# Linguistic Patterns in Heritage Persian Instruction

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**Abstract.** There exists a continuing debate in the field of foreign language teaching on the relative viability of implicit vs. explicit approaches in the classroom. While content-based methods typically lead to more advanced communicative abilities, certain language elements and structures benefit most from explicit instruction. I argue that in the case of heritage language learners, their specific needs and linguistic gaps call for the integration of an inductive explicit instruction methodology. Research shows that heritage language speakers differ from second language learners in several aspects: Heritage language learners display fluency in basic conversational contexts, but have difficulties with elements of formal and high register language variants as well as literacy skills. I propose a novel approach to heritage language instruction that takes advantage of the existing knowledge and linguistic intuition of learners to recognize language patterns and analytically discover the underlying principles. By focusing on specific areas that raise difficulties for Persian heritage speakers, I show that the approach successfully integrates leading edge linguistic insight in an interactive classroom.

#### 1. Introduction

The viability of grammar instruction in the foreign language classroom has been debated at length following the pendulum swing from traditional grammar-driven methods to communicative approaches that consider grammar as peripheral. More recent methodologies advocate integrating a meaning-based focus on structure for L2 learners within a communicative curriculum, as in Focus on Form (Long and Robinson 1998) and Processing Instruction (VanPatten 2002). Although a number of studies have been performed on the effects of implicit vs. explicit instruction in the second language classroom, empirical research on strategies in heritage language teaching is rather scarce.

It has been reported in the literature that heritage language learners differ substantially from L2 speakers (Valdés 2005, Kagan 2005, Montrul 2008a, among others). These speakers typically have acquired basic conversational skills in the heritage language (HL) but display low proficiency in high-level registers and have undeveloped literacy skills. Nevertheless, Lynch (2003) advocates a communicative, content-based approach for teaching HL learners because of the contextual nature of acquisition for heritage speakers in childhood and the fact that this method has been successful in developing the productive ability of L2 learners. I argue, however, that the specific needs of HL learners and their linguistic gaps especially at higher level registers call for the incorporation of instructional methods in the classroom. In this paper, I propose an inductive approach that takes advantage of the existing knowledge and linguistic intuition of HL learners to help them recognize language patterns and successfully apply them in the classroom. By focusing on specific areas that raise difficulty for Persian heritage speakers, the paper shows how this method of *linguistic instruction* can allow the learner discover the underlying principles of the language without the need for explicit instruction of grammar rules. In this novel pedagogical paradigm, cutting edge linguistic analysis rather than traditional grammar rules are integrated in the classroom, in particular in selected domains where structured input does not suffice, in order to provide the most impact. This approach allows students to discover linguistic principles and communicate meaningful information while performing a specific task, but also helps develop critical thinking and analytic skills in the language learner.

# 2. Heritage Speaker Characteristics

While the research on the linguistic competence of heritage learners is still in its infancy, it is generally agreed that their linguistic characteristics are distinct from those of both a second language (L2) learner and a monolingual native speaker of the language. Adult heritage speakers have been argued to have undergone incomplete acquisition of their first language: These speakers acquired two or more languages in childhood but despite having been exposed to their family language early in life, they either never fully acquire aspects of their first language or may lose some of the characteristics that had been learned (Polinsky 2005, Montrul 2008a). Unlike L2 students, HL learners are typically able to carry out conversations on everyday topics, may understand rapidly spoken language including the subtle use of humor, and have internalized grammatical rules especially if the latter are frequent in lower registers of the language (Lynch 2003). Compared to non-heritage students, heritage speakers typically possess skills that L2 speakers may never achieve such as native-like pronunciation, fluency in colloquial register and dialects, and sociocultural understanding (Brecht and Ingold 1998). But in most cases, the heritage students tend to lag behind the L2 learners in terms of reading and writing skills, and the use of formal registers or styles. High-level language proficiency is characterized by more clause-embedding, complex sentence structures, elaborate use of grammatical morphology, register variation, and more frequent pro-drop cases, all of which have been argued to be affected in heritage language (see Montrul 2006 and references therein). It has also been noted that the language spoken by heritage speakers may develop new linguistic features as a result of contact with the dominant language. These interference effects are often characterized by the widespread use of lexical items from the majority language and code-switching, although deeper morphosyntactic changes have also been noted (Polinsky 2008).

Recent research by Cagri et al (2007) on the linguistic competence of Iranian Persian heritage speakers living in the United States has shown that HL students are typically faster than second language learners of Persian across the board. The authors found that heritage speakers are often equivalent in response time to native speakers of Persian in the experiments carried out. In addition, it was shown that heritage learners have advantages over the L2 learners in selective grammatical domains, in particular concerning argument structure and the formation of complex sentences. Interestingly, the L2 learners displayed advantages over the heritage students in features that are explicitly taught in the classroom or language elements that are not frequent in the conversational discourse such as preposition subcategorization or the recognition of Arabic roots. Although interference effects were noted for both groups, the experimental results suggest that English-like structures seem to hinder heritage students more than the L2 speakers.

Based on our experiences in the classroom<sup>1</sup>, we have also observed that Persian HL learners typically have knowledge of the stress patterns of the language and have internalized the morpho-phonological changes in various contexts, such as vowel changes or assimilation of consonants. As anticipated, HL learners of Persian are very comfortable with complex structures that are frequent in conversational language, such as the use of the subjunctive in sequence of tense contexts or the correct usage of the specific direct object marker *ra* (pronounced *ro* or *o* in spoken Persian). HL learners, however, are unfamiliar with the vocabulary and word forms used in the formal or written discourse, e.g., the Arabic 'broken plural' forms. Persian heritage learners display interference effects from English in the

<sup>&</sup>lt;sup>1</sup> These observations were noted during Persian language classes taught in the Heritage Language Program at the University of California, San Diego (UCSD), over a two-year period.

subcategorization of verbs, in particular with respect to prepositional selection. Interference effects are also common in the choice of conjunctions in linking two sentences or in forming embedded questions. While the Persian heritage learner's familiarity with the heritage culture is likely to exceed that of the L2 learner, they demonstrate difficulties in complex interactions of politeness strategies that are very common in Iranian society, especially when these are represented by the choice of language features and the use of higher registers. Moreover, since Persian heritage learners typically have not been trained in reading and writing skills in the HL, they represent words as they are pronounced in the conversational language. Given the strong diglossic<sup>2</sup> situation in Persian, this leads to significant orthographic errors in writing Persian.

# 3. Linguistic Instruction

Although it is generally agreed that content-based methodologies have been beneficial in developing communicative abilities in the L2 classroom (Doughty and Varela 1998), a number of researchers have also argued that in L2 learning that is entirely meaning-based, some linguistic features do not ultimately develop to targetlike levels (Harley 1992, Harley and Swain 1984, Vignola and Wesche 1991). DeKeyser (2003) provides a detailed overview of the existing research comparing implicit and explicit learning and points out that the comparisons in these studies have typically been performed for very specific structures. Thus, the differential effectiveness of implicit and explicit learning seems to be a function of the nature of the grammatical or language element to be learned. According to DeKeyser, "the harder it is to learn something through simple association, because it is too abstract, too distant, too rare, too unreliable, or too hard to notice, the more important explicit learning processes become". Similarly, Doughty (2003) concludes that "instruction is potentially effective, provided it is relevant to learners' needs". These results suggest that in the case of L2, a range of structures might be better learned explicitly than implicitly.

I suggest that parallel to L2 learning, heritage students can benefit from explicit instruction in a series of targeted instances where implicit learning is not sufficient. In general, these are structures that HL speakers are not exposed to during their incomplete acquisition of the L1 within the context of the home or family. These typically include grammar elements that are not frequent in conversational language or that occur mainly in the higher register. Given the limited resources in the heritage language classroom, it is extremely difficult to modify existing errors or enhance these language gaps in the competence of heritage speakers by structured input alone. I propose instead, an explicit inductive approach in which the teacher facilitates the detection of linguistic patterns by the students in order to explain these difficult issues. Crucial to this approach is the linguistic intuition and insight that HL learners already possess and which is drawn upon in the discovery of generalizations in the classroom. Moreover, the communicative knowledge of HL students is used while performing these linguistic tasks, generating discussion and formulating hypotheses within a meaning-based context.

While some of the structures that Persian HL learners demonstrate difficulties with can be learned by implicit instruction, such as adverbial placement and most word order issues, others cannot. Structures involving complex patterns such as the choice of the *light verb* in a compound verb construction and fossilization due to interference as in the accurate choice of conjunctions often require explicit focus on form to be learned. Furthermore, there are certain language features used in formal language that may

<sup>&</sup>lt;sup>2</sup> Diglossia refers to a situation in which two distinct variants of a language coexist in a given society. Typically, one language variant is considered of high prestige, representing the literary history or the language of formal text, and the other is associated with low prestige and usually represents the spoken vernacular tongue (Ferguson 1959).

not be acquired even by L1 speakers such as complex Arabic morphology forms; these word forms are generally learned in the school. Finally, there are certain elements that are not linguistic but are artificial systems such as orthographic rules which cannot be acquired as part of the language and should be explicitly taught. This becomes particularly important in the case of Persian which displays strong diglossia, producing divergent spoken and written forms. By targeting specific areas that raise problems for Persian heritage speakers, I demonstrate instances where the proposed method of *linguistic instruction* can be successfully employed in the classroom. This paper focuses on four language elements from the domains of phonology, morphology, orthography, and syntax of Persian: the Arabic plural forms, orthography of the "ezafe" constructions. In addition to demonstrating how the linguistic information can be used to teach difficult language features, suggestions for ways of introducing the material in the classroom are also presented. Although the specific examples discussed are from Persian language elements, similar cases can be found in other languages and the method described can be applied to heritage language classrooms in general.

# 3.1 Morphology: Arabic plurals

One of the major issues in the teaching of Persian HL learners is the presence of Arabic word forms that have been imported into the Persian language. Although Persian is an Indo-European language, it includes a number of borrowings formed on the Arabic templatic morphology system which consists mainly of a series of consonantal roots that interlock with patterns of vowels to form words. For instance, the three-letter root form *k-t-b* can be used in Arabic to form the words *kitaab* 'book', *kutub* 'books', *maktab* 'school', *kataba* 'he wrote', *kaatib* 'writer; writing', *kuttaab* 'writers', or *kutiba* 'it was written'. In Arabic, as in other Semitic languages, this root-pattern morphological process has evolved extensively and covers a vast array of meanings typically associated with the consonantal root. As the *k-t-b* examples illustrate, there exist many different pattern templates that can combine with the consonantal root, providing very different meanings. Although this process is not considered to be productive in Persian, a number of such word forms, mainly nouns and adjectives, have been borrowed into the language from Arabic.

Plural formation in Persian is typically achieved by adding a suffix to the word, with -ha being the most common plural marker in the conversational language. But often, especially at higher registers, Arabic plural forms based on the root-pattern morphological system are used. These plurals may follow different template patterns but the most basic pattern, known as the  $\alpha f'al$  template, is shown in Table 1. As can be seen from the transliteration columns in these examples, the singular form of the noun consists of three written characters (although the unwritten vowels may vary). The plural is formed by adding an 'alef' character (pronounced / $\alpha$ / as in English 'cat') in the beginning of the word and a second 'alef' (pronounced /a/ as in 'father') between the last two characters. For instance, the noun *fekr* 'thought' has the plural form  $\alpha fkar$ .<sup>3</sup>

The Arabic plural forms are generally confined to the higher register of the language, even though the singular forms of the same words are quite common in the conversational register; Persian native speakers would tend to use the -ha ending to make a noun plural in regular conversational contexts. For instance, in spoken contexts the plural form of *mowj* 'wave' is most often realized as *mowjha* as opposed to *æmvaj*. *Mowjha* is, in fact, the form used by heritage speakers of Persian who have not been exposed to the Arabic root-pattern forms and are generally unfamiliar with them. Nevertheless, the Arabic template forms are quite common in writing, including advertisements in the newspaper or

<sup>&</sup>lt;sup>3</sup> Note that the pronunciation and sometimes even the meaning of Arabic borrowings are different in Persian.

on street signs. The goal of the linguistic instruction in this instance is to lead the students to recognize the pattern of plural formation in Arabic loans, enabling them to guess at their meanings when encountered in text.

	Plural Form				Singular Form			
Translation	Pronunciation	Transliteration	Persian	Translation	Pronunciation	Transliteration	Persian	
thoughts	æfkar	afkar	افكار	thought	fekr	fkr	فكر	
waves	æmvaj	amvaj	امواج	wave	mowj	mvj	موج	
individuals	æfrad	afrad	افراد	individual	færd	frd	فرد	
tribes	æqvam	aqvam	اقوام	tribe	qowm	qvm	قوم	
poems	æshe:ar	ashear	اشعار	poem	she:r	sher	شعر	
Arabs	æ:rab	aerab	اعراب	Arab	æræb	erb	عرب	
goals	æhdaf	ahdaf	اهداف	goal	hædæf	hdf	هدف	

Table 1 – Arabic plurals in Persian; æf'al template form

In the classroom, the students are provided with a text on a topic being discussed in class that happens to contain several distinct Arabic plurals based on the template pattern shown in Table 1. In this instance, since HL speakers have difficulties even recognizing these Arabic forms as plurals, we provide them with a pre-activity with the goal of identifying the plural formation pattern. The students are given a table with two columns listing the Arabic plural forms and their corresponding singular nouns. They are then asked to discuss the given forms in Persian, working in groups or in pairs, in order to identify the pattern used in the formation of the plural. The instructor's role is to facilitate the discussion and to lead the students to the discovery of the plural-formation pattern: Given the base singular pattern of characters "xyz", the plural is formed by inserting an 'a' in the beginning and between the last two characters to obtain "axyaz". This is illustrated in Table 2 in the Persian right-to-left direction. At this point, the students are directed to read the text in class; they are now able to recognize the Arabic plural forms, and analyze the corresponding meanings within context.

Plural		Singular
zlyxl	÷	zyx
افكار	÷	فكر

Table 2 – Arabic plural formation rule; æf'al template

In this instance, the heritage students do not typically have any linguistic intuition since these forms are not acquired in the HL. This example demonstrates however how an aspect of the formal language can be taught as a content-based task, where the students are encouraged to use their language skills to negotiate a pattern that works for the given set of words. More advanced heritage students can be expected to begin applying the plural formation rule in production especially in writing, but in general and for the less proficient learners, the understanding of this word formation rule will allow them to recognize the pattern when an Arabic plural form is encountered in higher level text. For instance, if the HL students see the new word *æhzab* in a text, they will be able to deduce the corresponding singular form *hzb* (pronounced *hezb*) meaning "political party" as well as the meaning of the plural word.

# 3.2 Phonology/Orthography: Bilabial Assimilation

Conversational Persian displays a number of morphophonological alternations that are not directly represented in the more conservative writing system. One of the most common alternations in spoken Persian is 'bilabial assimilation', whereby the dental nasal phoneme /n/ is pronounced as the bilabial nasal /m/ when it is followed by the bilabial phoneme /b/<sup>4</sup>. Hence, certain Persian words that originally contained a /n/ are now pronounced with a /m/ sound, such as *zæmbur* 'bee', *dombal* 'following, after', *doshæmbe* 'Monday', *sombol* 'hyacinth', *pæmbe* 'cotton'. These words are still written with the original 'n' in the official orthography as in *zænbur*, *donbal*, *doshænbe*, *sonbol*, and *pænbe*. HL students, not having been exposed to reading and writing, tend to write as they speak and therefore spell these words as they are pronounced in the conversational language, i.e., with a 'm' as illustrated in Table 3.

		Student Spelling		Text Spelling	
Translation	Pronunciation	Transliteration	Persian	Transliteration	Persian
bee	zæmbur	zmbvr	زمبور	znbvr	زنبور
Hyacinth	sombol	smbl	سمبل	snbl	سنبل
following	dombal	dmbal	دمبال	dnbal	دنبال
Monday	doshæmbe	dvshmbh	دوشمبه	dvshnbh	دوشنبه
cotton	pæmbe	pmbh	پمبه	pnbh	پنبه

 Table 3 – Bilabial assimilation examples

One way these words could be introduced in class is as follows:

- 1. Students are shown a series of images, pictures, or a film clip depicting a story.
- 2. (a) They are then asked questions about the images eliciting specific words. For instance, if in a picture or movie clip, a bee is sitting on a hyacinth, the HL student is expected to produce the words zæmbur 'bee' and sombol 'hyacinth'. In the following image, a bird could be chasing the bee, in which case the preposition dombal 'following, after' might be produced.
  - (b) It is important, that minimally different words that do not display the assimilation pattern be elicited as well. These may include *bændær* 'port', *zæng* 'bell', or the verb *endaxt* 'threw'. In these cases, the nasal /n/ does not precede a bilabial phoneme (i.e., /p/ or /b/) and therefore, does not assimilate to the /m/ form.
- 3. The students are directed to write down their answers or descriptions of the images, or a narrative of the movie clip.
- 4. The instructor then provides the students with a pre-written text describing the images or clip, which also includes the elicited words; these may be highlighted to direct the students' attention to them. Note that the words displaying bilabial assimilation are represented with the original 'n' in the text following the official orthography.
- 5. The students are then asked to compare their own spelling of the highlighted words with that of the corresponding words in the text as shown in Table 3 and to identify the pattern observed, namely that /n/ is modified to /m/ before /b/ in the spoken language.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> Bilabial refers to sounds that are pronounced by pressing the two lips together, such as /m/, /p/, and /b/.

 $<sup>^{5}</sup>$  Optionally, the instructor can provide the students with a phonetic table for Persian that shows the categorization of /m/ and /b/ as bilabial phonemes. This step requires that the instructor present the linguistic background for the organization of the phonetic table.

Understanding the assimilation rule of Persian can help HL students improve their spelling in these cases.<sup>6</sup> The instructor can follow up by discussing the notion of language change and explaining that the HL speech is not incorrect but a more evolved (i.e., more contemporary) stage of the language which is not yet represented in the official writing system of Persian. In fact, bilabial assimilation is a very common process across languages as illustrated by the modification of the 'in' to 'im' prefix in the English examples *impossible, immaterial, improper, immature,* and *imbalance.* The bilabial assimilation activity clearly shows how the linguistic intuition of the heritage students can be used to contrast with the literary language. In the class exercise discussed in the following section, the linguistic insight of Persian HL students is crucial in performing the task.

# 3.3 Orthography: Ezafe Construction

The "ezafe" is an affix used to link the members of the nominal syntactic phrase. As shown in the following example, the ezafe suffix (represented as EZ) relates the head noun to the following constituents such as adjectives and possessors:

ketab-e	jædid-e	nevisænde
book- ez	new- EZ	writer
'the writer's	new book'	

The ezafe is pronounced /e/ after consonants and /ye/ after vowels. The orthographic rules for representing the ezafe, however, are rather complex: The ezafe generally remains unwritten after consonants since it is represented with a diacritic that is usually omitted in text. It is represented with the 'ye' ( $\mathcal{G}$ ) character following the vowels /a/ and /u/. However, after the word-final vowel /e/ (written in Persian script with the final-form letter 'he'), it is represented as either a diacritic on top of the 'he' ( $\pounds$ ) (which is sometimes dropped in text) or as a detached 'ye' ( $\mathcal{G}$ ) character. As can be seen from this description, although the pronunciation of the ezafe is straightforward, its written representation is rather complex. Not surprisingly, HL students often make orthographic errors in this case even though they have typically internalized the usage of the ezafe construction in the spoken language.

To teach the correct orthography of the ezafe suffix in Persian, the students are provided with a worksheet that leads them to the determination of the spelling rules (see Appendix A). The students are asked to translate several simple English noun phrases into Persian as a group or pair exercise in class. The questions on the worksheet combined with facilitation by the instructor then lead the students to deduce the pronunciation and orthography based on the final character of the word. The steps are as follows:

- 1) Based on the worksheet provided, the students are asked to translate the given noun phrases into Persian for each of the three groups and to write them down in English transliteration
  - *Example:* 'the red book' will be written as 'ketabe qermez', or 'the red curtain' would be transcribed as 'pærdeye qermez', as shown in the second column of Table 4.
- 2) The students are then directed to answer the questions in the bottom of the worksheet for each group and to fill in the table provided (see Appendix A).
  - The students discover that the linkers used are '-e' in Group 1 and '-ye' in Groups 2 and
     The last sound of the first word in Persian (i.e., the last sound of the head noun) is a consonant in Group 1 and a vowel in both Group 2 (/a/, /o/ and /u/) and Group 3 (/e/).

<sup>&</sup>lt;sup>6</sup> It should be noted that there are some words that are both pronounced and written with the 'm' preceding the 'b' as in *domb* 'tail', but these are rather rare in the modern language.

- The generalization is then straightforward: '-e' is used after words ending in a consonant and '-ye' is used after words ending in a vowel.
- 3) The students are finally directed to write the translated noun phrases in the Persian orthography (cf. third column of Table 4). This is done with the help of the instructor as a whole class activity. The students are then encouraged to discuss (in Persian) the different spellings used in each group and to come up with generalizations:
  - $\circ$  The ezafe in Group 1 is represented with the diacritic or omitted altogether in orthography; the ezafe in Group 2 is written as the 'ye' character; and the ezafe in Group 3 is represented as the detached 'ye' or with the optional *hamze* diacritic above the last character.<sup>7</sup>

	English Phrases	Persian Translations (written in transliteration)	Persian Phrases (written in Persian)
Group 1	the red book	ketab-e qermez	کتاب قرمز
	the new table	miz-e now	ميز نو
	the long green tie	kravat-e deraz-e sæbz	کراوات دراز سبز
	good boy	pesær-e xub	پسر خوب
Group 2	the black hair	mu-ye siyah	موی سیاہ
	my vodka	vodka-ye mæn	ودکای من
	Sasan's foot	pa-ye sasan	پای ساسان
	cold rice (polo)	polo-ye særd	پلوى سرد
Group 3	the black house	xane-ye siyah	خانهی سیاه خانهٔ سیاه
	a big bag	kise-ye bozorg (moshæma-ye bozorg)	کیس <i>ەی</i> بزرگ کیسهٔ بزرگ
	the red curtain	pærde-ye qermez	پردہی قرمز پردۂ قرمز
	the small white bird	pærænde-ye kuchik-e sefid	پرندهی کوچک سفید پرندهٔ کوچک سفید

Table 4 –	The	Persian	Ezafe	construction

This linguistic task performed in the classroom allows the students to use their existing knowledge of the HL to discover the ezafe formation pattern in Persian. Furthermore, by working through the actual spelling of these constructions in the Arabic-based script in class, the students can learn the corresponding orthography in each instance.

<sup>&</sup>lt;sup>7</sup> The instructor can use this opportunity to remind the students that the final-form 'he', when pronounced as the vowel /e/, is never allowed to attach to the following character in Persian orthography. Moreover, words ending in /i/ are not specifically discussed in this particular worksheet; the instructor can mention that they follow the orthography used with consonants and the ezafe is represented as a diacritic in these cases (e.g., آزادی مردم , مردم attach e mærdom).

#### 3.4 Syntax: Light verb constructions

In addition to simple verbs, Persian uses a large number of light verb constructions (also known as compound verbs or complex verbs). These verbs consist of a preverbal element, usually a noun or adjective, followed by a light verb such as 'do' or 'make'. Some examples are given in Table 5. The use of light verbs is very productive in Persian and in fact, they are often used to construct new verbs, especially with *kærdæn* 'do/make' and *zædæn* 'hit', as in *lag kærdæn* 'to blog' or *imeyl zædæn* 'to email'. There are about 20 different light verbs in the language but native speakers have no difficulty determining which light verb to use with a particular noun form. HL speakers, on the other hand, often make mistakes and tend to overuse the default light verb *kærdæn* 'do/make'.

Translation	Word-for-word Translation	Persian
to brush	brush hit	برس زدن
to phone	telephone do	تلفن کر دن
to play the flute	flute hit	نی زدن
to hurt	pain pull	درد کشیدن
to defeat	defeat give	شکست دادن
to shower	shower take	دوش گرفتن
to exist	existence have	وجود داشتن
to live	life do	زندگی کردن
to melt	water become	آب شدن

The use of light verbs is not random, however, and linguistic research on Persian language has been able to identify certain syntactic and semantic reasons for the usage of the different categories of light verbs. For instance, adjectives are typically combined either with *shodæn* 'become' to form an intransitive (inchoative) verb or with kærdæn 'make' to form the corresponding causative meaning. This is illustrated by the verbal pair below (where OM indicates the object marker):

dær	baz	shod	mæn	dær	ro	baz	kærdæm
door	open	became	I	door	OM	open	made
'the door opened'		'I opened the door'					
[Lit. the door became open]		[Lit. I c	aused th	ne door	(to be) o	pen]	

There are in addition more subtle semantic distinctions based on the light verb chosen that, if taught in class, could help HL students in forming these verbal constructions. It is very difficult, however, to convey the patterns of light verb use within the classroom with structured input alone given the large number of the verbs and the complexity of the choices. In our experience, structured input with a meaning-based context is very efficient in helping the comprehension of light verb constructions, especially with the forms of the verbs used at a more advanced level, but it is not very helpful in developing the production of light verb constructions by HL students. We have observed that teaching the patterns corresponding to the meaning of the verbal construction, by focusing on a targeted set of light verbs that are amenable to clear classification, can aid heritage learners in this domain. Three

targeted cases are discussed in this paper formed with *zædæn* 'hit', *xordæn* 'eat/collide', and *keshidæn* 'pull/drag'.

There are a number of light verb constructions with zædæn 'hit' in Persian as described in Dabir-Moghaddam (1997): This light verb is typically used with verbs of "communication", such as fæks zædæn 'to fax', *telegraf zædæn* 'to send a telegraph', *imeyl zædæn* 'to email', *zæng zædæn* 'to call (on the telephone), to ring' or *hærf zædæn* 'to talk'. The same light verb can also be used to form verbs of "emission of sound" as in *buq zædæn* 'to honk', *piyano zædæn* 'to play piano' or *dad zædæn* 'to yell'. This light verb can, in addition, combine with a number of nouns to represent an activity that is repetitive and is performed with an instrument (see Megerdoomian, in press). These are illustrated in Table 6, where the noun is generally the instrument with which the action is performed. For example, 'to comb' is represented by combining the instrument used (i.e., comb) with the light verb. These verbs have also been described as involving forceful actions that involve surface contact. What is clear is that there is a pattern among the various light verb constructions and that the choice of the light verb *zædæn* in these instances is not random.<sup>8</sup>

Translation	Word-for-word Translation	Persian			
to comb	comb hit	شانه زدن			
to brush teeth	toothbrush hit	مسواک زدن			
to sweep	broom hit	جارو زدن			
to iron	iron hit	اتو زدن			
to whip	whip hit	شلاق زدن			
to stab	dagger hit	چاقو زدن			
to pedal	foot hit	پا زدن			
to beat (with wood/stick)	wood hit	چوب زدن			
to wax	wax hit	واکس زدن			
Pattern: Repetitive event using an instrument					

Table 6 – Persian light verb construction with zædæn 'hit'

Light verb constructions formed with *xordæn* which means either 'eat' or 'collide' tend to involve subjects that are typically negatively affected by the action as illustrated in Table 7. The subject in these cases is clearly not an agent of the action but rather the one experiencing the event. These verbs often correspond to the English passive form when translated.

<sup>&</sup>lt;sup>8</sup> Note that some of these verbs can also be used with the light verb *kærdæn* 'do' with a slightly different meaning. For instance, although *shane kærdæn* (comb do) also means 'to comb', *shane zædæn* (comb hit) tends to focus on the repetitive action of the event.

Translation	Word-for-word Translation	Persian			
worry	worry eat	غصبه خوردن			
catch a cold	cold eat	سرما خوردن			
be deceived	deception eat	گول خوردن			
be slapped	slap eat	سيلي خوردن			
be beaten	beating eat	کتک خوردن			
be defeated	defeat eat	شكست خوردن			
be shot	bullet eat	تير خوردن			
be stabbed	dagger eat	چاقو خوردن			
Pattern: Subject is affected (negatively)					

Table 7 – Persian light verb construction with *xordæn* 'eat, collide'

More subtle aspectual distinctions may also be expressed by the light verb. The verbs in Table 8 are formed with the light verb *keshidæn* 'pull, drag'. The choice of this light verb places the focus on the duration of the action. This is intuitively clear as *keshidæn* is used to form verbs that mean 'to last', 'to wait', 'to suffer' that tend to have a substantial focus on the duration of the event.

Translation	Word-for-word Translation	Persian				
be in pain	pain pull	در د کشیدن				
take pains	hardship pull	زحمت کشیدن				
wait	waiting pull	انتظار كشيدن				
be ashamed	shame pull	خجالت كشيدن				
scream	scream pull	داد کشیدن				
yell	yelling pull	فرياد كشيدن				
suffer	suffering pull	رنج کشیدن				
last	length pull	طول کشیدن				
Pattern: Focus on the duration of the event						

Table 8 – Persian light verb construction with keshidæn 'pull, drag'

A telling contrast is the comparison of the light verb constructions based on the noun  $n \approx f \approx s$  'breath':  $n \approx f \approx s \ keshid \approx n$  (breath pull) means 'to breathe'. However, if the same noun is combined with the  $z \approx d \approx n$  'hit' light verb, the resulting verb  $n \approx f \approx s \ z \approx d \approx n$  (breath hit) now means 'to pant'. In other words the same noun combined with the  $keshid \approx n$  'pull, drag' light verb focuses on the duration of the action performed with the breath, while the choice of the  $z \approx d \approx n$  'hit' light verb tends to focus on the repetitive aspect of the action performed with the breath.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Example from Dabir-Moghaddam (1997).

Since heritage students generally understand light verb constructions but have difficulty producing them with the correct verbal choice, a good method is to present a text (e.g., authentic material from a blog) with a number of light verb constructions from the category (or categories) the instructor wishes to focus on in the classroom. After reading and discussing the material for content or cultural information, students may be asked to recognize light verb constructions present in the text and to write them in groups based on the category of the light verb. Alternately, the instructor could direct the students to detect only a certain type of light verb constructions (e.g., all instances with *zædæn* only). The instructor's role is to help the students discover the patterns of light verb use or meaning by questions that tap into the intuition and knowledge of the HL students. For instance, questions for the light verb *zædæn* could include:

- 1) What does one use to perform this action or activity?
  - This question will lead the students to notice that the noun used with the verb is generally the instrument of the action.
- 2) By contrasting the light verb construction to its passive counterpart, ask the student for the difference in meaning. Generally, HL students have enough intuition to be able to discuss the differences in these cases.
  - For example, what is the difference between *chaqu zædæn* (dagger hit) 'to stab' and the passive counterpart *chaqu xordæn* (dagger eat/collide) 'to be stabbed'?
- 3) How many times do you have to do this action? One time only or several times?
  - This can lead the students to deduce that the light verb *zædæn* tends to involve repetitive actions

A follow-up activity could involve the reading of a text containing new, unfamiliar light verb constructions using the same light verbs (perhaps at a more advanced register of the language), where the students are required to determine the meanings using the generalizations discovered in class.

#### 3.5 Summary of methodology

Although the examples presented in this section focused on Persian, the methodology can be directly applied to other heritage language classrooms. The approach proposed involves the following steps:

- The instructor introduces the examples to be studied that will help the students detect the linguistic patterns involved. This is generally done within the context of the classroom discussion. The examples can consist of a single set or include a group of examples to be contrasted and analyzed.
- The instructor then uses probing questions to lead the students to the correct generalization(s).
   The goal is to allow the heritage language students to use the evidence and to tap into their linguistic intuition in order to identify the correct pattern and develop the relevant characteristics, rules, or linguistic principles.
- After the students successfully describe what they have learned in general terms, they are led to apply the generalization to a new text or in a new language context.

Crucially, the students use the heritage language in all discussions and make use of their own language intuitions in determining the patterns or the principles. The methodology applied encourages the students to be actively involved in the process of grammar induction, and provides them with the skills to detect similar patterns encountered in the heritage language, thus advancing higher level learning.

# 4. A New Paradigm for Heritage Language Learning

### 4.1 Distinct instruction needs for heritage vs. L2 learners

Adult heritage language learners have undergone incomplete acquisition of their first language and their specific instructional needs differ from those of the L2 learner. As previously discussed, Persian heritage speakers are typically well-versed in the conversational register (where communicative approaches show most success in L2 classes) but have difficulties with less frequent linguistic elements, are unfamiliar with word forms or structures used in the formal or written discourse, and their spelling directly reflects the pronunciation of the language leading to orthographic errors that L2 learners do not necessarily produce. Moreover, research on Persian speakers has demonstrated that HL learners show stronger interference effects from English compared with L2 learners. On the other hand, HL learners possess a number of linguistic insights that a L2 speaker may never be able to acquire. Crucially, heritage learners have internalized grammatical rules especially if the latter are frequent in lower registers of the language. I therefore argue, contra Lynch (2003), that an entirely meaning-based, communicative classroom without the integration of explicit instruction is not adequate for HL learners given the fact that they display gaps, particularly in cases involving formal language and literacy skills.

Since the amount of time available in the classroom is limited, it is generally not possible to provide sufficient structured input to learners in a solely topic-based, communicative environment to correct existing errors in the language of the heritage speaker or to teach novel and complex forms and structures that do not exist in English. However, by providing what I have referred to as *linguistic instruction* and by targeting areas that have been shown to be problematic for heritage learners, the teacher is able to serve as a facilitator helping the HL students to draw upon their intuitions and language skills in recognizing linguistic patterns and discovering the underlying principles. The inductive instruction method proposed is to be applied to a target set of language elements that raise difficulties for the heritage learner. Since the goal of this approach is to help students discover language patterns, it will not be as useful in cases involving irregular forms that will be better served with implicit learning (DeKeyser 2003, p. 333). However, even in instances where enough structured input could provide some level of learning (as in the case of light verb constructions in Persian), our position is that the inductive instruction would accelerate production accuracy since it will enhance later implicit acquisition by increasing chances of noticing the patterns involved (see Montrul 2008b for a similar view on the effect of negative evidence on L2 grammar learning).

#### 4.2 Focus on form approaches

The approach put forth in this paper is very different from traditional explicit instruction of grammar rules to learners since it does not involve discrete-point grammar teaching where language forms and paradigms are taught in isolation. In fact, the method is in line with meaning-based approaches since it motivates students to use their language skills towards a goal, where the goal is detecting the underlying principles of their heritage language. Mostly, linguistic elements are introduced within the context of the topic being discussed in class or are first encountered within the text being studied. In cases where the sole task in the classroom is to detect a language pattern, as in the case of the Ezafe construction exercise in Section 3.3, the students are still using the HL to communicate, negotiate meaning, and develop and test hypotheses. Hence, language always remains the means of the discussion and not just the object of the exercise.

The proposed approach has a number of similarities with 'explicit focus on form' approaches. The primary focus in both methods remains on meaning or communication; the meaning and use of the language elements are assumed to be evident to the learner when attention is drawn to the linguistic patterns and generalizations in the structures. This is particularly true in the case of heritage speakers who already possess some level of fluency and rather advanced comprehension skills in conversational language. In both approaches, attention to form is in essence *added* to a communicative task rather than interrupting it to discuss the linguistic feature.

*Linguistic instruction* differs minimally, however, from focus on form in that the target does not always arise incidentally in an otherwise content-based lesson. In *linguistic instruction*, the task could very well be designed to elicit or introduce problematic forms that the students are then directed to focus on (as in the bilabial assimilation scenario in Section 3.2), thus allowing for a natural opportunity for teachers to focus on form. However, in a number of activities (e.g., the ezafe constructions in Section 3.3), class interaction is not necessarily centered on the learning of a text or topic, but rather there is a shift to focus on the linguistic forms under study. In these instances, the "content" of the classroom discussion is a task that involves the discovery of a particular linguistic pattern. These elements should still not be presented completely in isolation and effort should be made to apply the resulting generalization in subsequent discussion or content-based activity.

Finally, even though the approach described can be defined as 'explicit induction', it differs from induction methods used in L2 classes since heritage students are using their internalized knowledge of the language whenever possible in detecting and analyzing the linguistic patterns observed. Crucially, *linguistic instruction* does not involve traditional grammar rules but integrates the leading edge research and proven generalizations from linguistics in the HL classroom. The linguistic principles discovered by the students can then help them become aware of the formal aspects of the language that are often difficult for heritage speakers. Furthermore, this methodology also helps develop critical thinking and analytic skills that allow learners to make intelligent guesses and apply strategies to compensate for linguistic gaps in their heritage language.

# 4.3 Curriculum design

In terms of curriculum design, this approach allows the course to be developed for the specific needs of the heritage speaker. However, the instructor's task is to carefully select the data and design the questions that will lead the students to the desired language generalizations and which will help them discover the appropriate grammar pattern. The data can be presented as a paradigm in an exercise or combined with meaningful context, and the choice of the presentation can be left up to the instructor. The methodology of *linguistic instruction* is in fact the basic approach typically applied in introductory linguistics courses, although the theoretical terminology is not utilized in the HL classroom. It is clear that this approach requires closer communication between the linguistic community and HL instructors in order to determine which language elements are particularly difficult for the HL learner and which features are best described within linguistic patterns. Since most traditional grammar books do not follow the discovery approach and they may not even contain the types of pattern analyses that were mentioned in this paper (e.g., the analysis of light verb constructions presented here is the result of recent research results in linguistic studies of Persian), there is a need to develop the relevant classroom material or grammar textbooks based on linguistic theory, which can then be applied by the language instructor.

### 4.4 Heritage language research

The approach developed in this paper is mainly based on classroom observations of the positive effect of the linguistic instruction on Persian HL speakers. However, there is certainly a need for further studies and systematic research on the effect of such instruction on heritage language acquisition. The scientific results obtained can help determine not only the viability of the proposed approach but also the types of language features that can benefit most from such linguistic instruction.

# 5. Conclusion

In this novel pedagogical paradigm for heritage language referred to as *linguistic instruction*, cutting edge linguistic analysis rather than traditional grammar rules are integrated in the classroom, where the focus is on the analytic discovery of language patterns. The target exercises described demonstrate how this approach allows students to tap into their own intuition of the heritage language in order to discover linguistic generalizations and communicate meaningful information while performing a specific task. This is in particular useful in selected domains where structured input does not suffice, in order to provide the most impact. In addition, this methodology helps develop analytic skills and strategies that can be used by the learner to compensate for linguistic gaps in their heritage language.

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# Appendix A: Ezafe Orthography

#### **EZAFE CONSTRUCTION IN PERSIAN: LINKING WORDS IN A NOUN PHRASE**

#### Group 1 •

English Phrases	Persian Translations (written in transliteration)	Persian Phrases (written in Persian)
the red book		
the new table		
the long green tie		
good boy		

#### Group 2 •

English Phrases	Persian Translations (written in transliteration)	Persian Phrases (written in Persian)
the black hair		
my vodka		
Sasan's foot		
cold rice (polo)		

#### Group 3 •

English Phrases	Persian Translations (written in transliteration)	Persian Phrases (written in Persian)
the black house		
a big bag		
the red curtain		
the small white bird		

#### For each group, answer the following questions:

(fill in the table below)

1. What do we use to link the words to each other in Persian?

2.Look at the first word in each case. What is/are the last sound(s) for the group?

3. What do the sounds in groups 2 and 3 have in common? Can you find a category to describe them? 4. What about group 1?

Question	Group 1	Group 2	Group 3
1. linker			
2. last sound of first word			
3. category for groups 2 & 3?			
4. category for group 1?			