INTRODUCTION

Heritage languages are spoken by early bilinguals, simultaneous or sequential, whose L1 (home language) is severely restricted because of insufficient input. As a result, they can understand the home language and may speak it to some degree but feel more at ease in the dominant language of their society. The study of heritage languages, a relatively new field in linguistics, brings together research on first and second language acquisition, bilingualism, and language attrition. Researchers have taken two main approaches in studies of heritage language: research that examines patterns found in heritage languages from the standpoint of Universal Grammar on the one hand, and research that emphasizes sociolinguistic or more applied aspects of heritage languages on the other.

GENERAL OVERVIEWS

There is no single textbook or survey book focusing specifically on heritage speakers, because the field of inquiry is relatively new and has not yet completely separated from structural or social investigations of bilingualism. The following overviews provide a helpful discussion of the range of issues involved in heritage language study. Polinsky and Kagan 2007 and Benmamoun, et al. 2010 present a broad range of topics related to heritage language study; Montrul 2008 and Cook 2003 discuss heritage languages in the more general context of bilingualism. Finally, Brinton, et al. 2008, Seliger and Vago 1991, Köpke, et al. 2007, and Schmid 2010 present a broad range of case studies that place heritage language investigation in a more general context.


An investigation into the relationships between attrition, incomplete acquisition, and fossilization in first language (L1) and second language (L2). These issues are discussed with regard to age of acquisition and critical-period theories.


An overview of heritage speakers (narrowly defined) from the standpoint of their linguistic characteristics and relearning potential in adulthood.


A collective monograph discussing sociolinguistic and structural issues pertaining to language attrition. A collection of case studies on a number of languages.


A collection of articles documenting case studies of several heritage languages and examining the methodology of heritage language research.


This volume contains a useful annotated bibliography on language attrition (through 2004), which is relevant for heritage language study as well.

**DEFINITIONS**

Heritage speakers can be defined narrowly, with respect to their exposure to the weaker language (Valdés 2000), or in a more broad sense, through their cultural or ethnic relation to an ancestral language (Cummins 2005, Fishman 2001). This article largely follows research using the narrower definition.


Introduces the term “heritage speaker” to the Canadian bilingual situation.


A broader definition, which identifies heritage speakers by their cultural and ancestral association with a given language and does not presuppose bilingualism.

Provides a narrow definition of a heritage speaker emphasizing the developmental trajectory and linguistic abilities of this population.

JOURNALS

In addition to a specialized online journal dedicated exclusively to heritage languages (Heritage Language Journal), a number of journals publish theoretical and experimental work on heritage languages (Bilingualism: Language and Cognition; Bilingual Research Journal; International Journal of Bilingualism; Linguistic Approaches to Bilingualism; Second Language Research; Studies in Second Language Acquisition). Several journals also publish applied and pedagogical work on heritage languages (International Journal of Bilingual Education and Bilingualism; Foreign Language Annals).

**Bilingualism: Language and Cognition**
A refereed journal focusing on cognitive aspects of bilingual language competence.

**Bilingual Research Journal**
A refereed journal dedicated to bilingual education, bilingualism, and language policies in education.

**Foreign Language Annals**
A refereed journal focusing on an applied linguistic approaches to second language acquisition and bilingualism.

**Heritage Language Journal**
A refereed journal specifically dedicated to heritage languages and heritage speakers; hosted by the UCLA Center for World’s Languages. Online only.

**International Journal of Bilingualism**
A refereed journal that publishes work on linguistic, psychological, neurological, and social issues that emerge from language contact.

**International Journal of Bilingual Education and Bilingualism**
A peer-reviewed journal that promotes work on bilingualism and bilingual education.

**Linguistic Approaches to Bilingualism**
A peer-reviewed journal that focuses on generative approaches to bilingualism.

**Second Language Research**
An international peer-reviewed journal, publishing work concerned with nonnative language acquisition as viewed from a linguistic and psycholinguistic perspective.

**Studies in Second Language Acquisition**
A refereed journal of international scope devoted to the scientific discussion of issues in second- and foreign-language acquisition of any language.

RELATED CONCEPTS AND PHENOMENA: SEMISPEAKERS

Semispeakers (Dorian 1973, Dorian 1978, Dorian 1981) show many of the features attributed to heritage speakers. Because heritage languages are often characterized by some incompleteness or
reduction of the linguistic system, they have been described as incompletely acquired or subject to attrition. A number of bibliographic references reflect this terminology. The term “near-native” has also been used; it needs to be used with caution because it sometimes refers to second language learners who show near-native attainment.

  An overview of language change under attrition in East Sutherland Gaelic.

  A detailed study of East Sutherland Gaelic.

  An important monograph introducing structural correlates of heritage languages.

PERCEPTION

Studies of speech/language perception show that heritage speakers generally have a good control of phonemic contrasts in their home language (Au, et al. 2002; Knightly, et al. 2003; Oh, et al. 2002) even if their exposure to that language was limited to the first five years of life (Tees and Werker 1984, Werker and Tees 1984).

  Even passive exposure to a language in childhood results in tangible phonetic and phonological benefits when adult heritage speakers take on the relearning of their heritage language.

  Exposure to a language in childhood leads to phonetic production benefits in adulthood even if the language has not been used.

  Early acquisition of a language in the home leads to advantages in both perception and production of phonological contrasts in that language when the language is accessed after a long period of nonuse.

  Early exposure to Hindi resulted in perceptual advantages in adults even if Hindi had not been used for a long time.

Sensitivity to the language an individual was exposed to in the first year of life can be recovered in adulthood even if the language was not used later.

**PRODUCTION**

Studies of production show that heritage speakers have a phonological and phonetic advantage over second-language learners (Au, et al. 2002; Oh, et al. 2003). However, heritage speakers are different from monolinguals (Godson 2004, Khattab 2002) and show transfer effects as well as possible effects of attrition (Major 1992; Godson 2004; de Leeuw, et al. 2010).


Even passive exposure to a language in childhood leads to lasting advantage in native-like production of sounds (data from Spanish and Korean).


Native speakers of German living in Canada and Holland are perceived to have an accent in their first language after a prolonged emigration. However, this accent is perceived as different from and weaker than the accent of consecutive German-English bilinguals.


An investigation of vowel production in heritage speakers of Western Armenian. English affects the Western Armenian vowel system but only for those vowels that are already close to English. Thus a single across-the-board principle of transfer is shown to be too general. Other forces such as universal tendencies, normal diachronic change, and sociolinguistic pressures must be considered.


Vowel onset time (VOT) phoneme production by heritage speakers of Arabic suggests possible age-of-acquisition effects, with heritage speakers who stopped learning before age three having more pronounced VOT differences.


Native speakers are sometimes judged as nonnative after a prolonged emigration; however, their perceived accent is considered quite slight and different from that of L2 speakers. The presence of a “heritage” accent suggests that pronunciation is affected in heritage speakers to some extent.

In Spanish, there was no difference in VOTs of voiceless stops in low-proficiency heritage speakers as compared to native speakers, which may also suggest cross-language variation.

**Morphology**

The investigation of morphological deficits in heritage languages has been a particularly active area of study. The most active areas of research include comparisons between nominal and verbal morphology in heritage speakers and monolingual controls.

**General Paradigm Leveling**

Heritage languages are characterized by significant overregularization and the leveling of morphological paradigms (Vago 1991, Choi 2003).

Choi, Hye-Won. 2003. Paradigm leveling in American Korean. *Language Research* 39:183–204. Heritage speakers of Korean whose dominant language is American English have control of only one or two registers of Korean (typically, the informal register) and show an overregularization of patterns found in this register.


**Agreement and Concord**

The following studies examine agreement and concord in various linguistic subdomains of heritage language grammars—overall, attrition of agreement seems to be particularly prominent in heritage grammars. A number of studies show significant loss of agreement (Albirini, et al. 2011; Anderson 2001; Håkansson 1995; Polinsky 2006; Rothman 2007). The erosion of agreement is particularly striking given that other verbal categories seem to be more resilient (Bolonyai 2007, Fenyvesi 2000).

Albirini, Abdulkafi, Elabbas Benmamoun, and Eman Saadah. 2011. Grammatical features of Egyptian and Palestinian Arabic heritage speakers’ oral production. *Studies in Second Language Acquisition* 33:273–303. Agreement in heritage Arabic as spoken in the US shows signs of attrition; however, different groups of speakers show a varying degree of attrition. In particular, Egyptian Arabic heritage speakers show a greater loss of agreement than Palestinian Arabic heritage speakers. This difference may have both structural and sociolinguistic underpinnings (Palestinian Arabic speakers are more focused on maintaining their language than some other Arabic émigrés).

A case study documenting a gradual weakening of verb agreement in the Spanish spoken by child immigrants in the United States.


Pervasive and systematic errors in nominal morphology of heritage Hungarian. Verbal morphology is better preserved; however, definiteness agreement is affected.


Changes in verbal agreement of heritage Hungarian as spoken in the United States involve loss of definiteness agreement and problems with verbal particles.


A comprehensive description of morphological deficits in heritage Russian. The degree of grammatical mastery of Russian is shown to correlate with lexical proficiency.


The study presents experimental evidence that heritage speakers of Brazilian Portuguese lack knowledge of inflected infinitives.

**Gender Categorization and Gender Agreement**

Studies of heritage Spanish (Anderson 1999; Montrul, et al. 2008) and heritage Russian (Polinsky 2008) show that gender categories undergo restructuring in heritage language; this in turn has an effect on agreement.


A case study documenting a gradual weakening of gender agreement in the Spanish spoken by child immigrants in the United States.


The study documents differences between heritage and L2 learners across modalities. The maintenance of gender agreement in adult heritage speakers shows age-of-acquisition effects.
Heritage speakers restructure the formal cues that are used to assign Russian nouns to gender classes. The degree of restructuring and the resulting number of genders correlates with general proficiency as measured by speech rate.

**Aspect**
The following studies argue for a systematic change in the aspectual categories of heritage languages (Montrul 2002, Montrul 2009); given the prominence of the category of aspect in Slavic languages, it is understandable that this area has been subject to particularly active research in Slavic (Anstatt 2008, Bar-Shalom and Zaretsky 2008, Gupol 2008, Laleko 2010, Polinsky 2008).

Narratives produced by Russian heritage speakers living in Germany show aspectual restructuring and transfer effects.

Russian-English bilingual children have an aspectual system that is not qualitatively different from the one in the baseline. This maintenance may follow from the continuous exposure to the language.

A comprehensive study of aspectual restructuring in heritage Russian spoken by school-age heritage speakers who are dominant in Hebrew.

A study targeting production, interpretation, and acceptability of perfective and imperfective aspectual forms by heritage speakers of Russian. Heritage speakers have decreased sensitivity to lexical or clausal determinants of aspect and show particular vulnerabilities at the level of pragmatic interpretation. In cases of optionality, they seem to favor the imperfective aspect.

This article investigates whether age of onset of bilingualism has an effect on ultimate attainment, and documents incomplete acquisition and attrition of tense/aspect morphology in Spanish. Results suggest that morphophonological spell-outs and semantic features of functional categories are affected by incomplete acquisition and language loss, and that many of the patterns of divergence found resemble stages of second-language acquisition.
The study compares native and heritage speakers of Spanish with respect to knowledge of tense, aspect, and mood morphology. The results show significant differences between native speakers and heritage speakers, confirming that heritage speakers make errors with verbal morphology. Accuracy on grammatical aspect and tense is higher than accuracy on subjunctive morphology in oral and written production and interpretation.

Low-proficiency heritage speakers of Russian show a significant leveling of the aspectual paradigm. Aspectual distinctions are generally abandoned and speakers develop alternative, periphrastic means of encoding conceptual distinctions associated with aspect.

**Tense and Mood**
These studies examine the knowledge of tense and mood categories in heritage grammars and demonstrate that while mood distinctions are subject to significant attrition, tense seems to be quite robust even if the heritage language is not used (Blake 1983, Martínez Míra 2009, Montrul 2009).

A study of mood forms in bilingual English/Spanish-speaking children indicating that the subjunctive is one of the more affected forms.

A study of the distribution of the subjunctive in different clause types in heritage Spanish.

The study compares mood morphology in heritage and baseline Spanish. The results show significant differences between native speakers and heritage speakers, confirming that heritage speakers make errors with the morphology of the subjunctive.

**Case Morphology**
The following studies examine the attrition and reduction of case morphology in heritage languages (de Groot 2005). Case morphology is particularly vulnerable in contexts that allow for some optionality (Leisiö 2006, Montrul and Bowles 2009, Montrul and Bowles 2010).

Attrition of case marking in Hungarian as spoken by émigrés, especially in the context of case optionality and differential object marking.

The genitive of negation is a weakening feature in baseline grammars of modern Russian, and it undergoes further attrition in the heritage language.

A study of incomplete knowledge of differential object marking by Spanish heritage speakers raised in the United States in comparison with fully competent native speakers. Optionality and more fine-grained semantic distinctions are lost in the heritage language.

This study documents the effect of explicit classroom instruction on heritage speakers’ control of differential object marking and the use of dative subjects with experiencer verbs. Explicit instruction leads to significant improvement both in production and comprehension.

**SYNTAX**

The papers listed in this section address various aspects of syntactic competence in heritage speakers and compare these speakers to monolingual controls as well as second-language speakers. The syntactic characteristics most commonly considered include A-bar movement (extraction) regularities (Lee-Ellis 2011; O’Grady, et al. 2001; O’Grady, et al. 2011; Polinsky 2011), word order (Bruhn de Garavito 2002), and binding (Keating, et al. 2011; Kim, et al. 2009).

Early bilinguals have a better control of word order and adverbial placement than L2 learners of Spanish.

Heritage speakers of Spanish show stronger reliance on grammatical cues in the resolution of anaphoric dependencies than second-language learners. However, both groups are different from the native-speaker control group.

Heritage Korean undergoes changes in the anaphoric system leading to the reduced use of the anaphoric form *caki* and null pronominal forms.


A comparison of Korean native and heritage speakers’ performance in an elicited production task that involved subject and object relative clauses. Proficiency scores exhibited a modest correlation with the different individual response patterns.


Heritage language relearners of Korean perform better than their L2 counterparts in the acquisition and comprehension of relative clauses. Both groups show a preference for subject relatives.


This paper examines the role of factors implicated in processing difficulty, such as prominence of an expression and length of filler-gap dependency in the acquisition of relative clauses, including Korean relative clauses.


An experimental study of relative clause comprehension in heritage Russian showing clear effects of attrition in adult heritage language.

**LEXICAL KNOWLEDGE**

Lexical access in heritage speakers is significantly slower than in native controls (Hulsen 2000; O’Grady, et al. 2009), which allows researchers to use naming tasks in the assessment of heritage speakers’ competence (O’Grady, et al. 2009; Polinsky 1997; Polinsky 2006).


A study of lexical access in production and comprehension in Dutch heritage speakers in New Zealand. Second-generation Dutch speakers differed significantly in both speed and accuracy of lexical retrieval from both first-generation speakers and a control group of Dutch speakers in the Netherlands. Third-generation speakers managed to perform the picture-matching task (comprehension) but were unable to perform the picture-naming task (production).


Introduces a naming task being developed as part of the Hawai‘i Assessment of Language Access (HALA) project. This task exploits the fact that the speed with which bilingual
speakers access lexical items in their two languages offers a sensitive measure of relative language strength.

The paper reports a correlation between lexical knowledge and extent of morphosyntactic attrition in heritage speakers of Russian. The author proposes to assess lexical knowledge using translations from the dominant language into the heritage language (these papers use the Swadesh basic vocabulary list).

An extension and elaboration of the results presented in Polinsky 1997.

**SEMANTICS**

Studies of semantic knowledge of heritage speakers have focused mainly on transfer effects (Kupisch and Pierantozzi 2010; Montrul and Ionin 2010; Montrul and Ionin 2011; Serratrice, et al. 2011).

Germanic languages allow bare plurals in generic contexts (*Dogs have tails*), whereas in Romance languages such bare plurals are generally impossible (*Les chiens ont des queues/*Chiens ont. . .). This study shows a trend towards the overacceptance of bare plurals in inappropriate contexts by Romance (Italian) heritage speakers whose dominant language is German.

Spanish heritage speakers exhibit transfer from English into Spanish with the interpretation of definite articles in generic contexts. Their interpretation of definite articles in inalienable possession contexts remains intact, however.

The use and interpretation of definite articles in Spanish undergoes transfer from English, especially in generic contexts.

An investigation of the effect that the knowledge of a particular construction in one language may have on the ability to judge the grammaticality of a similar construction in another language. English-Italian and Spanish-Italian bilingual children and monolingual peers judged the grammaticality of plural NPs in specific and generic contexts in English and in Italian. Knowledge of English affected the bilinguals’ ability to discriminate between grammatical and ungrammatical sentences in Italian.

**DISCOURSE**

Studies indicate that heritage languages consistently lose null subjects (and objects), replacing them with overt nominal expressions (Polinsky 1995, Sorace 2004, Sorace 2005, Sorrace 2011, Sorace and Serratrice 2009). This change takes place not only in the context of English (which itself does not have pro-drop) but also in the context of a pro-drop-dominant language (e.g., Spanish or Italian). It is therefore impossible to account for such a change by transfer effects alone. The proposal by Sorace and coauthors is that null pronominals, which need to be identified by association with a discourse antecedent, lie at the syntax-discourse interface, and interface phenomena are particularly susceptible to attrition.


Significant loss of pro-drop in several heritage languages.


Increase in the use of overt pronouns in heritage languages whose baseline includes null pronominals. The loss of pro-drop is due to the difficulty in identifying the reference of the null pronominal due to the complexity of the interface conditions.


Further arguments for the interface hypothesis as applied to pro-drop.


A detailed analysis of the interface hypothesis as applied to bilinguals and advanced second-language learners.

The paper shows that cross-linguistic influence may occur in bilingual first-language acquisition and attrition particularly in more complex areas (interface domains), for example, at the interface between syntax and pragmatics.

LANGUAGES

ARABIC
The existing work on heritage Arabic investigates morphological changes (Albirini, et al. 2011) as well as demographic and social factors leading to the maintenance of Arabic as a heritage language (Bale 2010, Sofu 2009).

Description of grammatical features that undergo attrition in heritage Arabic. Egyptian Arabic is shown to undergo greater changes than Palestinian Arabic, which may be due to social and sociolinguistic factors.

An overview of Arabic as spoken in the United States, with an emphasis on historical and demographic issues and a sketch of language-maintenance scenarios.

A case study of language reduction and attrition.

ARMENIAN
Godson 2003 presents a study of heritage Western Armenian investigating language-internal pressures and transfer effects in phonology.

An instrumental study of the vowel system of heritage Western Armenian as spoken in the United States.

CHINESE
The majority of work on heritage Chinese considers Mandarin in contact with English; the emphasis in existing studies is on sociolinguistic and pedagogical aspects of heritage Mandarin (He and Xiao 2008, Tao 2006, Wang 1996). A discussion of Cantonese can be found in Wei and Lee 2001 and He 2008.

A collection of articles addressing social, linguistic, psychological, demographic, and educational aspects of heritage Mandarin Chinese as spoken in the United States and United Kingdom.


Wei, Li, and Sherman Lee. 2001. L1 development in an L2 environment: The use of Cantonese classifiers and quantifiers by young British-born Chinese in Tyneside. International Journal of Bilingual Education and Bilingualism 4:359–382. The paper examines Cantonese data from a group of thirty-four British-born Chinese-English bilinguals, aged between five and sixteen years. The speakers have difficulties with more specific Cantonese classifiers and quantifiers, which is attributed to incomplete language learning and transfer from English. Despite a slight positive correlation between age and Cantonese ability, there is evidence of delayed and stagnated L1 development.

FINNISH
Heritage Finnish as spoken in the United States has been investigated from a generative perspective (Halmari 1997).


HUNGARIAN


A case study of heritage Hungarian (with Hebrew as dominant language) showing significant leveling in the pronominal, nominal, and verbal paradigm.

INUTTITUT
Heritage speakers of Labrador Inuittitut are generally low proficiency, which has led to their characterization as receptive bilinguals (Sherkina-Lieber 2010, Sherkina-Lieber, et al. 2011).


The knowledge of functional morphology by heritage speakers of Labrador Inuittitut is measured using comprehension techniques and is shown to be superior to that of late bilinguals.


Although heritage speakers of Labrador Inuittitut do not have production skills and are therefore receptive bilinguals or overhearers, their morphological discrimination as measured by comprehension tasks is superior to that of late bilinguals. The control of verbal morphology appears to be stronger than the control of nominal morphology.

KOREAN


A discussion of heritage speakers’ motivations for continuing study of their heritage language with an emphasis on reading skills.


Heritage speakers of Korean benefit from explicit grammar instruction.
Kim, Hi-Sun Helen. 2006. Processing strategies and transfer of heritage and non-heritage learners of Korean. PhD diss., Univ. of Hawai’i at Manoa. [class:thesis-phd]
A comparison of heritage speakers of Korean and advanced second-language learners shows that they have different strengths and deficits.

A collection of articles addressing issues of language maintenance and continuing language education for heritage speakers of Korean.

A collection of articles addressing linguistic and pedagogical issues of heritage Korean as spoken in the United States.

A study of phonological competence and production in Korean heritage speakers.

An investigation of social, psychological, and linguistic factors supporting continuous use of a heritage language in the American cultural setting.

A comprehensive overview of Korean immigration in the United States, language attitudes to bilingualism and maintenance of Korean, code-switching, and effects of language shift.

POLISH
Studies of Polish in the diaspora focus mainly on sociolinguistic aspects of the language (Dubisz 1997, Laskowski 2009) as well as some aspects of lexical knowledge and morphology (Brehmer 2011).

This paper examines changes in the use of the genitive case in Polish speakers living in Germany.

A collection of articles on the distribution and use of Polish in the émigré setting.

A study of Polish-Swedish bilingualism.
RUSSIAN
Heritage Russian has been studied as spoken in the United States (Andrews 1999, Andrews 2008, Kagan and Rifkin 2000), Finland (Protassova 2004), Germany (Anstatt 2008), and various other areas of Russian emigration (Mustajoki and Protassova 2004).

A comprehensive overview of Russian-speaking immigrants in the United States in the second half of the 20th century. A survey of language attitudes, language retention, and patterns of shift.

A collection of articles examining morphological, syntactic, and lexical production and comprehension of adult heritage speakers of Russian as well as issues of relearning at the college level.

An overview of patterns of change in the Russian language as spoken by immigrants in Germany.

A collection of articles addressing social, cultural, pedagogical, and linguistic issues of Russian and other Slavic languages in the United States.

A collection of articles examining social, cultural, and linguistic aspects of the Russian language in diaspora.

Social and demographic aspects of the maintenance of Russian in Finland.

SPANISH
Work on heritage Spanish includes fundamental studies of sociolinguistic and structural aspects of Spanish in the United States (Silva-Corvalán 1994), collections of studies on different varieties of Spanish in the United States (Roca and Lispki 1993, Roca 2000, Roca and Colombi 2003) and experimental work comparing heritage language acquisition, second language acquisition, and attrition (Montrul 2008).

A case study of social and cultural practices leading to the maintenance or loss of Spanish in the English-speaking context.

A comprehensive description of grammatical properties characterizing heritage Spanish as spoken in the United States. The monograph also presents an overview and discussion of prior research on heritage languages.

A collection of articles bringing together sociocultural, linguistic, and pedagogical investigations of heritage Spanish.

A collection of articles documenting different varieties of Spanish spoken in the United States.

A collection of linguistic and sociolinguistic articles on different varieties of Spanish spoken in the United States and Latin America.

A collection of papers dedicated to the research, theory, and practice of teaching Spanish to heritage speakers in the United States.

A comprehensive description of the Spanish spoken in Los Angeles and representing different degrees of language attrition and restructuring. The monograph presents multiple examples of Angeleno Spanish and discusses social and linguistic markers of language change.