by Parra for similar observations).

Understanding the similarities and differences between native speakers, heritage speakers, and second language learners is a labor-intensive and demanding task, but identifying what these three groups hold in common is important for both linguistic theory and educational

policy. Unfortunately, evidence is often anecdotal, limited to individual experiences or skewed to a particular group, which makes it challenging to generalize and fine-tune strategies in the classroom. Meanwhile, knowing what works and what does not is an important part in establishing effective pedagogies. One of the immediate needs in the education system is the establishment of a massive database on heritage students' progress in class; acquiring such a database will necessitate the rigorous testing of heritage language re-learners before the class starts, in the middle of the term, and after the semester is over. Such practices are in their infancy, but the tools for implementing them are available on the National Heritage Language Resource Center website where they are awaiting use and perfection.³

6 Conclusions

The remarks in this chapter are intended primarily as a brief commentary on the relationship between existing research on heritage languages and educational practices. The two areas of expertise are intertwined. The researcher's goal is to understand the mental representation of language possessed by heritage speakers; however, to do so, the researcher must understand where heritage language speakers excel and where they need improvement — a task that can only be accomplished by working together with language educators to develop suitable research methodologies. I have shown that some existing methodologies, including grammaticality judgments in particular, are not appropriate for use with heritage language populations.

The practical applications of heritage language research naturally fall within the domain of language teaching. At a time when the U.S. is increasingly turning outward — economically,

The goal of the tools site at NHLRC is to provide a central location for a collection of references, proficiency assessments, questionnaires, and research tools that may be utilized for assessing or conducting research on heritage speakers'/learners' language skills. The tools have been stored together in one resource site so that researchers, teachers, and program administrators can collectively use and contribute, creating a community that exchanges ideas on current issues involving heritage languages and promotes collaboration and further study of this topic.

³ http://web.international.ucla.edu/nhlrc/category/research

politically, and culturally — tapping into the benefits of our own population of bilinguals is essential. Heritage speakers are an underdeveloped resource among American bilinguals, and they should be encouraged by today's globalized state to develop their language skills. Their advantages over second language learners, particularly in pronunciation and cultural insight, give them a clear leg up in eventually achieving native-like fluency. For instance, the children of those 23 million Spanish speakers in America have a far better chance than that of adult second language learners in reaching functional proficiency in Spanish, even if childhood exposure was as minimal as simply overhearing the language. Pedagogical solutions to address the challenges faced by heritage language learners in the classroom are necessary, but arriving at such solutions is not possible without an awareness on the instructor's part of the nature of heritage language. Without some sensitivity to the heritage speaker profile on the part of language teachers, the heritage language learner may fall through the proverbial cracks and miss out on the opportunity to regain proficiency in his or her home language.

I began this chapter with the observation that the phenomenon of heritage language is as old as migration itself. In the days of Benjamin Franklin, German was most likely the primary heritage language in the U.S.; in modern times, it is Spanish, and it may well be Somali fifty years from now. The actual composition of heritage languages changes over time; but the phenomenon does not change, and it is not going to disappear. Recognizing heritage language speakers as a powerful presence in our laboratories and classrooms is an important step toward turning heritage speakers into balanced bilinguals.

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