Languages of the Caucasus

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In this series:


2. Forker, Diana. A grammar of Sanzhi Dargwa.
Grammar of Iranian Armenian
Parskahayeren or Iranahayeren

Hossep Dolutian
Afsheen Sharifzadeh
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Preface
Acknowledgments

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Hossep thanks Hannah Cox and Vartan Haghverdi for teaching him what Iranian Armenian is in the first place. Hossep also thanks Karine Megerdoomian for continuing fieldwork together.

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1https://www.instagram.com/tv/COWtIvUn4KA/
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Finally, we thank the sender of the anonymized email in §1.3. If it wasn’t for that email, Hossef would not have bothered to do any of the synthesis or replication work. For better or worse, this grammar was done out of resistance against linguistic discrimination.
Abbreviations

√ root
ABL ablative
ACC accusative
AGR agreement
AOR aorist stem or suffix, regardless of whether
it’s used in the past perfective or in other contexts
ASP aspect
AUX auxiliary ‘is’
K case
CAUS causative
CLF classifier
COND conditional
CN.CVB connegative converb suffix or converb form
DAT dative
DEF definite
DET determiner
FUT.CVB future converb
GEN genitive
IMP imperative
IMPF imperfective
IMPF.CVB imperfective converb
INCH inchoative
IND indicative (used for Western Armenian)
INDF indefinite
INJ interjection
INF infinitive
INS instrumental
LOC locative
LV linking vowel
NEG negation
NMLZ nominalizer
NOM nominative
NX stem extender between irregular nouns
or pronouns and oblique cases
OM object marker (used for Persian)
PASS passive
PERF.CVB perfective converb
PL plural
POSS.1SG first person possessive
POSS.2SG second person possessive
PRO pronoun
PROH prohibitive
PRS present
PST past
RPTCP resultative participle
SG singular
SIM.CVB simultaneous converb
SBJV subjunctive marker (used for Persian)
SPTCP subject participle
T tense
TH theme vowel
VX meaningless suffix as a verbal stem-extender
1 Introduction

In this grammar, what we call Iranian Armenian is the variety of spoken Armenian that was developed by Armenians in Tehran, Iran over the last few centuries. It has a substantial community of speakers in California. This variety or lect is called ‘Persian Armenian’ [պերսկահայերէն] or ‘Iranian Armenian’ [իրանահայերէն] by members of the community. A speaker of this dialect (or a person descended from this community) is called a ‘Persian Armenian’ [պերսահայ] or ‘Iranian Armenian’ [իրանահայ]. The name is a compound of the term for Persian or Iranian, plus the compound linking vowel /-ɒ-/ , and then the word for Armenian.

Table 1.1: Name of the language and of the ethnic group

<table>
<thead>
<tr>
<th>Person</th>
<th>Language</th>
<th>Roots:</th>
</tr>
</thead>
<tbody>
<tr>
<td>հոյ</td>
<td>հոյերէն</td>
<td>պարսիկ</td>
</tr>
<tr>
<td>հայ</td>
<td>իրանահայերէն</td>
<td>Իրան</td>
</tr>
<tr>
<td>պերսկահայ</td>
<td>իրանահայ</td>
<td></td>
</tr>
</tbody>
</table>

Persian Armenian is the more conventional name for the language. It reflects the fact that the Armenian community of Tehran/Iran and their dialect existed prior to the creation of the modern state of Iran. But in recent years, the community has shifted to preferring the term ‘Iranian Armenian’. This is because some community members feel that using the name ‘Persian Armenian’ creates the wrong sense that either a) the Armenian variety is genetically related to the Persian language, or b) that these Armenians are ethnically Persian. Out of respect to the community, we use the English name ‘Iranian Armenian’ (IA) in this grammar to refer to this dialect.

The present book is not a comprehensive grammar of the language. It occupies a gray zone between being a simple sketch vs. a sizable grammar. We try to clarify the basic aspects of the language, such as its phoneme inventory, noticeable morphophonological processes, various inflectional paradigms, and some peculiar aspects of its syntax. We likewise provide a sample text of Iranian Armenian
1 Introduction

Many aspects of this variety seem to be identical to Standard Eastern Armenian, so we tried to focus more on those aspects of Iranian Armenian which differ from that variety. Readers are encouraged to consult Dum-Tragut (2009)’s reference grammar of Standard Eastern Armenian if needed.

The introduction provides a basic typological sketch of the language (§1.1). We then discuss the origin of the Iranian Armenian community and its demographics in §1.2. The community displays triglossia and we discuss the community’s basic sociolinguistics in §1.3. We discuss how we carried out our fieldwork in §1.4 and our annotation system in §1.5.

At the time of writing this grammar, we have made recordings of some but not all of the examples in the grammar. We have created an online archive. We are currently holding it on GitHub, but we plan to transfer it to a more dedicated archive in the future.¹ The archive consists of the following items:

- Some recorded elicitations.
- Original sound files that are used in the Figures in the phonology chapter (§2).
- Complete verb conjugation classes from the verb morphology chapter (§6).
- The sample text from §8.

Elicitation records were made over either Zoom or Audacity; the recording medium does have some effects on the acoustic signal (Sanker et al. 2021). The elicitations and sample text were transcribed with Praat TextGrids (Boersma 2001), and then broken up with Praat scripts (DiCanio 2020).

1.1 Overview of Iranian Armenian

When providing a basic typological sketch of this variety, it is wise to first explain how Iranian Armenian relates to other Armenian varieties. Armenian is an independent branch of the Indo-European language family. Its earliest attested ancestor is Classical Armenian of the ∼5th century. The modern varieties of Armenian are conventionally divided into two branches: Western and Eastern. There are two standardized dialects that are mutually intelligible after significant exposure: Standard Western Armenian (SWA) and Standard Eastern Armenian (SEA); henceforth Standard Western and Standard Eastern. Both branches have dozens of extinct, endangered, or viable non-standard varieties (Adjarian 1909; Greppin & Khachaturian 1986; Vaux 1998b: ch1.1; Baronian 2017).

Geographically, the dividing line between the two branches roughly corresponds with the Turkey-Armenia border. Dialects that developed and were spo-

¹https://github.com/jhdeov/iranian_armenian
ken in the Ottoman Empire are part of the Western group, while dialects that developed in the Persian and Russian Empires constitute the Eastern branch. Iranian Armenian is part of this Eastern branch. The variety likely developed from a common ancestor between Standard Eastern and Iranian Armenian. Whereas Standard Eastern (as spoken in Yerevan) is a more conservative descendant of this ancestor, Iranian Armenian has developed various innovations that we discuss in this grammar. Despite these innovations, speakers of Iranian Armenian report feeling that Iranian Armenian is a dialect of Standard Eastern.

In terms of its segmental and suprasegmental phonology, Iranian Armenian for the most part resembles Standard Eastern Armenian. Like Standard Eastern and unlike Standard Western, Iranian Armenian has a 3-way laryngeal contrast for stops and affricates, e.g., /b, p, pʰ/ (§2.1.1) (Hacopian 2003). It has a two-way rhotic contrast between a trill /ɾ/ and a retroflex approximant /ɻ/ (§2.1.2). It has a relatively simple vowel inventory of /ɒ, e, i, o, u, ə/, and it includes /æ/ as a marginal phoneme, mostly for Iranian loanwords (§2.1.4).

Table 1.2: Illustrating the three-way laryngeal contrast in Standard Eastern and Iranian Armenian, but not Standard Western

<table>
<thead>
<tr>
<th></th>
<th>IA</th>
<th>SEA</th>
<th>SWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘word’</td>
<td>բառ</td>
<td>ար</td>
<td>պար</td>
</tr>
<tr>
<td>‘cheese’</td>
<td>պանիր</td>
<td>պանիր</td>
<td>պանիր</td>
</tr>
<tr>
<td>‘elephant’</td>
<td>փիղ</td>
<td>փիղ</td>
<td>փիղ</td>
</tr>
</tbody>
</table>

In terms of differences, the Iranian Armenian segments /ɻ, ɒ/ correspond to Standard Eastern /ɾ, ɑ/, while /æ/ does not exist in Standard Eastern. These differences are likely due to contact with Persian. A significant area of difference is in question intonation: Iranian Armenian has adopted the intonation patterns of Persian when forming questions (§2.2.3).

For morphophonology (§3), Iranian Armenian has grammaticalized as obligatory some processes that are optional or variable in Standard Eastern. These involve allomorphy of the definite article (§3.2.2), and a process of liquid deletion in periphrasis (§3.3). Liquid deletion is a type of phonosyntactic or syntax-sensitive phonological process. The liquid of the perfective converb suffix -el or -eɻ is deleted if the suffix does not precede the auxiliary.

For morphology, Iranian Armenian has agglutinative and suffixal inflection. There is no grammatical gender. Nouns inflect for case, number, and determiners (definite, possessive), with some residue of irregular inflection. Nominal morphology is largely the same between Standard Eastern and Iranian Armenian (§4).
1 Introduction

For verbal morphology (§6), Iranian Armenian verbs are divided into different conjugation classes based on the type of theme vowel, presence of valency suffixes (causative, passive, inchoative), and any irregularities in inflection (root suppletion, affix allomorphy, etc.). Iranian Armenian uses synthetic inflection for some parts of the verbal paradigm, but it is largely periphrastic. Like Standard Eastern and unlike Standard Western, Iranian Armenian forms the present indicative by using a converb and an inflected auxiliary, while Standard Western uses a synthetic form instead.

Table 1.3: Illustrating periphrastic vs. synthetic verbal inflection across the dialects

<table>
<thead>
<tr>
<th>IA</th>
<th>SEA</th>
<th>SEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>siɾ-um</td>
<td>e-m</td>
<td>պհույտ</td>
</tr>
<tr>
<td>sir-um</td>
<td>e-m</td>
<td>պահեստ</td>
</tr>
<tr>
<td>like-IMPF.CVb</td>
<td>is-1SG</td>
<td></td>
</tr>
<tr>
<td>gә-sir-e-m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IND-like-TH-1SG</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compared to Standard Eastern, Iranian Armenian has developed some significant changes in verbal inflection. The suffix /-m/ is a 1SG agreement marker for present verbs in Standard Eastern Armenian, but this suffix has been generalized to mark the 1SG for any possible tense in Iranian Armenian (§6.2.2). Compare the various tenses of ‘to read’ in Table 1.4. And in the past perfective or aorist, Iranian Armenian has developed extensive changes in what suffixes are used to mark the past and perfective/aorist morphemes (§6.4.1). In brief, Standard Eastern Armenian uses the morpheme template /-tʰ-i/ for most verb classes, such as A-Class ‘to read’ and E-Class ‘to sing’, while it uses /-ɑ/ for irregulars like ‘to eat’. Note the presence of theme vowels before /-tʰ-i/, and the absence of theme vowels before /-ɑ/. In contrast, Iranian Armenian has generalized the /-ɑ/ pattern and uses this template for many types of regular verb classes, such as ‘they sang’ but not ‘they read’.
1.1 Overview of Iranian Armenian

Table 1.4: Illustrating changes in verbal inflection across Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th>Tense</th>
<th>Verb</th>
<th>SEA</th>
<th>IA</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subj. Pres. 1SG</td>
<td>‘to read’</td>
<td>kartʰ-a-m</td>
<td>kɒɻtʰ-ɑ-m</td>
<td>read-TH-1SG</td>
</tr>
<tr>
<td>Subj. Past. Impf. 1SG</td>
<td>‘to read’</td>
<td>kartʰ-aj-i-∅</td>
<td>kɒɻtʰ-aj-i-m</td>
<td>read-TH-PST-1SG</td>
</tr>
<tr>
<td>Past Perf. 3PL</td>
<td>‘to read’</td>
<td>kartʰ-a-t͡sʰ-i-n</td>
<td>kɒɻtʰ-d-t͡sʰ-i-n</td>
<td>read-TH-AOR-PST-3PL</td>
</tr>
<tr>
<td>Past Perf. 3PL</td>
<td>‘to sing’</td>
<td>jerkʰ-e-t͡sʰ-i-n</td>
<td>jeɻkʰ-i-o-o-d-n</td>
<td>sing-TH-AOR-PST-3PL</td>
</tr>
<tr>
<td>Past Perf. 3PL</td>
<td>‘to eat’</td>
<td>ker-o-o-a-n</td>
<td>keɻ-o-o-o-n</td>
<td>eat-TH-AOR-PST-3PL</td>
</tr>
</tbody>
</table>

In terms of syntax (§7), we have not been able to carry out an extensive study of Iranian Armenian. Based on intuitions of our speakers, it seems that Standard Eastern and Iranian Armenian have relatively few significant syntactic differences. Like Standard Eastern Armenian, Iranian Armenian is primarily an SOV language but with free word order. One important area of commonality is that the copula is a mobile auxiliary in Standard Eastern and Iranian Armenian but not in Standard Western (Kahnemuyipour & Megerdoomian 2011). The auxiliary is added to focused words in Standard Eastern and Iranian Armenian.

Table 1.5: Mobile clitic in Standard Eastern and Iranian Armenian but not Standard Western

<table>
<thead>
<tr>
<th>IA</th>
<th>SEA</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>mɒɻj-ŋ</td>
<td>դ</td>
<td>մարք</td>
</tr>
<tr>
<td>marj-ŋ</td>
<td>է</td>
<td>մարք</td>
</tr>
<tr>
<td>Maria-DEF is happy</td>
<td>Մարիան-կան ուրախ է։</td>
<td></td>
</tr>
</tbody>
</table>

There are some syntactic differences that we have noted. Due to contact with Persian, Iranian Armenian can use the second person possessive suffix -t to act as an object clitic. No such use is attested for the other persons. There are other minor innovations in relative clause formation, again mostly due to Persian contact.

In terms of its lexicon, we have not found major differences between Standard Eastern and Iranian Armenian. Because of contact and sometimes bilingualism with Persian, Iranian Armenian speakers tell us that they often use Persian words.
for some concepts, such as for various plants or spices. The community has likewise borrowed some Persian phrases and turned them into Armenian phrases, i.e., calques.

For example, the following are common phrases in Persian; they are syntactically complex predicates made up of a word and light verb. Armenian speakers have adopted these phrases and just replaced the light verb with an Armenian equivalent. These phrases are known even by members of the California diaspora who speak Iranian Armenian but not Persian.²

<table>
<thead>
<tr>
<th>Persian</th>
<th>Iranian Armenian</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘to take a nap’</td>
<td>چرت زدن</td>
</tr>
<tr>
<td>nap</td>
<td>چرت زدن</td>
</tr>
<tr>
<td>hit</td>
<td>چرت زدن</td>
</tr>
<tr>
<td>‘to broadcast’</td>
<td>پخش کردن</td>
</tr>
<tr>
<td>broadcast</td>
<td>پخش کردن</td>
</tr>
<tr>
<td>do</td>
<td>پخش کردن</td>
</tr>
<tr>
<td>‘to shower’</td>
<td>دوش گرفتن</td>
</tr>
<tr>
<td>shower</td>
<td>دوش گرفتن</td>
</tr>
<tr>
<td>catch</td>
<td>دوش گرفتن</td>
</tr>
</tbody>
</table>

Unfortunately due to lack of time and resources, we haven’t been able to carry out an extensive study of such phrases in Iranian Armenian. See Sharifzadeh (2015) and our sample text (§8) for more examples of calques and borrowed words.

Finally, as a language, Iranian Armenian is under-described. To our knowledge, the only manuscript that even has data on this variety is Shakibi & Bonyadi (1995). This manuscript provides some sample paradigms, and a large glossary of Iranian Armenian. However, this document seems to actually describe a type of code switching or mixing between Iranian Armenian and Standard Eastern Armenian. For example, that manuscript’s data uses some Iranian Armenian features like the 1SG suffix -m, but it also uses more Standard Eastern Armenian features like using the Eastern style of marking the past perfective.³ As we discuss later, Standard Eastern and Iranian Armenian are two registers of Armenian as spoken by the Iranian Armenian community in a type of diglossia.

²Persian IPA is taken from Wiktionary, verified by Koorosh Ariyae.
³It should be noted that Shakibi & Bonyadi (1995) do not represent the three-way laryngeal contrast for stops and affricates. We suspect that this is because this manuscript seems to have developed without using linguistic sources on Armenian (which would state that there is such a distinction), and that the authors of this manuscript likely don’t speak Armenian.
1.2 Migration history

Armenians have had a long historical presence in Persia or Iran. We briefly review this history in order to later illustrate the sociolinguistic situation of the modern community.

Ethnic Armenians have been in contact with Persian or Iranian culture since antiquity, since at least the 6th century BCE (Dekmejian 1997: 421; Hovhannisian 2021: 1). Because of this historic contact, there has been extensive language contact between Armenian and Iranian languages (Meyer 2017: ch.1). There have been villages or areas in modern-day Iran with large Armenian populations, especially in Northwest Iran or Iranian Azerbaijan such as Tabriz. These various villages, towns, and districts developed their own dialects or Armenian varieties. These varieties significantly differ from Standard Eastern Armenian and from (Tehrani) Iranian Armenian.

An incomplete list of some area-specific varieties include Maku (Կատվալյան 2018), Maragha (Աճառյան 1926), New Julfa (Աճառյան 1940, Vaux in prep), Salmast (Vaux in review), and Urmia/Khoy (Ասատրյան 1962). For an overview of these dialects, see Martirosyan (2019: 85). These dialects constitute the historical region of “Persian Armenia”, called [պարսկահայ] in Standard Eastern Armenian (Martirosyan in review). For an overview of the migration patterns of these dialects, see Mesropyan (n.d.). For lists and historical overviews of past and present Armenian villages and districts, see Amurian & Kasheff (1986) and Ghougassian (2021). For in-depth historical and anthropological overviews of the Armenian community in Iran, see Chaqueri (1998), Sanasarian (2000), and Barry (2017b, 2018). There is likewise recent work on language signage in Armenian-populated areas (Rezaei & Tadayyon 2018).

In terms of demographics, the ancestors of most modern Iranian Armenians entered Iran via mass migrations (Kouymjian 1997: 19; Hovhannisian 2021: 3). In the 1600s, Shah Abbas I of Persia forced the mass migration of ethnic Armenians from historical Eastern Armenia, especially from modern-day Nakhchivan or Nakhijevan (Նախիջեւան). The number of these Armenians is estimated as 400,000 being deported to Iran in 1604, of which 300,000 individuals survived by 1606 (Ghougassian 2021: 314). These Armenians then settled in different regions of Iran, especially in Tabriz and in the New Julfa quarter of Isfahan (Hovhannisian 2021: 9). Over time, large numbers of Armenians then moved to Tehran sometime in the 19th or early 20th century (Hovhannisian 2021: 6). Then in the mid to late 20th century around the time of the Islamic Revolution, mass numbers of Armenians emigrated from Tehran to elsewhere around the globe, especially to Los Angeles county in Southern California.
1 Introduction

In terms of contemporary population size, it is difficult to get clear numbers (Iskandaryan 2019). Some sources estimate that the Armenian population of Tehran reached a peak of 50,000 people in the late decades of the 20th century (Hovhannisian 2021: 6). The US government gives larger numbers. Curtis & Hooglund (2008: 101) estimate that the size of the Armenian population in Iran was around 350,000 in 1979 (prior to the revolution). Emigration then led to a population count of 300,000 in 2000. They report that 65% of the population lived in Tehran, around 195,000.

As for the Iranian Armenian diaspora, Iranian Armenians are a culturally significant subset of the Armenian population in California (Bakalian 2017). The US census lists 47,197 individuals in California who report themselves as Armenians born in Iran (United States Census Bureau 2015). For more in-depth socio-economic, demographic, and anthropological studies of the California population, see Der-Martirosian (2021) and Fittante (2017, 2018, 2019).

Because of these complicated demographic changes, it is possible that modern Tehrani Iranian Armenian developed as an offshoot of Standard Eastern Armenian. The Tehrani variety may have been in contact with the varieties of other Armenian villages in Iran over the centuries. Over time, as Armenians moved within Iran to Tehran, the Tehrani community levelled their speech to form modern-day Tehrani Iranian Armenian. This modern variety is what we refer to as Iranian Armenian. This is the variety that is spoken and acquired by Armenian children in Tehran, and in the large Iranian Armenian diaspora.

Because Iranian Armenian is a spoken vernacular, there are very scant records of it. Within Armenian philology, the earliest reference we found for Tehrani Iranian Armenian is in the introduction chapter of Աճառյան (1940)’s grammar of New Julfa Armenian (translated into English in Vaux in prep). In that grammar, Adjarian collected data on New Julfa Armenian in the late 1910s, early 1920s. That variety is spoken primarily in the New Julfa district of Isfahan. He contrasts New Julfa Armenian with what he calls “Persian Armenian” or “Perso-Armenian” which he says is spoken in the northern regions of Iran, including Tehran. He doesn’t provide any data on this dialect but he states that this Perso-Armenian lect is socially predominant. We suspect that what he calls Perso-Armenian is the direct ancestor of modern Tehrani Iranian Armenian.

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4To illustrate, see the inconsistent population estimates on the Wikipedia page for Iranian Armenians: https://en.wikipedia.org/wiki/Iranian_Armenians
1.3 Sociolinguistics of the Iranian Armenian community

In terms of sociolinguistics, the Tehran community is diglossic or triglossic (Nercissians 1988, 2012). Armenians learn and speak Persian with non-Armenians, and code switching is common (Ghiasian & Rezayi 2014). Within the Armenian community, children acquire Iranian Armenian at home. This variety is spoken as an informal register. In Armenian schools, children learn Standard Eastern Armenian. The community uses Standard Eastern Armenian as a formal register in literature, newspapers, written communications, and formal speech. We discuss each code.

For Persian, Zamir (1982: ch6.7) reports that Tehran Armenians spoke a distinctive dialect of Persian. Their dialect involved various phonological changes. For example, standard Persian /æ/ was pronounced as /ɒ/ by speakers of this dialect (Zamir 1982: 370); the history of /æ/ is discussed more in §2.1.4. AS and others report that this Persian dialect died out over the last few decades (Barry 2017a: 154). This dialect is now more characteristic of the current generation’s grandparents or great-grandparents, i.e., people who were adults around the time of Zamir (1982)’s study. The modern community still has some level of awareness of this old dialect however; for example, the phonological accent of this old dialect is satirized in the work of Iranian Armenian comedian Gilbert Sinanian (Gibo Hopar).5 For the modern community, speakers seem to use the same dialect of Persian as non-Armenians but with some noticeable phonological features. For example, Barry (2018: 220) reports:

Furthermore, the Armenian accent is not simply something of which Iranian Armenians are self conscious; Muslim Iranians recognise it also. Two Iranian students in Melbourne stated that the Armenian accent in Persian is easily recognisable in its intonation.

As for the informal register of Iranian Armenian, this variety is natively acquired at home by speakers in the Tehran community. We’re not sure if Iranian Armenian has spread from Tehran to other Armenian-populated areas in Iran. This may be possible because of the social influences of Tehran. For example, Nercissians (2001: 64) explicitly states that “there is a clearly prestigious Tehran dialect for Armenian.”

As for the formal register, it’s more accurate to say that the formal register is Standard Eastern Armenian with an Iranian Armenian phonological accent. That is, the community would say an Standard Eastern Armenian sentence but use

5https://www.facebook.com/gibohopar/
Iranian Armenian phonology, such as using the rounded Iranian Armenian /ɒ/ instead of unrounded Standard Eastern /ɑ/.

Whereas the Iranian Armenian community in Tehran is diglossic or triglossic, the Iranian Armenian diaspora is much less so. For the diaspora in California, these families may speak Iranian Armenian at home, but not Standard Eastern or Persian. The relative rarity of transmitting Persian to the youth makes sense because it is not a lingua franca among Armenians in the US. As for the Armenian registers, Standard Eastern Armenian is the formal register, while Iranian Armenian is the informal register. Thus the children of such communities acquire Iranian Armenian at home. Some but not all diaspora children attend Armenian schools where they acquire Standard Eastern.

As a last note on sociolinguistics, we must mention the social status of Iranian Armenian. Because of the diglossic situation in Tehran, the spoken vernacular of Tehran Iranian Armenians is often stigmatized as ‘wrong’ or ‘broken’ or ‘vulgar’ speech, especially by the older generation of speakers. For example, in the early 2000s, one of the coauthors (BV) gave a conference presentation at UCLA on Iranian Armenian. Before the conference, he received an aggressive email from an esteemed member of the Iranian Armenian community in California. We repeat parts of that email below, anonymized. We re-transcribed Armenian words in IPA. Bolding is our own; Persian words are romanized in italics.

I am writing to you to express my deep concern about your thesis of the third literary dialect (the Persian-Armenian). The examples you cite to prove your findings, [ɡənɒtʰǐm], [imɒtʰɒm] (instead of [ɡənɒtʰǐ, imɒtʰɒ]), [mɛh] (instead of [mɛk]) are all dialectal forms, they are used in spoken language but never, never, never in print. You mention the printed material before the revolution. I have not seen one example with such vulgar errors. As to [lev] or [lof] instead of [lɒv], this is truly unheard of. These are all spoken forms by not-very-educated people in Iran and those who are here, and there are many. As to the words havich, xiar, jafari, xiarshur, these are purely Persian words (not even borrowings) and nonexistent in the spoken language let alone in the Persian Armenian literary dialect which I think, such an animal does not exist at all...

Please check your sources before coming to these conclusions. I consider myself an educated Iranian Armenian, who writes in Eastern Armenian literary language (and there is non [sic] other variations) and also speaks with some dialectal forms but never mixes Persian words.

Your question of what form of literary language is/was taught in schools in Iran. I am very much familiar with the textbooks used in Iran before the
revolution and after. The text, the syntax, the lexicon, and the grammar is that of Standard Eastern Armenian literary language. The same standards are used also in the media. I beg you again, revisit your findings and conclusions. Your presentation may irritate many Iranian Armenians. I was hoping you would speak about a distinct dialect of Iranian Armenians, like the Maragha dialect (the er branch: [etas er] meaning I am going) or the Gharadagh dialect that is close to the Gharabagh dialect.

As is clear, the email shows that the spoken vernacular is extremely stigmatized by at least some members of higher social classes. The dialect is considered ‘vulgar’, ‘un-educated’, or even ‘non-existent’. Paradoxically, the Iranian Armenian community legitimizes Armenian varieties that are spoken in the more peripheral areas of Iran. These varieties are deemed ‘exotic’ and un-intelligible enough for Tehranis to consider them as legitimate languages. In contrast, the spoken language of the average Tehrani child or adult is erased. People pretend they don’t speak this spoken vernacular, even though they do.

1.4 Fieldwork and language consultants

This grammar is based on fieldwork that was done by each of the authors, at different times, and with different people. We go through ease phase of fieldwork below.

The first phase of fieldwork was undertaken in the early 2000s by Bert Vaux (BV). BV is a trained generative phonologist and is a native speaker of English. He undertook fieldwork by collecting data from Armenian expatriates from Iran.

BV’s main consultant was Karine Megerdoomian (KM, female), who was born and raised in Tehran up until the age of 13. There, she acquired Iranian Armenian, Standard Eastern Armenian, and Persian. After that, she moved across Europe and North America until finally settling in the United States. KM is a trained generative syntactician and thus often gave meta-linguistic judgments as a linguist-speecher. At the time of BV’s fieldwork, KM was in her early 30s.

KM was BV’s main consultant, but BV also elicited data from other Iranian Armenian expatriates living in the US and Europe. One such consultant is AP. AP is a male from Peria, Isfahan. His judgments were relayed to BV through AP’s wife.

The second phase was undertaken by Afsheen Sharifzadeh (AS). AS is a self-trained linguist and is a native speaker of Persian and English. His fieldwork was somewhat atypical. He initially was interested in merely learning the Armenian culture and language. He often visited the Armenian community in Iran and
would befriend Iranian Armenian speakers. His exposure was some time in the late 2000s and early 2010s. Over time, he developed an advanced proficiency in Standard Eastern Armenian and Iranian Armenian. His data comes from his interactions with a wide community of Iranian Armenian speakers, both in Tehran and in expatriate communities in the US. His main consultants were people in their early to late 20s.

The third phase was undertaken by Hossep Dolatian (HD). HD is a trained generative morphophonologist and is a native speaker of Standard Western Armenian. He did fieldwork after discovering the data collected by BV and AS. He then undertook the task of synthesizing their data and replicating it with speakers of Iranian Armenian in California. He did fieldwork in 2021 and his main consultant was Nicole Khachikian (NK, female). NK was born and raised in the US within the Los Angeles community of Iranian Armenians. Her parents and grandparents are from Tehran. Her home languages were Iranian Armenian and English. She does not know Persian. She learned aspects of Standard Eastern Armenian both by a) learning the spoken formal register of Standard Eastern Armenian with the larger Armenian community in Los Angeles, and b) taking Armenian classes at university. She was in her early 20s during HD’s fieldwork. HD at times elicited data from KM, who was in her early 50s in 2021. Recordings were made remotely, either with Praat (Boersma 2001) over Zoom or with Audacity. HD’s recording methodology is documented on the associated archive of this grammar.

For some data points, HD elicited material on Standard Eastern Armenian material in order to show a contrast between Standard Eastern and Iranian Armenian. Elicitations were done with the following speakers:

- Mariam Asatryan (MA): female; born and raised in Tsovasar, Armenia, age was around late-20s.
- Victoria Khurshudyan (VK): female; born and raised in Goris, Armenia, age was around early-40s.
- Vahagn Petrosyan (VP): male; born and raised in Yerevan, Armenia; age was around mid-30s.
- Arevik Torosyan (AT): female; born and raised in Yerevan, Armenia up until her late teens; age was around early 20s.

As is clear, the three linguists did their fieldwork at different times and locations. However, we have found little to no discrepancies across these different pools of data. The main differences come from generational changes in the pronunciation of certain lexical items and morphemes, which we take note of.
Furthermore, neither BV, AS, nor HD are native speakers of Standard Eastern Armenian or Iranian Armenian. BV’s and AS’s data come from speakers who can be considered bi-dialectal, which means the speakers are proficient in both Iranian Armenian and Standard Eastern Armenian. This is because their speakers were born and raised in Iran and thus were exposed to Standard Eastern Armenian within the education system of the Armenian community. In contrast, HD’s main consultants are mono-lectal and mainly speak Iranian Armenian. Because HD’s consultants grew up in Los Angeles, his speakers did not acquire Standard Eastern Armenian within an educational system. We have found only minor differences between the grammars of bi-dialectal vs. mono-lectal speakers when it comes to Iranian Armenian judgments or pronunciations.

1.5 Orthography, transcription, and glossing

The Armenian language is normally written in the Armenian script (Sanjian 1996). There are two orthographic conventions or spelling systems for Armenian: Classical and Reformed. The Classical system is the original system of writing the Armenian script. It is used for Standard Western. It was originally used for Standard Eastern Armenian as well, but then a series of Soviet-era spelling reforms created the Reformed system. The Reformed system is used for Standard Eastern Armenian as spoken in Armenia and large parts of the Diaspora. But in Iran, Standard Eastern Armenian is still written with the Classical system. For an overview of these orthographic changes, see Dum-Tragut (2009: 5-6,12).

For this grammar, we use the Reformed spelling to write Standard Eastern Armenian examples. We use Classical spelling to write Iranian Armenian examples out of respect to the community’s orthographic customs. This is somewhat atypical because Iranian Armenian is an unwritten vernacular. We have decided to provide orthographic forms to make future cross-dialectal work easier. Note that the orthographic script does not indicate all phonetic aspects of Iranian Armenian pronunciation. All data is likewise transcribed in IPA.

For our glossed sentences, we first provide an IPA transcription, then gloss, then translation, and then the orthographic representation.

For glossing, we follow the Leipzig Glossing Rules, and we’ve added our own conventions for those morphosyntactic features that are absent from the Leipzig Glossing Rules.

In this grammar, we adopt a simple item-and-arrangement model of morphology (Hockett 1942). We try to segment as many affixes as possible. We adopt the word ‘morph’ as a theory-neutral term to denote the surface form of morphemes,
1 Introduction

i.e., to simply denote morphological items (Haspelmath 2020). We at times provide realization rules to more clearly show how certain inflectional features are marked in Iranian Armenian; these rules should not be treated as explicit formal theoretical rules.

Full morpheme segmentation and glosses are given for sentences and for morphological paradigms. In the morphology section, we likewise segment zero morphemes. We generally avoid segmentation for the data in the Phonology chapter in order to reduce clutter. Outside of the morphology chapter, we often segment the 3SG auxiliary (positive ɒ and negative ʃ-ɨ) as just ’(NEG)-is’ instead of ’(NEG)-isprs.3sg’ to reduce clutter.

For our bibliography, we do not romanize or transliterate Armenian entries.
2 Phonology

In this chapter we present the basic segmental inventory (§2.1) and suprasegmental phonology (§2.2) of Iranian Armenian.

2.1 Segmental phonology

Table 2.1 lists the consonant inventory of IA, including both phonemes and non-contrastive sounds in parentheses.

<table>
<thead>
<tr>
<th>Stop</th>
<th>Labial</th>
<th>Coronal</th>
<th>Dorsal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p b pʰ</td>
<td>t d tʰ</td>
<td>k g kʰ</td>
</tr>
<tr>
<td></td>
<td>tʰ</td>
<td>tʃʰ</td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td>ts dz tʃ tʃʰ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td>(ŋ)</td>
</tr>
<tr>
<td>Fricative</td>
<td>f v s z h fʃ ɻ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid</td>
<td>r</td>
<td>j</td>
<td></td>
</tr>
<tr>
<td>Glide</td>
<td></td>
<td></td>
<td>(w)</td>
</tr>
</tbody>
</table>

Figure 2.1: Consonant inventory for Iranian Armenian

Iranian Armenian has largely the same phonemic inventory as Eastern Armenian. For example, both utilize a three-laryngeal contrast for stops and affricates: D, T, Tʰ (§2.1.1). General overviews of Standard Eastern Armenian segmental phonology are found in Vaux (1998b: ch1) and Johnson (1954: ch1-3).

The lects do differ in a few aspects. In terms of rhotics (§2.1.2), Eastern has a phonemic trill /r/ and phonemic flap ɾ/, while Iranian Armenian has a phonemic trill /r/ and phonemic approximant ɻ/.

Both dialects have [ŋ] as a non-phonemic allophone of /n/ before velar stops. Iranian Armenian utilizes a glide [w] as a non-contrastive epenthetic segment, while this segment is absent in Standard Eastern (§2.1.3). We show these two sounds with parenthesis in Figure 2.1.
2 Phonology

In terms of vowels (§2.1.4), the low back vowel is unrounded /ɑ/ in Standard Eastern but rounded /ɒ/ in Iranian Armenian. Iranian Armenian also has a low front vowel /æ/ as a marginal phoneme.

![Vowel inventory](image)

Figure 2.2: Vowel inventory

2.1.1 Laryngeal qualities of consonants

Both Standard Eastern and Iranian Armenian utilize a 3-way laryngeal contrast for stops and affricates based on voice onset time (VOT). There is a phonemic contrast between prevoiced (-VOT), voiceless unaspirated (0VOT), and voiceless aspirated (+VOT) consonants. We provide near-minimal pairs in Table 2.1 from Iranian Armenian. In general, there is a separate grapheme (orthographic letter) for each type of phonemic stop/affricate. We list the graphemes in the first column, and the phonemes in the second column.

Acoustic data on the three-way contrast can be found for both Iranian Armenian (Hacopian 2003, Amirian 2017) and Standard Eastern (Seyfarth & Garellek 2018). The contrast is maintained even word-finally. However, there are very few words that are pronounced with word-final voiced obstruents. The coronals have been reported to be dental in Standard Eastern (Խաչատրյան 1988: 110), but we’re unsure if they’re also dental in Iranian Armenian.¹

¹NK self-reported a dental articulation for some tokens with initial coronal stops, but also reported alveolar articulation for other tokens.
Table 2.1: 3-way laryngeal contrast for stops and affricates

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
</table>
| p | /b/ | բ | բառ | բառ
| t | /p/ | բռին | բռին | բռ
| k | /pʰ/ | բռիք | բռիք | բռիք
| n | /d/ | դ | դար | դար
| l | /t/ | լ | լուն | լուն
| tʰ | /tʰ/ | տʰակ | տʰակ | տʰակ
| q | /ɡ/ | գ | գիրք | գիրք
| kʰ | /kʰ/ | կʰալ | կʰալ | կʰալ
| ɡʰ | /d͡z/ | ձ | ձու | ձու
| kʰ | /kʰ/ | կʰու | կʰու | կʰու
| ɡʰ | /d͡ʒ/ | ʤ | ճար | ճար
| kʰ | /t̚/ | տ̚ի | տ̚ի | տ̚ի

For word-final voiceless unaspirated stops (p, t, k), it is reported that some Iranian Armenian speakers pronounce these sounds as ejectives (Toparlak 2017), while some do not (Amirian 2017). For NK, we rarely heard any ejectives. Figure 2.3 shows an example of a final glottalized unaspirated /k/, along with an un-glottalized one. The recordings for these two words can be found in our online archive.

---

https://github.com/jhdeov/iranian_armenian
In general, for a given morpheme that’s shared between the IA and SEA, the obstruents in that morpheme maintain the same laryngeal features in the two lects. That is, if a word begins with a prevoiced stop in Standard Eastern, then it also begins with a prevoiced stop in Iranian Armenian. This correspondence is the general case. But we have encountered some morphemes where the Iranian Armenian pronunciation utilizes a different laryngeal quality. For example, the resultative participle suffix -ած is pronounced /-ɑt͡s/ in Standard Eastern, but is often pronounced as /-ɒt͡sʰ/ in Iranian Armenian with aspiration in some speakers. NK always uses aspiration for this morpheme, while KM reports that she rarely does so.

From AS’s personal experience, the unexpected use of aspiration for the affricate ռ /t͡s/ varies by speaker. We speculate that this variable aspiration may be connected to variable ejectivization or glottalization of voiceless unaspirates. Variable glottalization is reported for Standard Eastern (Schirru 2012, Seyfarth & Garellek 2018). AS likewise finds variable ejectivization for /t͡s/. We speculate that what we report as aspiration might instead be a reflex of ejectivization. More data is of course needed.
2.1 Segmental phonology

Table 2.3: Unexpected but variable aspiration in Iranian Armenian from NK

<table>
<thead>
<tr>
<th>SEA</th>
<th>IA</th>
<th>‘to be born’</th>
</tr>
</thead>
<tbody>
<tr>
<td>ծնուել</td>
<td>տեղի ծնուել</td>
<td>ռուսական ծնուել</td>
</tr>
<tr>
<td>գործածել</td>
<td>գորտսածել</td>
<td>ռուսական գորտսածել</td>
</tr>
</tbody>
</table>

In NK’s speech (and in her family’s), there were some words where the voiced stops were (variably) devoiced in her speech, and some where voiceless stops were (variably) voiced. KM felt that such variable voicing was more characteristic of heritage speakers in the diaspora than of speakers in Tehran. Note that these are all high-frequency words.

Table 2.4: High-frequency words with variable (de)voicing in NK and her family

<table>
<thead>
<tr>
<th>SEA</th>
<th>IA</th>
<th>‘(If) I come’</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘door’</td>
<td>դուռ</td>
<td>ռուսական դուռ</td>
</tr>
<tr>
<td>‘to put’</td>
<td>դեռել</td>
<td>ռուսական դեռել</td>
</tr>
<tr>
<td>‘dance’</td>
<td>պար</td>
<td>ռուսական պար</td>
</tr>
<tr>
<td>‘mouth’</td>
<td>բերան</td>
<td>ռուսական բերան</td>
</tr>
<tr>
<td>‘to bring’</td>
<td>բերել</td>
<td>ռուսական բերել</td>
</tr>
<tr>
<td>‘knife’</td>
<td>դանակ</td>
<td>ռուսական դանակ</td>
</tr>
<tr>
<td>‘yesterday’</td>
<td>երեկ, էրեկ</td>
<td>ռուսական երեկ</td>
</tr>
<tr>
<td>‘drawer’</td>
<td>դարակ</td>
<td>ռուսական դարակ</td>
</tr>
</tbody>
</table>

For such voicing differences, BV reports that using devoiced tokens like [tənel] instead of [dənel] ‘to put’ is the expected outcome in non-standard dialects of Iran. For the Tehrani, such variation in devoicing may indicate the residue of dialect shifting, or possibly a diglossic continuum between IA and SEA.

2.1.2 Rhotics

A stark difference between the two lects concerns their rhotics. Standard Eastern Armenian (SEA) has a phonemic contrast between a flap /ɾ/ and a trill /r/. The flap is more frequent than the trill. Orthographically, the flap is represented by the grapheme ռ, and the trill by Ծ. Although Iranian Armenian (IA) also has a two-way rhotic distinction, the Standard Eastern flap corresponds to an Iranian
Armenian retroflex approximant /ɾ/. We contrast the two lects in Table 2.5.³

Table 2.5: Rhotic contrasts in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>SEA</th>
<th>IA</th>
<th>p</th>
<th></th>
<th>SEA</th>
<th>IA</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>/ɾ/</td>
<td>/ɻ/</td>
<td>ɾ</td>
<td>'Raffi (a name)' ɾ /ɻ/ առիֆ</td>
<td>/ɾ/</td>
<td>/ɻ/</td>
<td>ɾ /ɻ/ առիձ</td>
</tr>
<tr>
<td>Medial</td>
<td>բառակ</td>
<td>բառակ</td>
<td>/ɾ/</td>
<td>'thin' բառակ</td>
<td>ոստանը</td>
<td>ոստանը</td>
<td>ոստանը</td>
</tr>
<tr>
<td></td>
<td>պատերազմ</td>
<td>պատերազմ</td>
<td>/ɾ/</td>
<td>'avaiable, empty' պատերազմ</td>
<td>հեռու</td>
<td>հեռու</td>
<td>հեռու</td>
</tr>
<tr>
<td>Final</td>
<td>կար</td>
<td>կար</td>
<td>/ɾ/</td>
<td>'string' կար</td>
<td>տառ</td>
<td>տառ</td>
<td>տառ</td>
</tr>
</tbody>
</table>

In general, if a word has a rhotic trill in Standard Eastern Armenian, then it has a trill in Iranian Armenian as well. However, there were some high-frequency words where NK preferred using a trill /ɾ/ where Standard Eastern would use a flap /ɾ/.

Table 2.6: High-frequency words that use a trill instead of an approximant

<table>
<thead>
<tr>
<th></th>
<th>SEA</th>
<th>IA</th>
<th>p</th>
<th></th>
<th>SEA</th>
<th>IA</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>'minute'</td>
<td>rope</td>
<td>rope</td>
<td>ուժեղ</td>
<td>'eraser' ուժեղ</td>
<td>ուժեղ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'war'</td>
<td>paterazm</td>
<td>paterazm</td>
<td>ապահույց</td>
<td>'far' ապահույց</td>
<td>ապահույց</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some high-frequency words have a rhotic in SEA, but the rhotic is optionally deleted in IA. The loss of the rhotic here may be related to the loss of rhotics in the perfective converb (§3.3).

Table 2.7: High-frequency words that lose a rhotic in Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>SEA</th>
<th>IA</th>
<th>p</th>
<th></th>
<th>SEA</th>
<th>IA</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>'to go'</td>
<td>jertʰal, երտʰալ</td>
<td>երտʰա</td>
<td>երտʰա</td>
<td>'when' երտʰա</td>
<td>երտʰա</td>
<td>երտʰա</td>
<td>երտʰա</td>
</tr>
</tbody>
</table>

³The /ɾ/ in 'Raffi' is variably geminated. The /b/ in Iranian Armenian 'thin' is variably devoiced for NK.
2.1 Segmental phonology

The Standard Eastern flap /ɾ/ is typically spirantized in some positions, such as word-finally (Toparlak 2019: ch5). The Iranian Armenian retroflex approximant sounds similar to the American English alveolar approximant [ɹ] to our ears, but more retroflex like [ɻ]. A future acoustic or articulatory study can help in determining the exact place of articulation of this rhotic.

Cross-linguistically, it is common to find that dialects differ in the phonetic realization of rhotics (Ladefoged & Maddieson 1996, Chabot 2019). It is rather rare to find languages with a phonemic retroflex approximant [ɻ] (Arsenault 2017: 28). Most of these languages are in Australia. Similar results are obtained from the PHOIBLE 2.0 database at 306 out of 3020 languages (10%) (Moran & McCloy 2019). For the alveolar approximant [ɹ], this segment is acoustically quite similar to [ɻ]. This sound is cross-linguistically rare as well at 60 languages (2%) in the PHOIBLE database. This segment is found particularly in Southeast Asia and in English.

The origins of the Iranian Armenian approximant could be due to language contact with Persian. Persian has a rhotic /ɾ/ whose realization varies between a trill, tap, fricative, and approximant (Majidi & Ternes 1991, Rafat 2010). In a study on Persian rhotics, Rafat (2010: 675) found that when they were realized as approximants, the approximants sounded retroflex.

There is evidence that an approximant rhotic is attested in also other Armenian dialects of Iran. In Vaux’s translation of Աճառյան’s (1940) grammar of New Julfa (Isfahan) Armenian, Vaux uses the IPA symbol [ɹ] to transcribe the letter ր (§6). It is an open question if the Tehrani [ɻ] and New Julfa [ɹ] are articulatorily different or the same.

Although the trill is phonemic in both lects, KM reports that the Iranian Armenian trill feels ‘not as trilled as in Eastern’. This suggests that the trill uses a fewer number of tongue contacts in Iranian Armenian than in Standard Eastern. Coincidentally, some dialects like Standard Western Armenian have lost a phonemic trill for certain communities like in Lebanon (Vaux 1998b: 16). Some communities in Canada still maintain weak phonemic and weak articulatory distinctions between trills and flaps (Tahtadjian 2020). KM’s intuitions thus might indicate a slow language change towards losing the trill.
2 Phonology

2.1.3 Other consonants

For completeness, we provide the rest of the consonantal inventory of Iranian Armenian in Table 2.8. To our knowledge, the phonological properties of these remaining consonants do not differ between Standard Eastern and Iranian Armenian.

Table 2.8: Other consonants in Iranian Armenian

<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>մ</td>
<td>/m/</td>
<td>մոմ-ից</td>
</tr>
<tr>
<td>ո</td>
<td>/n/</td>
<td>կոնել</td>
</tr>
<tr>
<td>$</td>
<td>/f/</td>
<td>թոփի</td>
</tr>
<tr>
<td>շ</td>
<td>/v/</td>
<td>գորեի</td>
</tr>
<tr>
<td>ս</td>
<td>/z/</td>
<td>սիրել</td>
</tr>
<tr>
<td>վ</td>
<td>/v/</td>
<td>տուող</td>
</tr>
<tr>
<td>ս</td>
<td>/s/</td>
<td>սիրել</td>
</tr>
<tr>
<td>ժ</td>
<td>/ʃ/</td>
<td>շենք</td>
</tr>
<tr>
<td>ծ</td>
<td>/ʒ/</td>
<td>ժպտալ</td>
</tr>
<tr>
<td>խ</td>
<td>/χ/</td>
<td>խաչ</td>
</tr>
<tr>
<td>ղ</td>
<td>/ʁ/</td>
<td>Ղազարոս</td>
</tr>
<tr>
<td>յ, հ</td>
<td>/h/</td>
<td>հաց</td>
</tr>
<tr>
<td>ի</td>
<td>/j/</td>
<td>երգ</td>
</tr>
</tbody>
</table>

The nasal /n/ becomes [ŋ] before velar stops /k, kʰ, ɡ/.

Table 2.9: Examples of nasal place assimilation

<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/zɒŋ/</td>
<td>→ 'զանգ'</td>
<td>'bell'</td>
</tr>
<tr>
<td>/menkʰ/</td>
<td>→ 'մենխ'</td>
<td>'we'</td>
</tr>
<tr>
<td>/tsʰonkʰnəl/</td>
<td>→ tsʰոնկʰնել</td>
<td>'to wish'</td>
</tr>
</tbody>
</table>
In addition to the above consonantal phonemes, Iranian Armenian has a surface glide [w] that is used to repair vowel hiatus. This glide is discussed in §3.1.2. It is not a contrastive or phonemic segment.

(1) /ko'tu =e-m/ → [ko.'tu.wem]  
cat=is-PRS.ISG  
‘I am a cat.’  
Կատու եմ։

2.1.4 Vowel inventory

The vowel inventory is largely the same in both lects. We provide the basic vowel inventory in the two lects in Table 2.10. Most occurrences of the schwa are unwritten.

<table>
<thead>
<tr>
<th>Grapheme</th>
<th>Phoneme</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ա</td>
<td>/ɑ/ /ɒ/</td>
<td>tɑɾi tɒɾi 'year’ տարի</td>
</tr>
<tr>
<td>ե</td>
<td>/e/ /e/</td>
<td>tʃʰoɾɛn tʃʰoɾɛn 'wheat’ ցորեն</td>
</tr>
<tr>
<td>ի</td>
<td>/i/ /i/</td>
<td>kʰitʰ kʰitʰ 'nose’ քիթ</td>
</tr>
<tr>
<td>օ, ո</td>
<td>/o/ /o/</td>
<td>vɔɾ vɔɾ 'that’ ո</td>
</tr>
<tr>
<td>ու</td>
<td>/u/ /u/</td>
<td>dɔɾ dɔɾ 'door’ դուռ</td>
</tr>
<tr>
<td>ը</td>
<td>/ə/ /ə/</td>
<td>mɑɾtʰə mɑɾtʰə 'the man’ մարդը</td>
</tr>
<tr>
<td>ղ</td>
<td>/ɡ/ /ɡ/</td>
<td>ɡɾɛɾ ɡɾɛɾ 'to write’ գրել</td>
</tr>
</tbody>
</table>

Between the two lects, the main difference is that the low back vowel is unrounded /ɑ/ in Standard Eastern but rounded /ɒ/ in Iranian Armenian. The rounding of the low vowel is likely due to contact between Iranian Armenian and Persian. Persian has a phonemic low back rounded vowel /ɒ/ (Majidi & Ternes 1991).

When the low vowel /ɒ/ is next to a glide /j/, the low vowel is still rounded, but we suspect that it’s not as rounded as in other contexts. More data is needed.

---

5Anecdotally, BV has sometimes heard a rounded /ɒ/ in spoken Eastern Armenian in Yerevan. In modern Persian, the low back rounded vowel /ɒ/ is acoustically unstable and can approach /ɔ/ (Esfandiari et al. 2015, Mokari et al. 2017, Aronow et al. 2017, Jones 2019). In our impressions, the Iranian Armenian low vowel is much lower than the Armenian /ɒ/. Although more acoustic data is needed, we speculate that the Iranian Armenian /ɒ/ is truly [ɒ] and not [ɔ].
with finer acoustic measurements and across multiple speakers.\footnote{For the word ‘voice’, the Iranian Armenian word is \textit{ձեն} \textit{ձեն} while the Standard Eastern word is the cognate \textit{ձայն} \textit{ձայն}. NK reports that Iranian Armenians sometimes say the word \textit{ձայն} as a type of Standard Eastern borrowing, sometimes nativized as \textit{ձայն}.}

Table 2.11: The low back vowel stays rounded next to glide /\j/.

<table>
<thead>
<tr>
<th>\textsc{IA}</th>
<th>\textsc{SEA}</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ˈhɒj] ‘Armenian person’ huy</td>
<td>[mɒɻˈjɒm] ‘Mariam Ումիտում</td>
</tr>
</tbody>
</table>

Iranian Armenian likewise utilizes a low front vowel /æ/ as a marginal phoneme.\footnote{The word ‘drawer’ is \textit{դարակ} in Standard Eastern. In Iranian Armenian, bi-dialectal KM pronounces the final stop as [k], while mono-lectal NK uses [ɡ]. We suspect this is just individual-level variation within the diaspora.} This vowel appears in Persian loanwords. Some of these loanwords likewise exist in Standard Eastern (sometimes via a different route like from Turkish). But in Standard Eastern, the loanwords are nativized with the low back vowel /a/. In general, the front vowel does not appear in native Armenian words, but we did find at few native constructions that contain it.\footnote{In the 1910s/1920s, \textit{Մհույթու} (1940: §7) reports that /æ/ was slowly getting introduced in the speech of young Armenians in New Julfa (Isfahan). See translation by \textit{Vaux (in prep)}. This}

Table 2.12: Low front vowel /æ/ in Iranian Armenian.

<table>
<thead>
<tr>
<th>\textsc{IA}</th>
<th>cf. \textsc{SEA}</th>
</tr>
</thead>
<tbody>
<tr>
<td>\æˈɾæb 'Arab' արաբ from Persian</td>
<td>аˈɾаb</td>
</tr>
<tr>
<td>maɛŋkæl ‘grill’ մանկալ from Persian</td>
<td>манˈкэл ումիտում</td>
</tr>
<tr>
<td>læmæˈdʒun ‘lahmacun’ լահմաջուն from Turkish/Persian</td>
<td>lahməˈdʒʊn</td>
</tr>
<tr>
<td>dæˈɻæɡ ‘drawer’ դարակ native</td>
<td>dɑˈɾɑk</td>
</tr>
<tr>
<td>maɛˈhæt ~ mæt ‘a one’ մի հատ native</td>
<td>mi ˈhɑt</td>
</tr>
</tbody>
</table>

In the Armenian script, the front vowel /æ/ is represented as the symbol û with umlaut in dialectological work. Because of variation across Iranian Armenian speakers, we don’t adopt this symbol in our orthographic forms, but instead use a simple u.

The use of /æ/ is due to contact which Persian which has a phonemic /æ/ vowel (Mahootian 2002: 286). Although contemporary Iranian Armenian has /æ/ as a marginal phoneme, it is possible that earlier stages of Iranian Armenian did not. Zamir (1982: 368) reports that his sample of Iranian Armenians did not have a /æ/ phoneme when they spoke Persian. Their accent of Persian was characterized by replacing the Persian /æ/ with a back variant.\footnote{In the 1910s/1920s, \textit{Մհույթու} (1940: §7) reports that /æ/ was slowly getting introduced in the speech of young Armenians in New Julfa (Isfahan). See translation by \textit{Vaux (in prep)}. This}
As an interesting diachronic fact, there are some words that are pronounced with either [uj] or [ju] in SEA, but which are pronounced with [u] in IA. But this is not a general rule however because there are some words that are pronounced with [uj] or [ju] in both varieties.

Table 2.13: Dialectal variation in [uj] and [ju] sequences

<table>
<thead>
<tr>
<th></th>
<th>Changing /uj/, /ju/ or [u]</th>
<th>Keeping /uj, ju/</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA</td>
<td>‘sister’ [kʰuɾ]</td>
<td>‘color’ [gujn]</td>
</tr>
<tr>
<td></td>
<td>‘snow’ [d͡zujn]</td>
<td>‘other’ [mjus]</td>
</tr>
<tr>
<td>IA</td>
<td>[kʰuɻ]</td>
<td>[gujn]</td>
</tr>
<tr>
<td></td>
<td>[d͡zun]</td>
<td>[mjus]</td>
</tr>
<tr>
<td></td>
<td>քոյր ձիւն</td>
<td>գոյն միւս</td>
</tr>
</tbody>
</table>

2.2 Suprasegmental phonology

In general, we did not find significant differences between Standard Eastern and Iranian Armenian in terms of syllable structure (§2.2.1) or word stress (§2.2.2). Intonational differences are however salient because Iranian Armenian has borrowed aspects of Persian intonation (§2.2.3).

2.2.1 Syllable structure

The syllable structure of Iranian Armenian is not substantially different from that of Standard Eastern. In Iranian Armenian, the typical syllable is at most CVCC. Complex onsets are limited to /Cj/ clusters, and intervocalic /Cj/ clusters are usually syllabified together into the same syllable. Complex codas generally have falling sonority. The segment /kʰ/ can follow any type of cluster. Phonologically, this segment is an extrasyllabic appendix.

suggests that the introduction of /æ/ as a marginal phoneme is both recent and widespread in the Armenian dialects of Iran.
2 Phonology

Table 2.14: Syllable shapes in Iranian Armenian

<table>
<thead>
<tr>
<th>Shape</th>
<th>Example</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>ու</td>
<td>ու</td>
</tr>
<tr>
<td>CV</td>
<td>ձու</td>
<td>ձու</td>
</tr>
<tr>
<td>VC</td>
<td>ձու’h</td>
<td>ձու’h</td>
</tr>
<tr>
<td>CVC</td>
<td>ձու’փ’h</td>
<td>ձու’փ’h</td>
</tr>
<tr>
<td>CVCC</td>
<td>ձու’փ’h</td>
<td>ձու’փ’h</td>
</tr>
<tr>
<td>CjVCC</td>
<td>ձու’փ’h</td>
<td>ձու’փ’h</td>
</tr>
<tr>
<td>CV.CjVC</td>
<td>ձու’փ’h</td>
<td>ձու’փ’h</td>
</tr>
<tr>
<td>CVCh</td>
<td>ձու’փ’h</td>
<td>ձու’փ’h</td>
</tr>
<tr>
<td>CVCCh</td>
<td>ձու’փ’h</td>
<td>ձու’փ’h</td>
</tr>
</tbody>
</table>

All the above generalizations are likewise found in Standard Eastern Armenian. For general overviews of syllable structure in Standard Eastern Armenian, see Vaux (1998b: ch1,3). For a discussion of the final appendix -kʰ in Standard Eastern, see Vaux (1998b: 83), Vaux & Wolfe (2009), and Dolatian (2021a: §5).

An exception to the above generalizations concerns word-initial sibilant-stop sequences. Such clusters variably undergo schwa prothesis in both Standard Eastern and Iranian Armenian. In modern Eastern, the norm is for schwa prothesis to not apply. In our elicitations from Iranian Armenian speakers, most cases of sibilant-stop clusters didn’t undergo prothesis. When a schwa is absent, the sibilant is analyzed as an extrasyllabic appendix (Vaux 1998b: 83ff; Vaux & Wolfe 2009).

Table 2.15: Schwa prothesis in sibilant-stop clusters

<table>
<thead>
<tr>
<th>Example</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>zɡuiʃ</td>
<td>զգոյշ</td>
</tr>
<tr>
<td>stʊnɒl</td>
<td>ստանալ</td>
</tr>
<tr>
<td>(ə)skəsɛl</td>
<td>սկսել</td>
</tr>
<tr>
<td>azɡɒl</td>
<td>զգալ</td>
</tr>
<tr>
<td>skizb</td>
<td>սկիզբ</td>
</tr>
</tbody>
</table>

2.2.2 Lexical stress

Iranian Armenian seems to utilize the same lexical stress system as Standard Eastern Iranian Armenian. For an overview of lexical stress in Standard Eastern Armenian, see Vaux (1998b: ch4) and Dolatian 2021a.

Within the morphological word, stress is generally final on the rightmost non-schwa vowel. This means that regular stress is on the final syllable if that syllable
2.2 Suprasegmental phonology

has a non-schwa nucleus. Suffixation of non-schwa suffixes triggers stress shift.\(^9\)

(2) a. չոռոտ 'forehead' դիոռոտ
չոռոտ-ու 'forehead-DEF' դիոռոտ ու

b. չոռը 'happy' դիոռի
չոռը-ու 'happy-DEF' դիոռի ու

If the final syllable has a schwa, then stress is on the penultimate syllable.

(3) a. չոռոտ-ո  'forehead-DEF'
չոռոտել 'forehead-also'

b. չոռը-ո  'happy-DEF'
չոռըել 'happy-also'

Besides final schwas, stress is avoided on clitics.

(4) a. չոռոտ=ել 'forehead=also'
չոռոտ=ել=ո  'forehead=also=is'

b. չոռը=ել 'happy=also'
չոռը=ել=ո 'happy=also=is'

If the word takes a cluster of clitics, stress stays inside the word.

(5) a. չոռոտ=ել=ո 'forehead=also=is'

b. չոռը=ել=ո 'happy=also=is'

A systematic exception to final stress involves the negation prefix չոռոտ (չոռոտ- be- before consonants). In both periphrastic and synthetic tenses, the negation prefix

\(^9\)Prescriptively, the suffix -ութիւն (ութիւն in Standard Eastern) is pronounced as [-utʰjun]. But in casual speech, the stop-glide sequence usually undergoes affrication.
Phonology

Attracts primary stress. For periphrastic tenses, the prefix is added to the auxiliary, and the auxiliary takes stress. In synthetic tenses, the prefix is added directly to the verb. The first syllable of the verb takes stress, even if the first syllable has a schwa.

Table 2.16: Irregular stress in negation

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>'I am singing’ jeʃkʰ-um e-m sing-IMPF.CVB is-1SG տեղի եմ</td>
<td>'ʃn-e-m jeʃkʰ-um NEG-is-1SG sing-IMPF.CVB չեմ եմ</td>
</tr>
<tr>
<td>'He took’ veɻ-tɻ-ɒ-v take-CAUS-PST-3SG վերցրաւ</td>
<td>'ʃn-veɻtɻ-ɒ-v NEG-take-CAUS-PST-3SG չվերցրաւ</td>
</tr>
<tr>
<td>'He did’ ŏɻ-ɒ-v do-PST-3SG արաւ</td>
<td>'ʃn-ɷɻ-ɒ-v NEG-do-PST-3SG չարաւ</td>
</tr>
<tr>
<td>'He fell’ ɚŋɡ-ɑ-v fall-PST-3SG ընկաւ</td>
<td>'ʃn-ɚŋɡ-ɑ-v NEG-fall-PST-3SG չընկաւ</td>
</tr>
</tbody>
</table>

Negation stress is reported in Iranian Armenian dialogues from Shakibi & Bonyadi (1995). In HD’s experience, negation stress is likewise attested in Standard Western Armenian in both synthetic and periphrastic tenses. However in Standard Eastern Armenian, negation attracts stress in only periphrastic tenses, not synthetic (Մարգարյան 1997:77). The fact that Iranian Armenian has negation-sensitive stress may be due to language contact with Persian, where negation is a stressed prefix (Kahnemuyipour 2009).

Beyond this section, we generally avoid marking stress in order to reduce clutter. Unless otherwise stated, stress is on the rightmost non-schwa and non-clitic vowel.

2.2.3 Prosodic phonology and intonation

Above the word, there is relatively little known about the prosodic structure of phrases and clauses in any Armenian lect (Fairbanks 1948: 27ff; Johnson 1954: 14ff; Ունցուկյան 1990; Toparlak & Dolatian review). There is however one aspect of Iranian Armenian prosodic phonology which stands out from Standard Eastern Armenian. This concerns the intonational structure of questions. We briefly
overview the main properties of Iranian Armenian interrogatives, using common notation from the autosegmental-metrical tradition on intonational phonology (Pierrehumbert 1980, Ladd 1986, Jun 2007). The recordings from this subsection can be found in the online archive.\footnote{https://github.com/jhdeov/iranian_armenian}

In a basic SOV sentence in the present tense (6a), verbal inflection is periphrastic\footnote{The distribution of this auxiliary is complex in Standard Eastern and Iranian Armenian (§3.3.1). For further data and discussion, see Tamrazian (1994), Megerdoomian (2009), Kahnemuyipour & Megerdoomian (2011, 2017).}. The verb is in the form of the imperfective converb, and tense-agreement marking is on an auxiliary. If the object is morphologically bare, then it carries sentential stress (nuclear stress, underlined). The auxiliary is cliticized to the bare object.\footnote{https://github.com/jhdeov/iranian_armenian}

Declarative sentences end in falling intonation.

(6)  

a. Declarative SOV sentence with an auxiliary

i. marja-n girkʰ = e kartʰ-um↘ (SEA)  

ii. mɑɾjɑ-n gɪɻkʰ =ɒ kɑɾtʰ-um↘ (IA)  

Maria-def book =is read-IMPF.CVBN  

Maria is reading books.

b. Polar question

i. marja-n girkʰ ↗ = e kartʰ-um↘ (SEA)  

ii. mɑɾjɑ-n gɪɻkʰ ↗ =ɒ kɑɾtʰ-um↗ (IA)  

Maria-def book =is read-IMPF.CVBN  

Is Maria reading books?

To form polar questions, the only strategy in Standard Eastern and Iranian Armenian is intonational. In Standard Eastern Armenian, there is a significant rise in pitch on the bare object in (6b-i). The sentence ends in falling intonation (cf. Ղուկասյան 1990, 1999). In contrast in Iranian Armenian, there is both a rise on the object and a sentence-final rise (6b-ii).

For illustration, Figure 2.5 shows the pitch track of the declarative sentence (6a) and its corresponding polar question (6b) in both Standard Eastern and Iranian Armenian. The Iranian Armenian recordings are from NK. The Standard Eastern Armenian recordings are from AT. We annotate the perceived nuclear with the H* symbol, sentence-final fall with L%, and sentence-final rise with H%.
2 Phonology

As is clear, both declarative sentences end in L%. The Iranian Armenian polar question has H%. For Standard Eastern, both the declarative and polar question end in a L%. The main difference is the level of pitch on the nuclear stressed word [ɡiɾkʰ] ‘book’.

![Pitch track of declarative (6a) and polar question (6b) in Standard Eastern (SEA) and Iranian Armenian (IA)](image)

The use of a sentence-final rise is likely due to two factors: one language-internal, and one language contact with Persian.

In Persian, polar questions end in a sentence-final rise as a type of Intonational Phrase boundary H% (Sadat-Tehrani 2007, 2011: 111; Mahjani 2003: 55). Furthermore, AS reports that some Iranian Armenian speakers draw out the last syllable, i.e., they apply sentence-final lengthening. This is also reported in Persian polar questions (Sadat-Tehrani 2011: 113).
2.2 Suprasegmental phonology

As for language-internal factors, prescriptively, Standard Eastern Armenian uses L% for polar questions when nuclear stress is on a non-final word. However, AT informs us that Colloquial Eastern Armenian (as spoken in Yerevan) does allow a final H%. The use of this H% is socially judged as ‘improper’. We provide a pitch track below. Another parallelism is that Colloquial Eastern Armenian can also use the colloquial auxiliary [ɑ] (like IA) instead of the standard [e].

![Pitch Track]

Figure 2.7: Polar question in Standard Eastern (6a-i) with optional H%

For Iranian Armenian, the final syllable in a polar question can be considerably lengthened in order to indicate politeness. AS reports that final lengthening in Iranian Armenian is common in order to indicate a non-aggressive and polite inquiry.

Phonologically, the sentence-final H% is on the final syllable of the polar question, regardless of whether that syllable carries lexical stress. For example, consider the following declarative sentence and its polar question form. Morphologically, the sentence consists of a verb in a non-finite form, plus a cliticized auxiliary. In the declarative, lexical stress and nuclear stress H* are on the last syllable of the verb, while the clitic is unstressed and carries L%.

\[
\begin{align*}
\text{(7) } & \quad \text{a. Declarative V-Aux with lexical stress on the V} \\
& \quad \text{i. } \text{t͡səχ-um} & =e-s \downarrow & (SEA) \\
& \quad \text{ii. } \text{t͡səχ-um} & =e-s \downarrow & (IA) \\
& \quad \text{smoke-IMPF.CVB} & \text{is-PRS.2SG} & \text{You smoke.}' \\
& \quad \text{Ծխում ես։} & & \text{'You smoke.'}
\end{align*}
\]
2 Phonology

b. Polar question

i. ʈ͡səχ-um↗ =e-s↘ (SEA)

smoke-IMPF.CV B is-prs.2sg

‘Do you smoke?’

ii. ʈ͡səχ-um =e-s↗ (IA)

smoke-IMPF.CV B is-prs.2sg

‘Do you smoke?’

In the polar form, the Standard Eastern version simply makes the nuclear stress more prominent, while the clitic keeps its L% tone. But in Iranian Armenian, sentence-final H% is placed on the clitic. The proximity of H% and the verb causes the verb to lose its nuclear stress. We show a pitch track for these sentences in Figure 2.8 from NK and AT.

![Pitch track of declarative (a) and polar question (b) in Standard Eastern (SEA) and Iranian Armenian (IA)](image)

Figures 2.8: Pitch track of declarative (7a) and polar question (7b) in Standard Eastern (SEA) and Iranian Armenian (IA)

Such lengthening and rising are also found in wh-questions. In a subject wh-question in the present tense, the subject is replaced by the wh-word, takes nuclear stress, and is cliticized with the inflected auxiliary. There is a significant rise
2.2 Suprasegmental phonology

on the wh-word. The sentence ends with a falling intonation in Standard Eastern (Johnson 1954: 15). For Iranian Armenian, the sentence can end in a falling intonation in casual speech. However, speakers can also apply a sentence-final rise in order to indicate a degree of politeness.

(8) **Subject wh-question**

a. ո՞վ է գիրք կարդում։

b. ո՞վ է գիրք կարդում։

c. ո՞վ է գիրք կարդում։

Figure 2.10 shows the recordings for the above wh-question, one with a final fall L%, and one with a final rise H%. Data is from NK. She at first produced the falling sentence, but in subsequent elicitations preferred the rising sentence.

In Persian, wh-questions likewise end in falling intonation (Sadat-Tehrani 2011: 118). Such questions can undergo a final rise and lengthening in order to indicate politeness, curiosity, or a sense of not asserting the question (Sadat-Tehrani, p.c.). The use of a final rise in wh-questions seems to have become somewhat grammaticalized in Iranian Armenian. For example, NK produced some wh-questions with final rises, and some wh-questions with final falls. But she more often used final rises than final falls. More data is however needed to establish the frequency of using sentence-final rises vs. falls in wh-questions across multiple speakers.

Finally, recall that Standard Eastern Armenian is used by the Armenian community in Iran as a formal register. It is possible that a contributing factor to the intonational difference between Standard Eastern and Iranian Armenian is the fact that Persian utilizes lower pitch in formal contexts (Falahati 2020). Thus, Iranian Armenian might have grammaticalized the use of sentence-final rises in order to further reinforce the sociolinguistic distinction between formal Standard Eastern and informal Iranian Armenian.

In sum, Iranian Armenian has adopted aspects of Persian intonation. Such aspects are not due to code switching because the majority of Iranian Armenian speakers in the diaspora and their descendants (including NK) do not know Persian.
2 Phonology

(a) SEA wh-question with L%

(b) IA wh-question with L%

(c) IA wh-question with H%

Figure 2.10: Pitch track of wh-question from (8) with a final fall (8-a,b) or with a final rise (8-c) in Standard Eastern and Iranian Armenian
3 Morphophonology

In terms of the interaction between morphology and phonology, we go over morphologically-induced phonological processes (§3.1), phonologically-conditioned allomorphy (§3.2), and a phonosyntactic process that references both phonology and syntax (§3.3).

3.1 Morphophonological alternations

Besides general phonology, Armenian dialects show various morphophonological rules which operate at morpheme boundaries. This includes root-initial glide insertion (§3.1.1), vowel hiatus repair under suffixation/cliticization (§3.1.2), and high vowel vowel reduction under suffixation (§3.1.3).

In general, morphophonological processes that are attested in Standard Eastern Armenian are also attested in Iranian Armenian. But in the judgments of KM, “phonological changes at morpheme boundaries are becoming simpler in Iranian Armenian.” This ‘simplicity’ suggests that such processes apply less often in Iranian Armenian than in Standard Eastern Armenian. For an overview of such morphophonological processes in Standard Eastern and Western Armenian, see Vaux (1998b: ch1) and Dolatian (2020: ch2).

3.1.1 Root-initial glide insertion

Armenian is primarily suffixing, and there are few morphophonological rules that are sensitive to prefix boundaries. The most noticeable process is root-initial ‘diphthongization’ or glide-insertion.

The Classical Armenian grapheme է was a mid vowel e (Macak 2017). In the diachronic development from Classical Armenian to modern Armenian, this grapheme later underwent root-initial glide insertion (Weitenberg 2008). For example in Standard Eastern Armenian, the word-initial pronunciation of this grapheme is [je]. In Standard Eastern, the glide is prescriptively supposed to delete after inflectional prefixes like the conditional k- and negative tʃʰ-, but the retention of the glide has become more common in Colloquial Eastern Armenian (Dum-Tragut
For Iranian Armenian, the retention seems obligatory based on our elicitations, at least for NK and her family. Note how these prefixes trigger schwa epenthesis before a consonant.

Table 3.1: Root-initial glide insertion from NK

<table>
<thead>
<tr>
<th>SEA</th>
<th>IA</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>երեկ</td>
<td>jeɾek</td>
<td>√(^{-})-TH-INF ('to sing')</td>
</tr>
<tr>
<td>երեկ</td>
<td>jeɻk</td>
<td>√(^{-})-TH-PRS.1SG ('I sing (subj.)')</td>
</tr>
<tr>
<td>կերկ</td>
<td>ka-jeɾk(^{b})-e-m</td>
<td>COND-√(^{-})-TH-PRS.1SG ('I shall sing')</td>
</tr>
<tr>
<td>չերկ</td>
<td>t(^{b})-jeɾk(^{b})-e-m</td>
<td>NEG-√(^{-})-TH-PRS.1SG ('I don’t sing (subj.)')</td>
</tr>
</tbody>
</table>

However, there are some lexemes which have the initial <#ե> [#je] in Standard Eastern Armenian, but where the glide is lost in Iranian Armenian. For some of these lexemes, Colloquial Eastern Armenian also has dialectal forms without the glide. The loss of the glide in Iranian Armenian is likely a sporadic and idiosyncratic diachronic process because the relevant lexemes are high-frequency words, and oftentimes function words.\(^1\)

Table 3.2: Loss of initial glides in Iranian Armenian

<table>
<thead>
<tr>
<th>SEA</th>
<th>IA</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>երեկ</td>
<td>eɾek eɻek</td>
<td>‘yesterday’</td>
</tr>
<tr>
<td>երթալ</td>
<td>eɾtʰɑl eɻtʰɑl</td>
<td>‘to go’</td>
</tr>
<tr>
<td>երկու</td>
<td>eɾku eɻku</td>
<td>‘two’</td>
</tr>
<tr>
<td>եփել</td>
<td>epʰel epʰel</td>
<td>‘to cook’</td>
</tr>
<tr>
<td>ելնել</td>
<td>elnel elnel</td>
<td>‘to rise’ (SEA); ‘to be’ (IA)</td>
</tr>
<tr>
<td>եկել</td>
<td>ekel ekeɻ</td>
<td>‘to come (RPTCP)’</td>
</tr>
</tbody>
</table>

For the words that show this glide-zero change, they are all polysyllabic. We have found monosyllabic words that have an invariant glide, such as [jeɻpʰ] ‘when’ տեր and [jeɻkʰ] ‘song’ տեր. But we haven’t been able find monosyllabic roots where the glide is deleted. It’s possible that glide deletion is only allowed in polysyllabic roots.

\(^1\)For the word ‘yesterday’ in Iranian Armenian, NK and her family tend to say this word as [eɻeɡ], while KM and AS report [eɻek].
3.1 Morphophonological alternations

When glide insertion applies word-initially, the orthographic convention is to write the word with an initial letter է. When the glide is absent, the convention is to use the letter ե. For example, the word ‘to cook’ with a glide [jeپʰエル] is spelled եփել, while the glide-less form [epʰエル] is spelled էփել.

A related process is how the letters ո,օ are pronounced [vo, o] root-initially, but both as [o] root-medially. For the letter ո, it seems that this letter is always pronounced as [vo] word-initially in both monosyllables and polysyllables. In Standard Eastern Armenian, a root-initial and word-medial [vo] changes to [o] doesn’t in prefixation, but Colloquial Eastern Armenian and Iranian Armenian prefer keeping this root-initial [vo] as [vo] (Dum-Tragut 2009: 16). But more data is needed to verify these tendencies.

Table 3.3: Maintaining initial [v] in Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>SEA</th>
<th>CEA</th>
<th>IA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ունւ</td>
<td>vosp</td>
<td>vosp</td>
<td>vosp</td>
</tr>
<tr>
<td>ոնգեղ</td>
<td>vorոfel</td>
<td>vorոfel</td>
<td>լո Foley</td>
</tr>
<tr>
<td>ոնգեղ</td>
<td>k-oroфem</td>
<td>k-oroфem</td>
<td></td>
</tr>
</tbody>
</table>

3.1.2 Vowel hiatus repair

Within the word, vowel-vowel sequences (vowel hiatus) are typically repaired, such as via [j] epenthesis or by changing [u] to [v]. Iranian Armenian seems to utilize all the vowel hiatus repair rules that are used by Standard Eastern. Iranian Armenian is however innovative in that it can also epenthesize a [w] glide.

Across the stem-inflection boundary in Standard Eastern Armenian, pre-vocalic /i/ tends to delete (1a) while pre-vocalic /u/ tends to de-vocalize or change to [v] (1b). Less common strategies are to epenthesize a glide [j] in these contexts. The following data uses the instrumental suffix /-ov/.

(1) /u/ devocalization and /i/ deletion in vowel hiatus

<table>
<thead>
<tr>
<th></th>
<th>SEA</th>
<th>IA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>աջի դջի</td>
<td>աջի դջի</td>
</tr>
<tr>
<td></td>
<td>աջ-ով դջ-ով</td>
<td>աջ-ով դջ-ով</td>
</tr>
<tr>
<td></td>
<td>աջի-ովի</td>
<td>աջի-ովի</td>
</tr>
<tr>
<td>b.</td>
<td>լեզու լեզու</td>
<td>լեզու լեզու</td>
</tr>
<tr>
<td></td>
<td>լեզվ-ով լեզվ-ով</td>
<td>լեզվով լեզվով</td>
</tr>
<tr>
<td></td>
<td>լեզու-ովի լեզու-ովի</td>
<td>լեզուով լեզուով</td>
</tr>
</tbody>
</table>

(Reformed), տթան (Classical)
3 Morphophonology

In KM’s judgments for pre-vocalic /u/, Iranian Armenian utilizes /u/-devocalization and /i/ deletion less often than Standard Eastern, while Iranian Armenian utilizes /j/-insertion more often than Standard Eastern.

Unlike Standard Eastern, Iranian Armenian utilizes [w] insertion to repair vowel hiatus in a cliticized /u=V/ sequence. Inserting a glide w is obligatory if the /u/ is part of the future converb. The second vowel is part of the inflected auxiliary, and the vowel can be /e, o, i/. We provide stress markings to reinforce the fact that the final vowel is a clitic. We don’t provide a finer segmentation for the auxiliary.

(2) [w] insertion for cliticized future converbs

\[ /je\textsubscript{i}kʰ-e-l-u=\textit{em}/ \quad \text{je}_i\textsubscript{kʰ}e.\textit{lu}.\textit{wem} \quad \text{‘I will sing’} \]
\[ /je\textsubscript{i}kʰ-e-l-u=iɻ/ \quad \text{je}_i\textsubscript{kʰ}e.\textit{lu}.\textit{wiɻ} \quad \text{‘you were going to sing’} \]
\[ /je\textsubscript{i}kʰ-e-l-u=ɒ/ \quad \text{je}_i\textsubscript{kʰ}e.\textit{lu}.\textit{wɒ} \quad \text{‘he will sing’} \]
\[ \sqrt{-\text{TH-INF-FUT.CVB}=\textit{is}} \quad \text{կատու ա} \]

Below, we show a rule for vowel hiatus repair in the future converb.

Rule 1. Morpheme-specific rule of w-epenthesis

\[ \emptyset \rightarrow [w] / u\textsubscript{1} _ V\textsubscript{2} \]

where /u\textsubscript{1}/ is future converb suffix, and /V\textsubscript{2}/ is the auxiliary

Insertion of w is also attested outside of the future converb. When an enclitic is attached to a /u/-final noun, the typical vowel hiatus repair rule is to insert [j]. But NK and AS report that [w] insertion is also possible.

(3) [w] insertion outside of the future converb

a. /kɒtu=e-m/
   kɒ.ˈtu.jem or kɒ.ˈtu.wem
   cat=is-PRS.1SG
   ‘I am a cat.’
   Կատու եմ։

b. /kɒtu=el=e-m/
   kɒ.ˈtu.je.lem or kɒ.ˈtu.we.lem
   cat=also=is-PRS.1SG
   ‘I am also a cat.’
   Կատու էլ եմ։
It is possible that Iranian Armenian innovated a rule of w-insertion because of contact with Persian. Persian allows various types of vowel hiatus repair rules (Ariyae & Jurgec 2021: 3). One such rule is inserting the glide [w] after a back vowel /u/ (Dehghan & Kambuziya 2012: 20).

### 3.1.3 Destressed high vowel reduction

Armenian utilizes a process of destressed high vowel reduction (Vaux 1998b; Khanjian 2009; Dolatian 2020, 2021a). When a root undergoes suffixation, regular final stress typically shifts to the suffix. In Standard Eastern and Iranian Armenian, destressed high vowels from the root reduce before derivational suffixes, but generally not before consonant-initial inflectional suffixes. Some words exceptionally reduce before the consonant-initial -neɻ.2

<table>
<thead>
<tr>
<th>SEA</th>
<th>IA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ɑmuˈsin</td>
<td>ɒmuˈsin</td>
<td>‘husband’</td>
</tr>
<tr>
<td>amusn-ʊtʃjun</td>
<td>amusn-ʊtʃun</td>
<td>‘marriage’</td>
</tr>
<tr>
<td>amusin-ner</td>
<td>ɒmusin-neɻ</td>
<td>‘husbands’</td>
</tr>
<tr>
<td>ʾskizb</td>
<td>ʾskizb</td>
<td>‘beginning’</td>
</tr>
<tr>
<td>skizb-ner</td>
<td>skizb-neɻ</td>
<td>‘beginnings’</td>
</tr>
<tr>
<td>skəzб-ner</td>
<td>skəzб-neɻ</td>
<td>‘beginnings’</td>
</tr>
</tbody>
</table>

Before vowel-initial inflectional suffixes, the tendency in Standard Eastern Armenian is for reduction to apply. For Iranian Armenian, KM feels that reduction applies less often in this context than in Standard Eastern.

(4) **Variation in vowel reduction before V-initial inflection**

- **a.** komʉdʒ3  ‘bridge’  կոմուրջ
  - komʉdʒ3-itsʰ  ‘bridge-ABL’  կոմուրջից
  - koməɻdʒ3-itsʰ  ‘bridge-ABL’  կումուրջից
- **b.** jeɻkiɻ  ‘world’  երկիր
  - jeɻkiɻ-um  ‘world-LOC’  երկիրում
  - jeɻkɪɻ-um  ‘world-LOC’  երկրում
- **c.** ˈtun  ‘house’  տուն
  - tuˈn-um  ‘house-LOC’  տունում
  - tən-um  ‘house-LOC’  տնում

2See footnote 9 on the difference in the pronunciation of the suffix suffix /-utʰjun/.
3 Morphophonology

Before vowel-initial inflectional suffixes, there is widespread cross-dialectal and lexical variation in the application of high vowel reduction (Ղարագյուլյան 1974, Մարգարյան 1997). For an overview, see Dum-Tragut (2009: 41ff) and Dolatian (2021a: ch2.7).

3.2 Phonologically-conditioned allomorphy

This section goes over some examples of phonologically-conditioned allomorphy in Iranian Armenian. These include syllable-counting allomorphy of the plural suffix (§3.2.1), schwa-zero and schwa-nasal alternations for the possessive and definite suffixes (§3.2.2), and variable voicing assimilation in the conditional prefixes (§3.2.3)

3.2.1 Syllable counting allomorphy of the plural suffix

For plural, the regular suffix is -eɭ for monosyllabic bases, and -neɭ for polysyllabic bases (Vaux 2003, Dolatian 2021b). This is a relatively straightforward case of syllable-counting allomorphy, as a form of phonologically-conditioned allomorphy.

Table 3.5: Distribution of regular plural suffixes

<table>
<thead>
<tr>
<th>Monosyllabic</th>
<th>Polysyllabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>bɒr ‘word’</td>
<td>բառ</td>
</tr>
<tr>
<td>bɒr-eɭ ‘words’</td>
<td>բառեր</td>
</tr>
<tr>
<td>senjɒk ‘room’</td>
<td>սենեակ</td>
</tr>
<tr>
<td>senjɒk-neɭ ‘rooms’</td>
<td>սենեակներ</td>
</tr>
</tbody>
</table>

Words that have only one syllable and the appendix -kʰ count as monosyllabic for plural-counting. Words with an initial appendix /s/ + a syllable are treated as polysyllabic.

Table 3.6: Pluralization of exceptional syllable structures

<table>
<thead>
<tr>
<th>syllable + /-kʰ/</th>
<th>/s/ + syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>pɒɻtkʰ ‘debt’</td>
<td>պարտք</td>
</tr>
<tr>
<td>pɒɻtkʰ-eɭ ‘debts’</td>
<td>պարտքեր</td>
</tr>
<tr>
<td>skizb ‘beginning’</td>
<td>սկիզբ</td>
</tr>
<tr>
<td>skizb-neɭ ‘beginnings’</td>
<td>սկիզբներ</td>
</tr>
<tr>
<td>kuɻt͡skʰ ‘breast’</td>
<td>կուրծք</td>
</tr>
<tr>
<td>kuɻt͡skʰ-eɭ ‘breasts’</td>
<td>կուրծքեր</td>
</tr>
<tr>
<td>skəzb-neɭ ‘beginnings’</td>
<td>սկզբներ</td>
</tr>
</tbody>
</table>
### 3.2 Phonologically-conditioned allomorphy

#### 3.2.2 Schwa alternations in the determiner slot

In nominal inflection, the determiner slot is occupied by either a possessive suffix or a definite suffix. Both types of suffixes display allomorphy conditioned by consonant- vs. vowel-final stems. The definite suffix likewise displays outwardly-conditioned allomorphy to subsequent vowels.

The possessive suffixes are -s, -t for vowel-final bases. A schwa is epenthesized after consonant-final bases. The epenthetic schwa is maintained between a C-final base and a V-initial clitic.

<table>
<thead>
<tr>
<th>No epenthesis after V-final base</th>
<th>V-</th>
<th>V_V</th>
</tr>
</thead>
<tbody>
<tr>
<td>kõtu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kõtu-s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kõtu-s=el</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kõtu-t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kõtu-t=el</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schwa epenthesis after C-final base</th>
<th>C_</th>
<th>C_V</th>
</tr>
</thead>
<tbody>
<tr>
<td>gûmôɾ̥</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gûmôɾ̥-əs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gûmôɾ̥-əs=el</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gûmôɾ̥-ət</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gûmôɾ̥-ət=el</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The definite suffix has three allomorphs: -a, -n, -ən. The choice of suffix is conditioned by the preceding segment and the following segment. When there is no following segment, the suffix is -n after vowel-final bases, but -ə after consonant-final stems.

<table>
<thead>
<tr>
<th>SEA</th>
<th>IA</th>
<th>V_</th>
<th>V_V</th>
<th>C_</th>
<th>C_V</th>
</tr>
</thead>
<tbody>
<tr>
<td>kətu</td>
<td>kõtu</td>
<td>kõtu-n</td>
<td>kõtu-n=el</td>
<td>gûmôɾ̥</td>
<td>gûmôɾ̥-ə</td>
</tr>
<tr>
<td>kõtu-s</td>
<td>cat-POS.1SG</td>
<td>cat-DEF</td>
<td>cat-DEF=also</td>
<td>'the amount'</td>
<td>'the amount'</td>
</tr>
<tr>
<td>kõtu-s=el</td>
<td>cat-POS.1SG=also</td>
<td>'also the amount'</td>
<td>'also the amount'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kõtu-t</td>
<td>cat-POS.2SG</td>
<td>'your cat'</td>
<td>'is the cat'</td>
<td>'is the amount'</td>
<td></td>
</tr>
<tr>
<td>kõtu-t=el</td>
<td>cat-POS.2SG=also</td>
<td>'also your cat'</td>
<td>'also the amount'</td>
<td>'also the amount'</td>
<td></td>
</tr>
</tbody>
</table>
The lects differ when the definite suffix is between a C-final base and V-initial clitic. In this context, Standard Eastern Armenian uses the -n form of the definite. In Iranian Armenian, the form is -ən. More examples are shown below.

(5) **Other examples of the /-ən/ form before clitics in Iranian Armenian**

\[ \dot{\text{m}d\text{t}h-\text{ən}=\text{d}} \quad \text{man-def}=\text{is} \quad \text{’(he) is the man’} \quad \text{չինշեւ ու} \]
\[ \dot{\text{i}n\text{k}h-\text{ən}=\text{d}} \quad \text{he-def}=\text{is} \quad \text{’it is he’} \quad \text{չինշեւ ու} \]
\[ \dot{d}\text{n}k-\text{ən}=\text{d} \quad \text{knife-def}=\text{is} \quad \text{’(it) is the knife’} \quad \text{չինշեւ ու} \]

Iranian Armenian also uses the -ən form between a C-final word and a V-initial word.

(6) **Use of -ən before a V-initial word**

a. \[ \dot{\text{i}n\text{k}h-\text{ən}=\text{i}} \quad \text{him-def} \quad \text{he.gen} \]
\[ \text{’himself’} \quad \text{չինշեւ իռ} \] (KM)

b. \[ \dot{\text{m}d\text{t}h-\text{ən}=\text{d} \quad \text{d}h\text{t}n-\text{t} \quad \text{t}h-\text{d}-\text{v} \]
\[ \text{man-def} \quad \text{wake.up-LV}-\text{AOR-PST-3SG} \]
\[ \text{’The man woke up.’} \quad \text{չանացաւ։} \] (KM)

Note that prosodic phrasing and pauses can block the use of the -ən form between a C-final word and V-initial word. For example, in the sentence below, it is common to have a pause between the subject and the object. The presence of a pause blocks the -ən form.

(7) \[ \dot{d}\text{jn-ə} \quad \text{indz} \quad \text{m\text{t}k\text{h}-t}-\text{d}-\text{v} \]
\[ \text{John-def me.dat clean-pst-3SG} \]
\[ \text{’John cleaned me.’} \quad \text{Գովեշեւ մեսերամ} \] (NK)

In sum, the shape of definite is sensitive to the type of preceding and following segment and to prosodic pauses. This amounts to a case of phrasal allomorphy that is outwardly-sensitive. Such phenomena are cross-linguistically rare (Paster 2006). For an analysis of the definite suffix in Iranian Armenian and other Armenian lects, see Dolatian (2022).
3.2.3 Voicing assimilation in the conditional prefix

There are reports of limited phonologically-conditioned allomorphy for the conditional prefix. Some speakers seem to have this process, some do not. The process resembles a mildly long-distance assimilation process whereby velar stops in a /CV-C/ context can assimilate in voice. For some speakers this process is limited to a few or no lexical items, while for others it’s more widespread.

The conditional prefix is underlyingly /k-/ (8a). Before a consonant, schwa epenthesis resolves the consonant cluster. Before a voiced velar stop [ɡ], AS reports that the prefix assimilates to [ɡə-] for some speakers (8b). However, one consultant (NK) does not produce any alternation (8c) Though for the word ɡɒm ‘I shall come’, NK’s family reports variable assimilation (8d).

Within Armenian linguistics, it is reported that New Julfa Armenian has a similar voicing assimilation for the cognate of this prefix (Vaux 1997, 1998a, 1998b: 39, 215ff; Vaux in prep: 287). This Armenian lect is spoken in the Isfahan province of Iran. It is possible that the traces of this process in (Tehrani) Iranian Armenian is due to language contact with New Julfa Armenian.

3.3 Phonosyntax: Auxiliary-induced segment deletion

We examine the behavior of the final segment of the perfective converb suffix: -el or -eɭ. This phenomenon is the most complex morphophonological process that we describe in this grammar, because it involves syntax-phonology interactions.
Phonologically, this segment can delete in different morphosyntactic contexts. To make this segment surface, we find that the ultimate conditioning factor is syntactic and long-distance. This factor is that the suffix has to precede the auxiliary ‘to be’ within the same clause or verb phrase. The suffix and auxiliary can be adjacent or non-adjacent.

This section focuses on describing as much of as we can about this suffix’s behavior. This process counts as a phonosyntactic or syntax-sensitive phonological process because of the deep interaction between the phonology and syntax. We postpone a complete theoretical analysis to future work.

We go over some basics of Armenian syntax, with regards to the mobile auxiliary (§3.3.1). We then discuss the basic data on liquid deletion in §3.3.2. Long-distance factors are examined in §3.3.3. An identical deletion process is attested from irregular imperfectives (§3.3.4). We discuss the diachronic origin of liquid deletion from Standard Eastern Armenian (§3.3.5).

Note that there are other Armenian lects in Iran which alternate in the form of the perfective converb suffix based on whether the auxiliary is to the right vs. the left of the verb. For Tehrani Iranian Armenian, this difference manifests in the presence/absence of the final liquid: V-elo vs. V-e. But in Iran, there are other Armenian lects where the difference is manifested in using a completely different allomorph for the perfective converb suffix. For example in Salmast (Vaux in review: 53), the pre-auxiliary form is V-s, while the post-auxiliary form is V-li. Other such dialects include Urmia (Ղարիբյան 1941: 275). It is an open question whether all the generalizations for Tehrani Armenian likewise extend to these other Armenian varieties of this sort.

### 3.3.1 Background on the mobile auxiliary

Before we discuss the main morphophonological process, we overview the basic features of Iranian Armenian syntax. We focus on the use of converbs and the mobile auxiliary. The syntactic data has been discussed in previous works on Standard Eastern Armenian, but previous analyses extend to Iranian Armenian (Comrie 1984, Kahnemuyipour & Megerdoomian 2011, 2017).

Like in Standard Eastern Armenian, many verbal tenses are marked by periphrasis. For example, the present indicative is marked by using the form of the verb that we call the ‘imperfective converb’. Tense and agreement is marked on the auxiliary ‘to be’. See §6.3.1 for full morphological paradigms.

(9)  a. jes giłkʰ-o  gəɻ-um  e-m
    I  book-DEF write-IMPF.CVB is-1SG
    ‘I am writing the book.’ (NK)
3.3 Phonosyntax: Auxiliary-induced segment deletion

Throughout this section we underline the relevant converb form. We highlight the auxiliary. We mark the nuclear stress of the sentence via boldface, and this information is quite relevant to the syntax of the auxiliary. In the above sentences, nuclear stress is on the verb.

Note that the auxiliary is phonologically cliticized to the word to its left, i.e., the converb. Evidence is that the auxiliary is syllabified with the converb: [ɡəɻu mem] ‘I am writing’. In terms of stress, the auxiliary is an unstressed clitic in general (§2.2.2).\(^3\)

In the simple sentences above, the auxiliary is by default after the verb. However, in more complex types of sentences, we find that this auxiliary can shift or move leftwards. Hosts for the mobile clitic include negation.

Negation is marked by using the prefix ʰt. When the verb is periphrastic, the negation prefix is placed directly before the verb, and then the auxiliary moves leftwards and attaches to the prefix. The prefix-auxiliary combination acts as its own phonological word, and carries the nuclear stress of the sentence.

Another context for leftward movement involves bare objects. In the above sentences, the object of the verb is definite and resists taking nuclear stress. But if the object lacks any morphological markers for definiteness or indefiniteness, then the object is considered bare, takes nuclear stress, and takes the auxiliary.

---

\(^3\)The auxiliary takes stress when it’s negated, as seen in (10).
3 Morphophonology

For descriptions and analyses of bare objects in other Armenian lects, see Standard Eastern (Comrie 1984, Megerdoomian 2009, Yeghiazaryan 2010, Crum 2020) and Standard Western (Sigler 1997, Sağ 2019, Kalomoiros 2022).

Another context is narrow focus. If a word has narrow focus and precedes the verb, then the auxiliary moves and attaches to that focused word.

(12) a. jes =e-m giɻkʰ-ə gəɻ-um
   I =is-1SG book-DEF write-IMPF.CVB
   ‘I am writing the book.’ (NK)

b. esoɻ =e-m giɻkʰ-ə gəɻ-um
today =is-1SG book-DEF write-IMPF.CVB
   ‘TODAY, I am writing the book.’ (NK)

It is obvious that there are strong correlations between auxiliary movement and nuclear stress. Such correlations have been modeled in the past with various frameworks and analyses (Tamrazian 1994, Megerdoomian 2009, Kahnemuyipour 2009, Kahnemuyipour & Megerdoomian 2011, 2017, Giorgi & Haroutyunian 2016, Hodgson 2019a). We do not analyze or provide a larger catalog of contexts for auxiliary movement. For our purposes, we focus on the effects of auxiliary movement on converbs.

3.3.2 Non-constant form of the perfective verb

Having overviewed the syntax of auxiliaries, this section shows how auxiliary movement interacts with the phonology of the perfective verb suffix.

The imperfective verb suffix -um is phonologically constant. Its segments never delete or change, regardless of whether the suffix precedes the auxiliary or not. In contrast, the perfective verb is formed with the suffix -el or -eɻ. The liquid deletes when the auxiliary has moved.

When the perfective verb suffix precedes the auxiliary, some speakers produce this suffix as -el, some as -eɻ, and some as either. The choice of liquid varies by speaker and generation. For consistency, we mostly use the -eɻ form in this chapter because HD’s main consultant NK preferred it.

(13) jes giɻkʰ-ə gəɻ-el/eɻ =e-m
   I book-DEF write-PERF.CVB =is-1SG
   ‘I have written the book.’ (NK)
3.3 Phonosyntax: Auxiliary-induced segment deletion

When the auxiliary is attached to the suffix, the auxiliary is syllabified with the suffix: \([gəɻ-e.l\text{em}]\) or \([gəɻ-e.ɻ\text{em}]\).

When the auxiliary shifts leftwards, the perfective converb suffix loses its liquid. We find deletion in with configurations involving negation (14a), bare objects (14b), or narrow focus (14c-14d), among others.

(14)  

a. \(\text{jes \(g\text{ičk}^h-ə\) \(\text{ʃt}^h\text{e}=\text{-}\text{m}\) \(gəɻ-e\)}\)

I book-def NEG=1SG write-PERF.CVB

'I have not written the book.'

(NK)

b. \(\text{jes \(g\text{ičk}^h\text{=}\text{e}\text{-}\text{m}\) \(gəɻ-e\)}\)

I book =IS-1SG write-PERF.CVB

'I have written books.'

(NK)

c. \(\text{jes \(=\text{e}\text{-}\text{m}\) \(g\text{ičk}^h-ə\) \(gəɻ-e\)}\)

I IS-1SG book-def write-PERF.CVB

'I have written the book.'

(NK)

d. \(\text{esol} \(=\text{e}\text{-}\text{m}\) \(g\text{ičk}^h-ə\) \(gəɻ-e\)}\)

today IS-1SG book-def write-PERF.CVB

'TODAY, I have written the book.'

(NK)

Note that in the above sentences, the final liquid of the suffix has deleted. NK sometimes would produce sentences where the deleted liquid was replaced with what HD and NK heard as an [h]. However, this [h] was so weak that it may be an extragrammatical sentence-final voiceless interval rather than an allophone of the underlying final liquid.

Auxiliary movement and liquid deletion is quite common in answers to wh-questions which naturally create narrow focus. The following set of questions and answers illustrate. Focus is on the wh-word \(\text{ʃt}^h\text{ʃ}\) in the question (15a), and on the focused word ‘song’ in the answer (15a). Because the verb is encliticized, the final liquid is either dropped or pronounced as [h]. It seems that the choice of deletion vs. [h] is unpredictable and to random chance.
3 Morphophonology

(15) a. \( \text{int}^h \quad =e-s \quad \text{je}^h \text{-e}(h) \)
what \( =\text{is-2SG} \quad \text{sing-PERF.CVb} \)

‘What have you sung?’

(16) b. jes es \( \text{je}^h \text{-ən} \quad =e-m \quad \text{je}^h \text{-e}(h) \)
I this \( =\text{is-1SG} \quad \text{sing-PERF.CVb} \)

‘I have song this song.’

The deletion of the liquid is not a prosodic process. It is not conditioned by the sentence-final pause. For example, in the following ditransitive constructions, the verb is between two noun phrases in a focus-neutral declarative sentence (16a). In the corresponding interrogative sentence, the auxiliary moves leftward and is placed on the wh-word. The verb can be sentence-final (16b) or sentence-medial (16c). In both cases, the verb lacks a final liquid.

(16) a. es \( \text{gi}^h \text{-ə} \quad \text{təv-ə} \quad =e-m \quad \text{dʒon-i-n} \)
this book-DEF \( =\text{is-1SG} \quad \text{John-DAT-DEF} \)

‘I have given this book to John.’

b. es \( \text{gi}^h \text{-ə} \quad \text{um-i-n} \quad =e-s \quad \text{təv-ə} \)
this book-DEF who-DAT-DEF is-2SG \( =\text{give-PERF.CVb} \)

‘Who have you given this book to?’

c. \( \text{um-i-n} \quad =e-s \quad \text{təv-ə} \quad es \quad \text{gi}^h \text{-ə} \)
who-DAT-DEF is-2SG \( =\text{give-PERF.CVb} \) this book-DEF

‘Who have you given this book to?’

In (16c) the post-verbal word starts with a vowel /e/, but this vowel does not block liquid deletion. Vowel hiatus between the suffix [-e] and the subsequent word [es] ‘this’ is not repaired by glide epenthesis. In our recordings, we notice a very slight transitional glide: [... təv-ə ʲes.. ].

When a word is focused, the most typical situation is to place the focused word before the verb (17a). In this case, the auxiliary shifts onto the focused word. The direct object is optional and can be added at the end of the sentence. If the sentence is negated (17b), we again find auxiliary shift and liquid deletion. Thus, the uncliticized verb surfaces without the final liquid, regardless of whether it is sentence-medial or sentence-final (17a).
3.3 Phonosyntax: Auxiliary-induced segment deletion

(17) a. $\text{jes ձոն-i-n }\cdot \text{ təv-e} =\text{e-m} \quad \text{təv-e} \quad (\text{es գիրք-ա})$
I John-DAT-DEF =is-1SG give-PERF.CVB this book-DEF
'I have given this book to JOHN.'  
(NK, KM)

b. $\text{jes ձոն-i-n} \cdot \text{ tʃʰ} =\text{e-m} \quad \text{təv-e} \quad (\text{es գիրք-ա})$
I John-DAT-DEF NEG=is-1SG give-PERF.CVB this book-DEF
'I have not given this book to John.'  
(NK, KM)

An alternative construction places the focused answer after the verb (18). In this case, the auxiliary does not shift leftwards and it remains cliticized to the verb. Thus, the verb surfaces with a liquid.

(18) $\text{es գիրք-ա} \cdot \text{ təv-e}ɻ =\text{e-m} \quad ձոն-i-n$
this book-DEF give-PERF.CVB =is-1SG John-DAT-DEF
'I have given this book to JOHN.'  
(NK)

Similarly, the following question-answer set again shows that the uncliticized converb loses its liquid in sentence-medial position.

(19) a. $\text{jeþpʰ =e-s} \quad \text{գիրք-ա} \quad \text{təv-e} \quad \text{ձոն-i-n}$
when =is-2SG book-DEF give-PERF.CVB John-DAT-DEF
'When have you given John the book.'  
(NK)

b. $\text{jes esoɻ} =\text{e-m} \quad \text{təv-e} \quad \text{ձոն-i-n}$
I today =is-1SG give-PERF.CVB John-DAT-DEF
'I have given it to John TODAY.'  
(NK)

AS’s fieldwork likewise reports the deletion of the liquid in uncliticized converbs, and the retention of the liquid in cliticized forms:

(20) a. $\text{voɻteɾ =e-s} \quad \text{ծան-v-e}$
where =is-2SG birth-PASS-PERF.CVB
'Where were you born?'  
(AS)

b. $\text{ek-eɻ} =\text{e-հ-ո, ek-eɻ} =\text{e-i-m}$
come-PERF.CVB =is-PST-3SG, come-PERF.CVB =is-PST-1SG
'He had come. I had come.'  
(AS)
3 Morphonology

Էկեր էր, էկեր իմ։

3.3.3 Long-distance conditions

So far, we’ve seen cases where the liquid is dropped when the auxiliary shifts leftward. Based on the data so far, one could hypothesize that liquid surfaces when the auxiliary is immediately to the right. We find evidence against this hypothesis. In order for the liquid to surface, the liquid doesn’t need to be adjacent to the auxiliary, just (non-immediately) before it. Data comes from intervening coordination and clitics. The data constitutes a type of suspended affixation (Kabak 2007, Kornfilt 2012, Erschler 2018, Fenger 2020, Dolatian accepted).

In simple cases of coordination, two verbs can be coordinated each with their own auxiliary. In a sentence such as (21a), the liquids of both verbs surface because each is before an auxiliary.

(21) Coordination and liquid deletion

<table>
<thead>
<tr>
<th>Verb1</th>
<th>Aux</th>
<th>Conj</th>
<th>Verb2</th>
<th>Aux</th>
</tr>
</thead>
<tbody>
<tr>
<td>չմեր-ել</td>
<td>=է-մ</td>
<td>կոմ</td>
<td>կերեր-ել</td>
<td>=է-մ</td>
</tr>
<tr>
<td>(drink-perf.cvb)</td>
<td>=is-1sg</td>
<td>or</td>
<td>(eat-perf.cvb)</td>
<td>=is-1sg</td>
</tr>
<tr>
<td>‘I have drunk or have eaten.’</td>
<td>(NK)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>խմեր կամ կերեր եմ։</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

But this sentence can be paraphrased with a simpler type of coordination which we call reduced coordination (21b). In reduced coordination, only one auxiliary is used. The auxiliary follows the second verb, and it licenses the liquids of both verbs. Note how this auxiliary licenses the liquid of the first verb (Verb1) even though they are not adjacent.

The generalization so far is that, in reduced coordination, the single auxiliary can license the liquids of both verbs without being adjacent to both of them. Similarly behavior is found in clitics.
The clitic [=el] is polysemous and can mean a host of meanings based on its position and presence of negation. We gloss it as ‘also’ because that is its basic meaning. For verbs without negation, the clitic can appear between the verb and auxiliary (22a), or after the auxiliary (22b). In neither case does the clitic prevent the liquid from surfacing. This is because the auxiliary is to the right of the liquid.

(22) Liquid deletion and clitics without negation

\[
\begin{align*}
\text{a. } \text{keɻ-eɻ} & =\text{el} \quad =\text{e-m} \\
\text{eat-PERF.CVB} & =\text{also} \quad =\text{is-1SG}
\end{align*}
\]

'I have also eaten.' (NK)

\[
\begin{align*}
\text{b. } \text{keɻ-eɻ} & =\text{e-m} \quad =\text{el} \\
\text{eat-PERF.CVB} & =\text{is-1SG} \quad =\text{also}
\end{align*}
\]

'I have eaten already!' (NK)

In contrast for verbs with negation, the clitic can be placed after either the auxiliary (23a) or after the verb (23b). In both cases, the liquid is deleted because the auxiliary shifted leftward. The clitic is vowel-initial and in the same prosodic word as the suffix; but the clitic cannot license the liquid.

(23) Liquid deletion and clitics with negation

\[
\begin{align*}
\text{a. } \text{t͡ʃʰ} & =\text{e-m} \quad =\text{el} \quad \text{keɻ-e} \\
\text{NEG} & =\text{is-1SG} \quad =\text{also} \quad \text{eat-PERF.CVB}
\end{align*}
\]

'Also, I have not eaten.' (NK, KM)

\[
\begin{align*}
\text{b. } \text{t͡ʃʰ} & =\text{e-m} \quad \text{keɻ-e} \quad =\text{el} \\
\text{NEG} & =\text{is-1SG} \quad \text{eat-PERF.CVB} \quad =\text{also}
\end{align*}
\]

'I have not eaten anymore.' (NK, KM)

In theoretical terms, the data can be categorized in terms of a post-lexical rule that is syntactically conditioned. Such cases are relatively rarer than purely prosodic rules, but still attested (Selkirk 1986, Kaisse 1985). However, to our knowledge, most attested cases of syntax-sensitive phonology involve adjacency between the target and trigger/blocker. For example, such locality or adjacency

\footnote{NK found the Aux-Clitic sequence rather odd but acceptable, while KM felt it too odd.}

The Iranian Armenian data is thus cross-linguistically rare in allowing long-distance conditioning. To our knowledge, the closest attested case of long-distance syntax-sensitive phonology is long-distance and discontinuous vowel harmony in Wolof (Sy 2005) and Guébie (Dąbkowski & Sande 2021). For Wolof, vowel harmony applies across words, specifically between a head and its complement. This makes vowel harmony a type of syntax-sensitive phonology. Harmony can ignore certain intervening words between the source and target vowels. This invisibility of intervening words is what makes Wolof be a case of long-distance syntax-sensitive phonology.

(24) Long-distance ATR agreement in Wolof, taken from Sy (2005: 95:ex1)

<table>
<thead>
<tr>
<th>a. [-ATR]</th>
<th>[-ATR]</th>
<th>[ATR]</th>
</tr>
</thead>
<tbody>
<tr>
<td>xaj</td>
<td>-u</td>
<td>weex</td>
</tr>
<tr>
<td>dog CL-REL be.white CL-DEM.DIST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘that white dog’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. [+ATR]</th>
<th>[+ATR]</th>
<th>[+ATR]</th>
</tr>
</thead>
<tbody>
<tr>
<td>bēy</td>
<td>-u</td>
<td>réy</td>
</tr>
<tr>
<td>goat CL-REL be.big CL-DEM.DIST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘that big goat’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.3.4 Irregular imperfective converb

All the preceding data focused on the perfective converb suffix. This suffix shows an inconstant form, with or without a final liquid: [-el/-l] or [-e]. Whether a liquid surfaced or not is based on the presence and location of the auxiliary. We find exactly the same behavior in another suffix: the irregular imperfective [-i(s)].

For regular verbs and most irregular verbs, the imperfective converb is formed by adding the suffix -um onto the verb root or stem. In contrast, there are two irregular verbs ‘to give’ and ‘to come’ which form their imperfective converb by adding the suffix -is to the infinitive. Paradigms for these irregular verbs are given in §6.6.2.

---

5 We thank Kie Zuraw for bringing the Wolof case to our attention. Another potential case is iterative or pervasive propagation in the Verbicaro dialect of Italian (Silvestri 2022: 7).

6 Standard Eastern Armenian utilizes the same irregular imperfective forms for the verbs ‘to come’ [g-a-l], ‘to give’ [t-a-l], and ‘to cry’ [l-a-l]. But in Iranian Armenian, the verb [l-a-l] ‘to cry’ is replaced by regular [lits₃-e-l] ‘to cry’ which forms the imperfective converb with -um: [lits₃-um]. See §6.6.4 for discussion of this verb.
3.3 Phonosyntax: Auxiliary-induced segment deletion

Table 3.9: Formation of regular and irregular imperfective converbs

<table>
<thead>
<tr>
<th></th>
<th>Regular</th>
<th>Irregular</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'to sing'</td>
<td>'to give'</td>
</tr>
<tr>
<td>Infinitive</td>
<td>jeɻkʰ-e-l</td>
<td>t-d-l</td>
</tr>
<tr>
<td></td>
<td>√-TH-INF</td>
<td>√-TH-INF</td>
</tr>
<tr>
<td>Impf. verb</td>
<td>jeɻkʰ-um</td>
<td>t-d-l-is</td>
</tr>
<tr>
<td></td>
<td>√-IMPF.CVB</td>
<td>√-IMPF.CVB</td>
</tr>
</tbody>
</table>

In §3.3.1, we saw that the regular suffix -um has a constant form and never alternates. In contrast, the irregular suffix -is as -is when before the auxiliary, and as -i when the auxiliary has shifted leftwards.

(25) 

a. jes ɡiɻkʰ-ə t-d-l-is  
   I book-def give-th-inf-impf.cvb =is-1sg  
   'I am giving the book.'  
   Ես գիրքը տալիս եմ։  
   (NK)

b. jes ɡiɻkʰ-ə ʧʰ=e-m  t-d-l-i  
   I book-def NEG=is-1sg give-th-inf-impf.cvb  
   'I am not giving the book.'  
   Ես չեմ տալ։  
   (NK)

c. jes ɡiɻkʰ =e-m  t-d-l-i  
   I book =is-1sg give-th-inf-impf.cvb  
   'I am giving books.'  
   Ես եմ գիրք եմ տալի։  
   (NK)

d. jes =e-m ɡiɻkʰ-ə  t-d-l-i  
   I is-1sg book-def give-th-inf-impf.cvb  
   'I am giving the book.'  
   Ես եմ գիրքը տալի։  
   (NK)

The imperfective -is∼-[i] alternation happens in the same contexts for the perfective [-el/ɻ]∼[-e] alternation. We report additional data from AS’s work. The same generalization stands: if the auxiliary has shifted leftwards, then the suffix -is alternates with -i.

(26) 

a. uʃ =e-n  g-d-l-i  
   late =is-3pl come-th-inf-impf.cvb  
   'They are coming late.'  
   (AS)
3 Morphophonology

b. *mez* ̣=e-n  t-d-l-i
us.DAT =is-3PL give-TH-INF-IMPF.CVB
‘They are giving it to us.’
(AS)

Մեզ են տալի։

c. *jes džezi χoskʰ*  ̣=e-m  t-d-l-i  vol
I  you.PL-DAT promise =is-3PL give-TH-INF-IMPF.CVB that
դարիք-աս  el  jepʰekʰ senisʰ  bdn-er  iʰ-i-∅
daughter-POS.1SG ever never these thing-PL NEG-is-3SG
dn-e-l-u
doTH-INF-FUT.CVB
‘I promise you that my daughter will never do these things.’
(AS)

Ես ձեզի խօսք եմ տալի որ աղջիկս էլ երբէք սենց բաներ չի անելու։

We likewise see the same long-distance conditions in reduced coordination. The suffix surfaces as [-is] when the auxiliary is to the right within the phrase, even if not adjacent to the suffix. The suffix surfaces as [-s] when the auxiliary shifts leftwards.

(27) a. ̣ t-d-l-is  ̣=e-m  kom ̣ tsdχ-um  ̣=e-m
give-TH-INF-IMPF.CVB =is-1SG or
sell-IMPF.CVB =is-1SG
‘I am giving or am selling.’
(NK)

Սայրի տու ձառակ առանում տու:

b. ̣ t-d-l-is  kom ̣ tsdχ-um  ̣=e-m
give-TH-INF-IMPF.CVB or
sell-IMPF.CVB =is-1SG
‘I am giving or selling.’
(NK)

Սայրի տու ձառակ առանում տո:

3.3.5 Diachronic origins

The previous section examined the synchronic behavior of the perfective converb suffix *-el/el* and how this suffix loses its liquid when the auxiliary has shifted. This section describes the diachronic origins of this behavior from Standard and Colloquial Eastern Armenian.

In Standard Eastern Armenian, the perfective converb suffix is *-el*, and the irregular imperfective converb suffix is *-is*. Whereas these suffixes alternate in Iranian Armenian, they do not in Standard Eastern. The forms of the suffixes remain constant regardless of whether the auxiliary has shifted leftwards.

(28) Constant forms in Standard Eastern Armenian
3.3 Phonosyntax: Auxiliary-induced segment deletion

a. \[ \text{ɡəɾ-el} \quad \text{write-PERF.CVB} \quad =\text{e-m}, \quad \text{t-ɑ-l-is} \quad \text{give-TH-INF-IMPF.CVB} \quad =\text{e-m} \]

\[ \text{‘I have written, I am giving.’} \]

b. \[ \text{ʧʰ} \quad \text{NEG=is-1SG} \quad \text{ɡəɾ-el}, \quad \text{write-PERF.CVB}, \quad \text{NEG=is-1SG} \quad \text{t-ɑ-l-is} \quad \text{give-TH-INF-IMPF.CVB} \]

\[ \text{‘I have not written, I am not giving.’} \]

The deletion of the final liquid is reported to be unique to the perfective verb suffix [-el/-eɭ] in Colloquial Eastern Armenian. This colloquial process is likewise attested in the Colloquial Eastern Armenian as spoken by immigrant communities in Los Angeles (Karapetian 2014: 72).

There is some experimental evidence on Colloquial Eastern Armenian that this optional deletion process has some correlations with the prosodic weakening of liquids (Գրիգորյան 2018).

One speaker of CEA (VP) also informed us that the clitic [=el] ‘also, even’ can also optionally delete its liquid in CEA:
3 Morphophonology

(30) \[ \text{jes e(l) kʰez =e-m spas-um} \]
I also you.sg.dat =is-1SG wait-IMPF.CVB
‘I am also waiting for you.’ (VP)

For Colloquial Eastern Armenian, we’ve asked young speakers from Armenia (around 20-40 years old) for their sociolinguistic intuitions about the optional deletion in the suffixes [-el] and [-is]. Some speakers told us that they themselves do this optional process, some told us they don’t do it all. Some told us that this process is common, while others told us that it’s judged as ‘vulgar’ and uncommon. Some told us that they can apply the deletion for some verbs, but not others.

Table 3.10: Consultants on Colloquial Eastern Armenian and their meta-linguistic judgments

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Age</th>
<th>Sex</th>
<th>What verbs?</th>
<th>Social judgment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP</td>
<td>mid-30s</td>
<td>M</td>
<td>any verb</td>
<td>“any social class/region”</td>
</tr>
<tr>
<td>HH</td>
<td>early-20s</td>
<td>M</td>
<td>N/A</td>
<td>“it’s colloquial and vulgar”</td>
</tr>
</tbody>
</table>

Based on the above reports, it is clear that this colloquial process is attested but stigmatized. The use of this process varies by speaker, and sometimes by the verb. There is little to no work on the variationist sociolinguistics of Armenian,\(^7\) thus we do not know if any demographic factors are correlated with this deletion process.

Diachronically, there is an obvious path of historical development for the perfective suffix in Iranian Armenian. 1) In some stage of the dialect, there was no deletion at all [-el] (like modern SEA). 2) Later on, the dialect developed optional deletion [-e(l)] (like modern CEA). 3) And finally, the deletion become obligatory [-e] (as in modern IA).

\(^7\)To our knowledge, the closest work is Զալքիան (1981)’s study of social factors in different Armenian morphophonological choices.
4 Nominal morphology

This chapter goes through the basics of nominal inflection in Iranian Armenian. In general, we have not found any significant differences between Standard Eastern and Iranian Armenian in this domain. We thus keep this chapter brief, with an overview of basic paradigms. For larger paradigms and for work on the noun phrase of Armenian, we refer readers to other sources for Standard Eastern Armenian (Kozintseva 1995, Yeghiazaryan 2010; Tamrazian 1994: ch4; Megerdoomian 2009: ch5; Dum-Tragut 2009: ch2.1; Hodgson 2019b: ch2.1.1) and Standard Western Armenian (Sigler 1997; Khanjian 2013: ch2.3).

4.1 Basic template for nominal inflection

Nominal inflection is agglutinative for number, case, possession, and definite marking. The basic template for nominal inflection is Table 4.1. The rightmost column is dedicated to possessive and definiteness marking, which we refer to collectively as a Determiner slot. We list productive suffixes within each cell, including suffixal allomorphs.

<table>
<thead>
<tr>
<th>N</th>
<th>Number</th>
<th>Case (k)</th>
<th>Determiner (DET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>-∅</td>
<td>NOM/ACC</td>
<td>unmarked -∅</td>
</tr>
<tr>
<td>PL</td>
<td>-eɭ</td>
<td>DAT/GEN</td>
<td>POSS.1SG -㈣s -u</td>
</tr>
<tr>
<td></td>
<td>-ėnɭ</td>
<td>ABL</td>
<td>POSS.2SG -㈣t -η</td>
</tr>
<tr>
<td></td>
<td>-vunɭ</td>
<td>INS</td>
<td>DEF -㈣ -ג</td>
</tr>
<tr>
<td></td>
<td>-um</td>
<td>LOC</td>
<td>-n -ג</td>
</tr>
</tbody>
</table>

Some of the above morphemes have multiple realizations due to phonologically conditioned allomorphy. Such allomorphy is discussed in §3.2.

To illustrate nominal inflection, we show the paradigms of a singular case-marked noun, a plural case-marked noun, and a plural case-marked possessed noun. Note how possessive marking follows case marking.
### 4 Nominal morphology

Table 4.2: Paradigm for singular noun, plural noun, and plural possessed noun

<table>
<thead>
<tr>
<th></th>
<th>N-K</th>
<th>N-pl-K</th>
<th>N-pl-K-poss.1sg</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM/ACC</td>
<td>senjɒk</td>
<td>senjɒk-neɻ</td>
<td>senjɒk-neɻ-əs</td>
</tr>
<tr>
<td></td>
<td>ուղղական</td>
<td>ուղղականությամբ</td>
<td>ուղղականությամբ</td>
</tr>
<tr>
<td>DAT/GEN</td>
<td>senjɒk-i</td>
<td>senjɒk-neɻ-i</td>
<td>senjɒk-neɻ-i-s</td>
</tr>
<tr>
<td></td>
<td>հայցական</td>
<td>հայցականությամբ</td>
<td>հայցականությամբ</td>
</tr>
<tr>
<td>ABL</td>
<td>senjɒk-itsʰ</td>
<td>senjɒk-neɻ-itsʰ</td>
<td>senjɒk-neɻ-itsʰ-əs</td>
</tr>
<tr>
<td></td>
<td>բացառական</td>
<td>բացառականությամբ</td>
<td>բացառականությամբ</td>
</tr>
<tr>
<td>INS</td>
<td>senjɒk-ov</td>
<td>senjɒk-neɻ-ov</td>
<td>senj Javascript: əs</td>
</tr>
<tr>
<td></td>
<td>գործիական</td>
<td>գործիականությամբ</td>
<td>գործիականությամբ</td>
</tr>
<tr>
<td></td>
<td>ներգոյական</td>
<td>ներգոյականությամբ</td>
<td>ներգոյականությամբ</td>
</tr>
</tbody>
</table>

In Standard Eastern Armenian, the name for case is \[\text{հոլով}\]. The names of the different cases are the following:

Table 4.3: Names of cases in Standard Eastern Armenian

<table>
<thead>
<tr>
<th>Case</th>
<th>[սերական]</th>
<th>[հայոցական]</th>
<th>[կառավարական]</th>
<th>[ինստենտային]</th>
<th>[նորինյագան]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>[սերական]</td>
<td>[հայոցական]</td>
<td>[կառավարական]</td>
<td>[ինստենտային]</td>
<td>[նորինյագան]</td>
</tr>
<tr>
<td>Accusative</td>
<td>[սերական]</td>
<td>[հայոցական]</td>
<td>[կառավարական]</td>
<td>[ինստենտային]</td>
<td>[նորինյագան]</td>
</tr>
<tr>
<td>Genitive</td>
<td>[սերական]</td>
<td>[հայոցական]</td>
<td>[կառավարական]</td>
<td>[інс]: ռենտа</td>
<td>[նորինյագան]</td>
</tr>
<tr>
<td>Dative</td>
<td>[սերական]</td>
<td>[հայոցական]</td>
<td>[կառավարական]</td>
<td>[інс]: ռենտա</td>
<td>[նորինյագան]</td>
</tr>
<tr>
<td>Ablative</td>
<td>[սերական]</td>
<td>[հայոցական]</td>
<td>[կառավարական]</td>
<td>[інс]: ռենտա</td>
<td>[նորինյագան]</td>
</tr>
<tr>
<td>Instrumental</td>
<td>[սերական]</td>
<td>[հայոցական]</td>
<td>[կառավարական]</td>
<td>[інс]: ռենտա</td>
<td>[նորինյագան]</td>
</tr>
<tr>
<td>Locative</td>
<td>[սերական]</td>
<td>[հայոցական]</td>
<td>[կառավարական]</td>
<td>[інс]: ռենտա</td>
<td>[նորինյագան]</td>
</tr>
</tbody>
</table>

In terms of syncretism and exponence, nominative and accusative are zero-marked, singular number is unmarked, and dative and genitive are syncretic for common nouns. The syncretism however does not appear for personal pronouns, which we discuss in §5.1.

Standard Eastern Armenian can use the instrumental case marker -ov to denote either the meaning of ‘to use X as an instrument’ or ‘to go along with X’. The latter meaning is considered a comitative meaning (Dum-Tragut 2009: 93). However in Iranian Armenian, the comitative meaning of the instrumental suffix is considered atypical and odd. Speakers prefer to express the comitative meaning through an alternative postpositional construction.
4.1 Basic template for nominal inflection

For example, sentence (1a) places an instrumental suffix on the noun. The intended interpretation is comitative: to go along with the sister. Such a meaning is parseable in Standard Eastern Armenian, but not in Iranian Armenian. The typical Iranian Armenian reading would be purely instrumental: to go to the cinema by using the sister. To express the comitative meaning, speakers strongly prefer using the postposition *het* (1b).

\[(1) \quad \begin{align*}
a. & \quad kʰəɻ-ot͡ʃʰ-ov \ gən-d-տֶսʰ-i-ŋkʰ \ sinemο \\
& \quad \text{sister-DAT-INS-POS.1SG go-TH-AOR-PST-1PL cinema} \\
& \quad \text{Intended meaning: ‘We went to the cinema along with my sister.’} \\
& \quad \text{Actual meaning: ‘We went to the cinema by using my sister.’} \\
& \quad \begin{array}{cc}
\begin{array}{c}
\text{Քրոջովս գնացինք սինեմա։} \\
(\text{KM})
\end{array}
& \\
\end{array}
\\
b. & \quad kʰəɻ-ot͡ʃʰ-əs \ het \ gən-d-տֶսʰ-i-ŋkʰ \ sinemο \\
& \quad \text{sister-GEN-POS.1SG with go-TH-AOR-PST-1PL cinema} \\
& \quad \text{‘We went to the cinema along with my sister.’} \\
& \quad \begin{array}{cc}
\begin{array}{c}
\text{Քրոջս հետ գնացինք սինեմա։} \\
(\text{KM})
\end{array}
& \\
\end{array}
\end{align*}\]

The suffixes in Table 4.1 are the regular or default for the corresponding morphosyntactic features. Iranian Armenian has limited morphologically-conditioned allomorphy with irregular suffixes. We have not found any significant differences for irregular inflection in Iranian Armenian vs. Standard Eastern Armenian. At most, it seems that Iranian Armenian is slowly leveling out irregular inflection.

To illustrate, the regular dative/genitive suffix is *-i*. In both Standard Eastern and Iranian Armenian, the dative/genitive suffix has a wide set of irregular allomorphs or realizations. For example, the suffix *-ութիւն /-utʰjun/ is a productive nominalizer. This suffix forms an irregular dative/genitive by using a different allomorph for the entire nominalizer suffix: *-ութեան /-utʰjɒn/. The use of this allomorph is the prescriptive rule in Standard Eastern and Iranian Armenian, but KM reports that Iranian Armenian speakers much more frequently apply a regularized form *-/utjun-i/*.

\[(2) \quad \text{Leveling out of irregular dative/genitive of /-utjun/}
\begin{align*}
a. & \quad uɻɒχ \text{ ‘happy’} \\
& \quad uɻɒχ-utjun \text{ happy-NMLZ ‘happiness’} \\
& \quad uɻɒχ-utjun \text{ DAT/GEN ‘of/to happiness’} \\
b. & \quad uɻɒχ-utjun-i \text{ happy-NMLZ-DAT/GEN ‘of/to happiness’} \\
& \quad \begin{array}{cc}
\end{align*}\]

\[^1\text{For the word ‘sister’, the nominative form is [kʰuɻ] քուր. In the dative/genitive, the word uses an irregular allomorph for both the root and the suffix: [kʰəɻ-ot͡ʃʰ]. The dative/genitive stem is then further inflected to form the instrumental. Note that prescriptive the irregular dative/genitive suffix is [-od͡ʒ], but in Iranian Armenian it is more often pronounced as [-ot͡ʃʰ].}\]
For complete paradigms of these irregular declensions in Standard Eastern Armenian, see Dum-Tragut (2009: ch2.1.2). These paradigms apply to the formal prescriptive speech of Iranian Armenians. But in casual speech, KM and AS report the loss of various irregular case suffixes.

4.2 Constraints on definite marking and case marking

The determiner slot can be realized by either nothing, the 1SG possessive, 2SG possessive, or the definite suffix. The possessive 1SG and possessive 2SG can be after any type of case marker. This was illustrated in section §4.1 in Table 4.2 for the 1SG possessive. However, the definite suffix cannot follow the genitive, ablative, or instrumental (Dum-Tragut 2009: 104; Yeghiazaryan 2010: 7; Hodgson 2019b: 48, review).

To illustrate, Table 4.4 shows definite marking on singular nouns and plural nouns. For the genitive, ablative, and instrumental, the noun is semantically ambiguous in terms of being definite or not.

<table>
<thead>
<tr>
<th></th>
<th>N-k-def</th>
<th>N-pl-k-def</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM/ACC</td>
<td>senjok-ə</td>
<td>senjok-neɭ-ə</td>
</tr>
<tr>
<td>DAT</td>
<td>senjok-i-n</td>
<td>senjok-neɭ-i-n</td>
</tr>
<tr>
<td>GEN</td>
<td>senjok-i</td>
<td>senjok-neɭ-i</td>
</tr>
<tr>
<td>ABL</td>
<td>senjok-ıtsʰ</td>
<td>senjok-neɭ-ıtsʰ</td>
</tr>
<tr>
<td></td>
<td>* senjok-ıtsʰ-ə</td>
<td>* senjok-neɭ-ıtsʰ-ə</td>
</tr>
<tr>
<td>INS</td>
<td>senjok-ov</td>
<td>senjok-neɭ-ov</td>
</tr>
<tr>
<td></td>
<td>* senjok-ov-ə</td>
<td>* senjok-neɭ-ov-ə</td>
</tr>
<tr>
<td>LOC</td>
<td>senjok-um</td>
<td>senjok-neɭ-um</td>
</tr>
<tr>
<td></td>
<td>* senjok-um-ə</td>
<td>* senjok-neɭ-um-ə</td>
</tr>
</tbody>
</table>

It is interesting that the dative and genitive are syncretic with the suffix -i. However, the definite suffix can be used after the dative form, but not the genitive form. This is illustrated in the following sentences.

In sentence (3a), the suffix -i marks dative case. It can take the definite suffix -n. But in (3b), the suffix -i marks genitive case. It cannot be following by the definite suffix.
4.3 Constraints on possessive marking

(3) a. senjɒk-i-n ɡiɻkʰ təv-d-m
room-DAT-DEF book give-PST-1SG
'I gave books to the room.' (NK)
մենատայք գիրք տուամ.
b. senjɒk-i(-n) ɡuɪn-ə
room-GEN-*DEF color-DEF
'the color of the room' (NK)
սենեակի գոյնը

The co-occurrence restriction applies equally to both non-human nouns and
to human nouns, such as the given name Aram.

(4) a. ɒɻɒm-i-n ɡiɻkʰ təv-d-m
Aram-DAT-DEF book give-PST-1SG
'I gave books to Aram.' (NK)
Արամին գիրք տուամ.
b. ɒɻɒm-i(-n) ɡiɻkʰ-ə
room-GEN-*DEF book-DEF
'the book of Aram' (NK)
Արամի գիրքը

The co-occurrence restriction between the genitive and the definite suffix is
limited to just the definite suffix. Other determiner suffixes like the 1SG posses-
sive can freely co-occur with either the dative -i or the genitive -i.

(5) a. senjɒk-i-s ɡiɻkʰ təv-d-m
room-DAT-POSS.1SG book give-PST-1SG
'I gave books to my room.' (NK)
մենատայք գիրք տուամ.
b. senjɒk-i-s ɡuɪn-ə
room-GEN-POSS.1SG color-DEF
'the color of my room' (NK)
սենեակիս գոյնը

4.3 Constraints on possessive marking

The determiner slot can be occupied by either the possessive suffixes or the defi-
nite suffix. There are likewise co-dependencies between this slot and the posses-
sive pronouns.

Draft of May 31, 2022, 08:00
4 Nominal morphology

Iranian Armenian has a set of 8 genitive/possessive pronouns which mark possession. The 3SG and 3PL each have two members. One member is logophoric, while the other member is non-logophoric. This is discussed in §5.1.

If a noun is possessed by the 1st person, then the noun can surface in one of three forms. It can surface without a possessive pronoun and with the 1SG possessive suffix. It can surface with the possessive pronoun and the 1SG possessive suffix. It can likewise surface with the possessive pronoun but with the definite suffix. Similar options are found for 2nd person possessives.

(6) a. Variation in 1SG possessive marking
   a. senjk-əs սենեակս
      room-poss.1sg
   b. im senjk-əs իմ սենեակս
      my room-poss.1sg
   c. im senjk-ə իմ սենեակը
      my room-def
      ‘my room’

b. Variation in 2SG possessive marking
   a. senjk-ət սենեակդ
      room-poss.2sg
   b. kʰo senjk-ət քո սենեակս
      my room-poss.2sg
   c. kʰo senjk-ə քո սենեակը
      my room-def
      ‘your room’

Sociolinguistically, the simultaneous use of the possessive pronoun and the definite suffix is deemed as prescriptively correct (Dum-Tragut 2009: 113). The use of both the pronoun and possessive suffix is instead restricted to colloquial speech and often stigmatized. But it is the preferred strategy for casual speech in Iranian Armenian.

For the other combinations of person and number, there is no dedicated possessive suffix. Instead, the possessed noun takes the genitive/possessive pronoun and the definite suffix.
4.4 Synthetic constructions for plural possessors

When the noun has a plural possessor, the most typical construction is to use a genitive pronoun and the definite suffix. Both SEA and IA allow a synthetic alternative that is very restricted in usage (Dum-Tragut 2009: 113-114). In SEA, one can use the plural suffix -neɾ to encode a plural possessor.

(7) SEA (adapted from Khurshudian (2020: 339,340))
   a. mer atʃʰkʰ-er-ə, mer het-ə
      us.gen eye-pl-def, us.gen with-def
      ‘our eyes, with us’
      մեր աչքերը, մեր հետը
   b. atʃʰkʰ-ner-əs, het-ner-əs
      eye-pl-poss.1sg, with-pl-poss.1sg
      ‘our eyes, with us’
      աչքներս, հետներս

Note how the plural -ner suffix is supposed to take only polysyllabic stems, while the allomorph -eɾ is for monosyllables. But the suffix -neɾ is exceptionally used to mark plural possession on monosyllables in the above examples (§3.2.1).

In SEA, the use of this synthetic construction for plural possessors is quite unproductive, and limited to concepts such as body parts and adpositions. In contrast, such constructions are more productive in Standard Western Armenian using different morphological templates (Arregi et al. 2013, Bezrukov 2016).

The SEA-style of plural possessives is also attested in IA

(8) IA
4 Nominal morphology

a. meɻ otʰkʰ-eɻ-ə, meɻ het-ə
   us.gen eye-pl-def, us.gen with-def
   ‘our eyes, with us’  (NK)

b. otʰkʰ-neɻ-əs,
   eye-pl-poss.1sg, with-pl-poss.1sg
   ‘our eyes, with us’  (NK)

This construction seems particularly common for body parts which come in pairs, like feet or eyes.

(9) IA

a. meɻ votkʰ-eɻ-ə, meɻ dzer-eɻ-ə
   us.gen foot-pl-def, us.gen hand-pl-def
   ‘our feet, our hands’  (NK)

b. votkʰ-neɻ-əs, dzer-neɻ-əs
   foot-pl-poss.1sg, hand-pl-poss.1sg
   ‘our feet, our hands’  (NK)

As in SEA, this construction is restricted and unproductive in IA. NK found it odd and ‘improper’ to add it to nouns that were animals.

(10) IA

a. meɻ muk-ə, meɻ kov-ə, meɻ kɒtu-n
   us.gen mouse-def, us.gen cow-def, us.gen cat-def
   ‘our mouse, our cow, our cat’  (NK)

   mouse-pl-poss.1sg, cow-pl-poss.1sg, cat-pl-poss.1sg
   Intended: ‘our mouse, our cow, our cat’  (*NK)

4.5 Differential object marking

In object position, common nouns take covert accusative case. In contrast, human nouns in object position take dative -i as a form of differential object marking.
The same pattern occurs in Standard Eastern Armenian (Dum-Tragut 2009: 61; Scala 2011).

To illustrate, consider the sentences below. If the object is a non-human (11a), then the noun takes covert accusative case. If the object is a human, such as the given name Aram (11b), then the object must take dative case. Our consultants felt that if the dative marker was absent (11c), then the sentence reads as if Aram was a non-human entity.

(11)  
   a.  senjɒk-ə mɒkʰɻ-ɒ-m  
       room-DEF clean-PST-1SG  
       'I cleaned the room.'  
       (NK)  
   b.  ɒɻɒm-i-n mɒkʰɻ-ɒ-m  
       Aram-DAT-DEF clean-PST-1SG  
       'I cleaned Aram.'  
       (NK)  
   c.  *ɒɻɒm-i mɒkʰɻ-ɒ-m  
       Aram-DAT clean-PST-1SG  
       Intended: 'I cleaned Aram'.  
               Actual: 'I cleaned some entity called an “Aram”'.

4.6 Indefinites and classifiers

Like Standard Eastern Armenian, Iranian Armenian has grammaticalized the numeral ‘one’ into an indefinite proclitic. Iranian Armenian likewise utilizes a classifier [hɒt] for counting. The combination of the indefinite and classifier have some semantic and phonological idiosyncrasies (Hodgson 2020a).

The numeral ‘one’ in Iranian Armenian is [mek]. The k segment is retained in citation form (12a). But when the numeral is used as a modifier, the k can be dropped: me rope ‘one minute’ (12b). The me morph is also grammaticalized as an indefinite proclitic (12c). It is spelled as ուռ [mi] because the Standard Eastern equivalent is [mi].

(12)  
   a.  mek  
       one  
       'one'  
       (KM)

---

^2For the word ‘minute’, the rhotic is a flap [ɾope] in Standard Eastern Armenian, but it is a trill in NK and KM’s speech [rope].
4 Nominal morphology

\[ \text{me} \]

b. mek/me rope
    one minute
  \( \text{‘one minute’} \) (NK, KM)
\[ \text{me} \]

c. me bon
    INDF thing
  \( \text{‘A thing; something’} \) (NK)

The indefinite can be used alongside the classifier \( h\text{t} \) (Sigler 2003, Sağ 2019). The classifier \( h\text{t} \) can also be used as a noun meaning ‘piece’ (13a). As in Standard Eastern and Western Armenian, the classifier is used in number + noun constructions. Here, the \( \text{me} \) is on the surface ambiguous between an indefinite proclitic and a numeral (13b). But when it precedes the classifier \( h\text{t} \), the morpheme \( \text{me} \) is unambiguously a numeral (13c).

(13) a. me h\text{t}
    INDF/one piece
  \( \text{‘a piece; one’} \) (KM)
\[ \text{me} \]

b. me m\text{d.}\text{t}^{h}
    INDF/one man
  \( \text{‘a man’} \) (KM)
\[ \text{me} \]

c. me h\text{t} m\text{d.}\text{t}^{h}
    INDF/one CLF man
  \( \text{‘a man’} \) (KM)

The construction \( \text{me h\text{t}} \) can undergo vowel lowering and fronting as \( \text{mæ hæt} \). This phrase can be further reduced into a single morph \( \text{mæt} \). Note the use of [æ] which is otherwise a marginal phoneme in Iranian Armenian.

(14) a. {mæt / mæ hæt} m\text{d.}\text{t}^{h}
    INDF.CLF / INDF CLF man
  \( \text{‘a man’} \) (NK)
4.6 Indefinites and classifiers

b. \{mæt / mæ hæt\} χ<QString>
   INDF.CLF / INDF CLF toy
   ‘a toy’
   Մի հատ խաղալիք

\text{(AS)}

\text{The combination of indefinite + classifier is also used as an adverb to denote}
\text{a sense of transience, roughly translatable to ‘for a moment’ or ‘a little bit’}.

\text{(15)  a. mæt \text{IMP.2SG} ste}
   INDF.CLF come.IMP.2SG here
   ‘Come here for a moment.’
   Մի հատ արի ստէ:
   \text{(AS)}

\text{b. mæt mætɒtˢʰ-i mjus-i ʐqɒtˢʰmʊŋkʰ-neɭ-i mds-i-n}
   INDF.CLF think-IMP.2SG other-GEN feeling-PL-GEN about-GEN-DEF
   ‘Think a little bit about the other person’s feelings.’
   Մի հատ մտածէ միւսի զգացմունքների մասին:
   \text{(AS)}

\text{c. mæt hɒŋgəstɒtˢʰɻ-u senjɒk-um-ət}
   INDF.CLF relax-IMP.2SG room-LOC-POSS.2SG
   ‘Rest for a while in your room.’
   Մի հատ հանգստացրու սենեակում:
   \text{(AS)}
5 Function words

We go over basic function words in this chapter, including personal pronouns (5.1), demonstratives (5.2), interrogative pronouns or wh-words (5.3), and other function words (5.4). We have not found many significant differences between Iranian Armenian and Standard Eastern Armenian when it comes to pronouns.

5.1 Personal pronouns

Iranian Armenian utilizes the personal pronouns in Table 5.1. Whereas common nouns are syncretic for dative and genitive, pronouns distinguish the two cases. The Iranian Armenian pronouns do not significantly differ from Standard Eastern (Dum-Tragut 2009: 123) except that the logophoric 3SG dative is *iɾen* in Standard Eastern but *iɻɒn* in Iranian Armenian. The form [iran] is attested in CEA (Dum-Tragut 2009: 128).

Table 5.1: Paradigm of personal pronouns in Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>Nominative PRO</th>
<th>Acc/Dative PRO-(DAT)</th>
<th>Genitive PRO</th>
<th>Ablative PRO-(NX)-ABL</th>
<th>Instrumental PRO-(NX)-INS</th>
<th>Locative PRO-(NX)-LOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>jes tu</td>
<td>indz, indz-i</td>
<td>im</td>
<td>indz-on-itsʰ</td>
<td>indz-on-ov</td>
<td>indz-on-um</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>du ռեն</td>
<td>kʰez, kʰez-i</td>
<td>kʰo ռեն</td>
<td>kʰez-on-itsʰ</td>
<td>kʰez-on-ov</td>
<td>kʰez-on-um</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td>iŋkʰ-ա-ռեն</td>
<td>ռեն, ռեն-ա-ռեն</td>
<td>tʰ-ռեն</td>
<td>tʰ-ռեն-ա-ռեն</td>
<td>ռեն-ov</td>
<td>ռեն-ու</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1PL</td>
<td>menkʰ-ռեն</td>
<td>mez, mez-i</td>
<td>mez ռեն</td>
<td>mez-on-itsʰ</td>
<td>mez-on-ov</td>
<td>mez-on-um</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td>dukʰ-ռեն</td>
<td>dzez, dzez-i</td>
<td>dzez ռեն</td>
<td>dzez-on-itsʰ</td>
<td>dzez-on-ov</td>
<td>dzez-on-um</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td>iɾentsʰ-ռեն</td>
<td>iɾentsʰ-ռեն</td>
<td>iɾentsʰ-ռեն</td>
<td>iɾentsʰ-ռեն-ա-ռեն</td>
<td>iɾentsʰ-ռեն-ov</td>
<td>iɾentsʰ-ռեն-ու</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5 Function words

For the 3SG and 3PL, there are two series of pronouns. One series is logophoric and starts with the segment $i$, while the other series is a generic 3rd person pronoun and starts with $n$. For the syntactic distribution of Armenian logophors, see Sigler (2001), Donabédian-Demopoulos (2007). For both NK and KM, the logophoric pronoun is considered more ‘conversational’, while the non-logophoric pronoun feels more formal. For the 3PL non-logophor, the initial /naɻɔ-/ sequence was often lenited in NK’s speech, e.g., nominative [naɻɔntsʰ̠] or lenited [nɔntsʰ̠] ‘they’.

For the accusative/dative series, outside of the 3rd person, the pronoun has two forms: one bare and one suffixed with -$i$. For example, accusative/dative 1SG is ind͡z or ind͡z-$i$. The bare form is the more common form, but there is significant speaker variation on the preferred form. For example, NK almost always used the bare form in our elicitations, while AS reports that his consultants often used the suffixed form.

In pronouns, the accusative is syncretic with the dative. This syncretism is shown in the following sentences.

(1) a. դձոն-ը մձ մբկʰ(print)-d-v  
John-def me.dat clean-pst-3sg  
‘John cleaned me.’ (NK)

b. դձոն-ը մձ գիɻkʰ mɒkʰɻ-ɒ-v  
John-def me.dat book clean-pst-3sg  
‘John gave a book to me.’ (NK)

Morphotactically, the ablative, instrumental, and locative are built on top of the dative form. For the non-third person series, the dative form and the added case suffix are separated by the meaningless morph -$ɒn$. This morph sequence can be weakened to either -$ən$- or -$n$-: [ind͡z-$ən$-itsʰ̠, ind͡z-n-itsʰ̠] ‘I-ABL’.

We have received conflicting judgments on the frequency of such weakening. NK always lenited the 1SG obliques to -$ən$-, e.g. 1SG ablative ind͡z-$ən$-itsʰ̠. Yet she always lenited the other non-third person series to just -$n$-, e.g., dative 2SG kʰez-$n$-itsʰ̠. In contrast, AS reports that for speakers in Iran, the deletion of /ɒ/ is not frequent.

For the instrumental and locative series, it is quite difficult to elicit them in natural speech. Alternative syntactic strategies are preferred. For example, for instrumentals, the comitative meaning of the instrumental (‘to go alongside X’) is
expressed by using a postpositional construction with the genitive pronoun. Similarly, the locative meaning is instead expressed by using a postposition \([\text{mej}^h]\) ‘in’ չէջ.

Table 5.2: Expressing comitative-instrumental with postpositions

<table>
<thead>
<tr>
<th></th>
<th>1SG</th>
<th>2SG</th>
<th>3SG</th>
<th>1PL</th>
<th>2PL</th>
<th>3PL</th>
<th>PRO.GEN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>im het</strong></td>
<td><strong>kʰo het</strong></td>
<td><strong>iɿp het</strong></td>
<td><strong>meɿ het</strong></td>
<td><strong>diɿɿ het</strong></td>
<td><strong>iɿpntɿ nəɿpntɿ</strong></td>
<td><strong>nəɿpntɿ nəɿpntɿ</strong></td>
<td><strong>with</strong></td>
</tr>
</tbody>
</table>

5.2 Demonstratives

Iranian Armenian uses a small set of demonstrative pronouns. These show a 3-way contrast for deixis: proximal, medial, and distal. There are different forms for when the pronoun is a modifier in a noun phrase vs. when the pronoun stands on its own as a substantive.

For illustration, we focus on the proximal series. This series is characterized by starting with the segmental sequence /es-/ or /s/. When the proximal pronoun is a modifier in a noun phrase, it is realized as [es]. It can modify either a singular or plural noun.

(2) a. es ɡiɿkʰ-ə  
this book-DEF
‘this book’
ցու գիրք

b. es ɡiɿkʰ-ɛɿ-ə  
this book-PL-DEF
‘these books’
ցու գիրքեր

Table 5.3 shows the set of demonstrative pronouns when the pronoun is a modifier.
Table 5.3: Demonstrative pronouns when acting as a modifier

<table>
<thead>
<tr>
<th></th>
<th>Proximal</th>
<th>Medial</th>
<th>Distal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage</td>
<td>‘this’</td>
<td>‘that (close)’</td>
<td>‘that (yonder)’</td>
</tr>
<tr>
<td>‘es’</td>
<td>‘et’</td>
<td>‘en’</td>
<td></td>
</tr>
</tbody>
</table>

When the pronoun is substantivized and stands for an entire noun phrase, it can be realized in one of three forms. For the proximal pronoun, the singular forms are *es*, *esi*, and *esikə*. The plural form of the substantivized pronoun is *səɻɒŋkʰ*.

(3) a. *es/*esi/*esikə* ɡiɻkʰ ɹ ɹ
this book-DEF is
‘This is a book.’ (NK)

b. *səɻɒŋkʰ* ɡiɻkʰ-eɻ e-n
these book-PL is-3PL
‘These are books.’ (NK)

The final schwa of the long pronoun *esikə* is likely part of the definite suffix. Evidence for this is that the schwa becomes a schwa-nasal sequence when cliticized. See similar patterns for the definite suffix in §3.2.2.

(4) *esik-ən* e-m uz-um
this-DEF is-1SG want-IMPF.CVB
‘I want this one.’ (NK)

Etymologically, it is possible that forms like /esik-ə/ ‘this’ derive by adding the definite suffix onto a hypothetical earlier form like *esik* (cf. Ուժիորդում 1954: 195ff). Alternatively, BV suggests that the modern complex form /esik-ə/ may have a more complicated origin. First, the form was *esikə*. Second, the form underwent final vowel reduction to *esikə*. Third, the form underwent morphological reanalysis as /esik-ə/ with a definite suffix. But Hrach Martirosyan (p.c.) suggests the first is more probable.

When these demonstratives are substantivized, they inflect for case.
5.3 Interrogative pronouns

(5)  a. սարան ցար տար-ում
    this.DAT food give-PST-1SG
    ‘I gave food to this one.’
    (NK)

b. սար ցարկ-ո
    this.GEN color-DEF
    ‘the color of this one’
    (NK)

Table 5.4 shows the paradigm of substantivized demonstratives. Note that the inflected forms of the substantivized distal are identical to the non-logophoric third-person personal pronouns from Table 5.1. The Iranian Armenian paradigm does not significantly differ from that of Standard Eastern Armenian (Dum-Tragut 2009: 129). For the medial series, the plurals and the case-marked forms use [d] in Standard Eastern Armenian: [դորար, դորա]. Some Iranian Armenian speakers like KM use [d] too, while some Iranian Armenian speakers like NK use [t].

<table>
<thead>
<tr>
<th></th>
<th>Nom/Acc</th>
<th>Dative</th>
<th>Genitive</th>
<th>Ablative</th>
<th>Instrumental</th>
<th>Locative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pro</td>
<td>pro</td>
<td>pro</td>
<td>pro-abl</td>
<td>pro-ins</td>
<td>pro-loc</td>
</tr>
<tr>
<td>Singular Prox.</td>
<td>es, esi, eski</td>
<td>սար, սար, սար</td>
<td>սար-ի, սար-ի, սար-ի</td>
<td>սար-ով, սար-ով, սար-ով</td>
<td>սար-ում, սար-ում, սար-ում</td>
<td></td>
</tr>
<tr>
<td>Med.</td>
<td>et, eti, etika</td>
<td>դար, դար, դար</td>
<td>դար-ի, դար-ի, դար-ի</td>
<td>դար-ով, դար-ով, դար-ով</td>
<td>դար-ում, դար-ում, դար-ում</td>
<td></td>
</tr>
<tr>
<td>Dist.</td>
<td>en, eni, enika</td>
<td>նար, նար, նար</td>
<td>նար-ի, նար-ի, նար-ի</td>
<td>նար-ով, նար-ով, նար-ով</td>
<td>նար-ում, նար-ում, նար-ում</td>
<td></td>
</tr>
<tr>
<td>Plural Prox.</td>
<td>սարոնք սարոտ սարոտ</td>
<td>սարոտ-ի, սարոտ-ի, սարոտ-ի</td>
<td>սարոտ-ով, սարոտ-ով, սարոտ-ով</td>
<td>սարոտ-ում, սարոտ-ում, սարոտ-ում</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Med.</td>
<td>դարոնք դարոտ դարոտ</td>
<td>դարոտ-ի, դարոտ-ի, դարոտ-ի</td>
<td>դարոտ-ով, դարոտ-ով, դարոտ-ով</td>
<td>դարոտ-ում, դարոտ-ում, դարոտ-ում</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dist.</td>
<td>նարոնք նարոտ նարոտ</td>
<td>նարոտ-ի, նարոտ-ի, նարոտ-ի</td>
<td>նարոտ-ով, նարոտ-ով, նարոտ-ով</td>
<td>նարոտ-ում, նարոտ-ում, նարոտ-ում</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3 Interrogative pronouns

Iranian Armenian seems to use the same set of interrogative pronouns (wh-words) as Standard Eastern Armenian (Dum-Tragut 2009: 247). Full declension paradigms
5 Function words

are found in the Dum-Tragut grammar for Standard Eastern Armenian. We have not found significant differences between Standard Eastern and Iranian Armenian when it comes to the use or form of these interrogative pronouns, and therefore keep this section rather brief. In the following sentences, we provide an example for the different types of interrogative pronouns in bold.

The pronoun ‘who’ is [ov] in the nominative (6a). But it uses a different root allomorph um when case suffixes are added. Instrumentals and locative suffixes are generally avoided, and replaced with postpositional constructions.

(6)  

a.  

[ov ուրախ]

who is happy

‘Who is happy?’

(NK)

b.  

[um-ի-ն ե-ս մաքրում]

who-DAT-DEF is-2SG clean-IMPF.CV

‘Who are you washing?’

(NK)

c.  

[գիրք-ը ում-ի-ն ե-ս տալ]

bookDEF who-DAT-DEF is-2SG give-TH-INF-IMPF.CV

‘Who do you give the book to?’

(NK)

d.  

[ում-ից]

who-ABL

‘From who?’

(NK)

e.  

[ում-ից]

who-ABL

‘From who?’

(NK)

f.  

[ում-ից]

who-ABL

‘With who? In who?’

(NK)

The pronoun ‘what’ is [intʰ], and there is no case-conditioned allomorphy involved.
5.3 Interrogative pronouns

(7) a. intʰ o kəput. intʰ e-s uz-um
   what is blue. what is-2SG want-IMPF.CVB
   ‘What is blue? What do you want?’
   (NK)

b. intʰ-i(-n) e-s t-d-l-i giɻkʰ-ə
   what-DAT(-DEF) is-2SG give-TH-INF-IMPF.CVB book-DEF
   ‘To what do you give the book?’
   (NK)

c. intʰ-i gujn-ə
   what-GEN color-DEF
   ‘What’s color?’
   (NK)

d. intʰ-itsʰ, intʰ-ov, intʰ-um
   what-ABL, what-INS, what-LOC
   (NK)

The word for ‘where’ can vary between [voɻteɾ] and [uɻ]. NK reports that [uɻ] feels more informal.

(8) a. keɻɒkuɻ-ə voɻteɾ o
   food-DEF where is
   ‘Where is the food?’
   (NK)

b. keɻɒkuɻ-ə uɻ o
   food-DEF where is
   ‘Where is the food?’
   (NK)

c. voɻteɾ-itsʰ, voɻteɾ-um e-s tsən-v-e
   where-ABL. where-LOC is-2SG born-PASS-IMPF.CVB
   ‘From where? Where were you born?’
   (NK)

The pronoun ‘when’ is prescriptively [jeɻpʰ], but the rhotic can be deleted in colloquial speech [jepʰ] (9a). The pronoun takes a special dative/genitive suffix -vɒn or -vɒ (9b). This suffix is also used before oblique case suffixes like the ablative (9c), as a type of oblique stem.

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5 Function words

(9) a. տուհեդահուս-ատ ջեպ^b/jep^b ա birthday-poss.2sg when is
   'When is your birthday?' (NK)
   Տարեդարձդ ե՞րբ ա:

b. ջեպ^b-ու
   when-gen
   'Of when?' (NK)
   Երբուա՞յ:

c. ջեպ^b-վան-իտ^b
   when-dat-abl
   'From when?' (NK)
   Երբուանի՞ց:

For the pronoun ‘why’, the Eastern Armenian version is [intʃʰu]. This word is
used by the Iranian Armenian community as well, but it has a formal connotation.
A common colloquial version is [heɻ], which is reported in other Armenian

(10) a. ինտʃʰu
   why
   ‘Why?’ (NK)
   Ինչո՞ւ:

b. հեɻ uf-d-ուն-d-n
   why late-lv-aor-pst-3pl
   'Why are they late?' (AS)
   Հե՞ր ուշացան:

NK reports that her family uses [heɻ] more often than [intʃʰu]. She further
reports that [intʃʰu] is restricted to more formal speech.

(11) a. հեɻ e-s et հոկ^b-e
   why is-2sg that wear-perf.cvb
   ‘Why are you wearing that?’ (NK)
   Հե՞ր ես էտ հագե:

b. հեɻ e-s et ուտ-ում
   why is-2sg that eat-impf.cvb
   ‘Why are you eating that?’ (NK)
   Հե՞ր ես էտ ուտում:
5.4 Other function words

What follows is lists of function words that we have elicited which do not neatly fit into the previous sections. As of writing this grammar, we have not been able to study these function words extensively.

Iranian Armenian uses the following adverbial function words to indicate location, e.g., the equivalent of English ‘here’ and ‘there’. As with demonstratives, these locational words distinguish between proximal, medial, and distal locations. We specify the source of the items.

<table>
<thead>
<tr>
<th>Proximal</th>
<th>estɛɛ (KM, NK), ste (AS), steɛ (AS)</th>
<th>‘this place’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>էստեղ, ստեղ, ստէ</td>
<td></td>
</tr>
<tr>
<td>Medial</td>
<td>etɛɛ (AS, NK)</td>
<td>‘that place’</td>
</tr>
<tr>
<td></td>
<td>էդտեղ</td>
<td></td>
</tr>
<tr>
<td>Distal</td>
<td>ândɛɛ (AS), ânde (AS), ânne (NK, KM), ânneɛ (KM)</td>
<td>‘that place yonder’</td>
</tr>
<tr>
<td></td>
<td>ընտեղ, ընտէ, ըննէ, ըննեղ</td>
<td></td>
</tr>
</tbody>
</table>

All these words like [estɛɛ] ‘this place’ are morphologically derived from a demonstrative like [es] ‘this’ and the word ‘place’ [teɛ]. Note how the [t] becomes
5 Function words

[d] after the nasal in [ənderə] ‘that place yonder’. Post-nasal voicing seems limited to such function words.

To illustrate, the following sentence shows a location adverb.

(13) գան-դ անձ
     go-Th there’
     ‘Go over there.’
     Գնա ըննե։

We likewise elicited the following adverbs of manner.

Table 5.6: Manner adverbs in Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>Proximal</th>
<th>Medial</th>
<th>Distal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>esentʰ (AS), sentʰi (AS) ‘this manner’</td>
<td>etentʰ (AS) , tentʰi (AS) ‘that manner’</td>
<td>nentʰi (AS) ‘that manner’</td>
</tr>
</tbody>
</table>

An additional adverb of manner is [hentʰ] that has a broad range of uses, often translatable to the English word ‘just’.

(14) a. hentʰ et
      just that
      ‘That’s it’
      Հէնց էտ։

b. hentʰ himও
   just now
   ‘Right now’
   Հէնց հիմա։

Iranian Armenian has two a modal word [piti] that roughly translates to ‘must’.

(15) a. piti et-d-m
     must go-Th-1SG
     ‘I have to go.’
     Պիտի էթամ։

5.4 Other function words

b. piti ut-e-m
   must eat-TH-1SG
   'I have to eat.' (NK)
   Ռիփում ռետ։

This word is related to the syntactic construction [petʰk ɘ] which is used to mean 'it is needed' or 'it is necessary'.

(16) a. petkʰ ɘ
   need is.PRS.3SG
   'It is needed.' (NK)
   Ռիքում ու:

b. petkʰ ɘ ut-e-m
   need is.PRS.3SG eat-TH-1SG
   'I have to eat.' (NK)
   Literally: 'It is needed that I eat.'
   Ռիքում ո ռետ։
6 Verbal morphology

In Iranian Armenian, regular verbs are divided into simple verbs and complex verbs. In their infinitive citation form, simple verbs consist of a root, theme vowel, and infinitive suffix. Of these simple verbs, there are two conjugation classes based on theme vowel. Complex verbs include a valency-changing morpheme. These include passives, causatives, and inchoatives. In contrast, irregular verbs can be divided into four categories: nasal-infixed verbs, suppletive verbs, defective verbs, and miscellaneous verbs.

When comparing Iranian Armenian with other Armenian lects, Iranian Armenian is close to Standard Eastern Armenian. Like Standard Eastern, Iranian Armenian widely uses periphrasis for various inflectional paradigm cells. Periphrasis is used for the indicative present, indicative past imperfective, and various complex tenses (present perfect, past perfect, future). Periphrasis involves the use of a non-finite converb (which carries lexical meaning) alongside an inflected auxiliary that carries tense/agreement marking. Synthesis is used for less frequent inflectional cells, such as subjunctives, conditionals, and imperatives. The most common synthetic form is the past perfective, also called the aorist.

There is a larger literature on the verbal morphology of other Armenian lects. For Standard Western Armenian morphotactics, see Donabédian 1997, Boyacioglu (2010), Boyacioglu & Dolatian (2020), Dolatian & Guekguezian (2021, accepted), and Karakaş et al. (2021). For Standard Eastern Armenian, most work on verbal morphology is on the semantics of various paradigm cells (Kozintseva 1995, Dum-Tragut 2009). For Iranian Armenian, we focus on providing complete paradigms for the different conjugation classes. We provide a complete segmentation of all inflectional morphology.

For reference, Iranian Armenian shows the following significant differences from Standard Eastern Armenian in terms of verbal morphology:

(1) Summary of differences between Standard Eastern and Iranian Armenian verbs:

a. The 1SG marker /-m/ is used in both the present and past paradigms (§6.2.2).
b. The present 3SG auxiliary is /ɒ/ in Iranian Armenian, /e/ in Standard Eastern (§6.2.1). The form [ɑ] is also attested in Colloquial Eastern Armenian.

c. Iranian Armenian deletes the auxiliary /e/ or theme vowel /e/ before the past marker /i/ (§6.2.2, 6.4.2).

d. There is optional leveling of the negated copula and negated auxiliary (§6.2.3).

e. The perfective converb suffix displays liquid-zero alternations, briefly illustrated in §6.3.3, discussed more in §3.3.

f. The past perfective or aorist system has been significantly altered, by promoting the past morph /-ɒ/ from a restricted marked allomorph to an elsewhere allomorph (§6.4.1).

g. The imperative 2SG suffix differs across the lects (§6.4.4).

h. Some irregular verbs in Standard Eastern have become leveled or lost in Iranian Armenian (§6.6).

For contrast, we often show the verbal paradigms of both Standard Eastern Armenian and Iranian Armenian. This chapter provides complete paradigms for the simplex verbs, and partial paradigms for complex and irregular verbs. Complete paradigms are found in our online archive.¹

Across Armenian varieties, the conjugation classes utilize different stems when forming the different paradigm cells. These are often called the present stem and the past/aorist stem. The aorist stem can be formed via various morphological strategies, such as root allomorphy and affix deletion. The aorist stem can include either an overt aorist suffix -t͡sʰ- or a covert aorist suffix -∅-. Due to space limitations, we do not explicitly discuss the formation of present vs. aorist stems in Iranian Armenian. Our paradigms indicate the use of the aorist stem and aorist suffix -t⁶⁄∅- in both the past perfective and other paradigm cells as AOR. When used in the past perfective, the aorist morpheme contributes perfective meaning; but it is used meaningless as a morphemic element in other paradigm cells (cf. Aronoff 1994). For discussion of the formation of aorist stems in an Armenian lect, see Dolatian & Guekguezian (accepted).

6.1 Simple verbs and their classes

Like in Standard Eastern Armenian, regular simple verbs in Iranian Armenian are classified into two classes based on the choice of theme vowel: -e-, -ɒ-. We

¹https://github.com/jhdeov/iranian_armenian
call these classes E-Class and A-Class. The citation form is the infinitive, called the [անորոշ դերբայ] ‘indefinite participle’ in Standard Eastern Armenian.

Table 6.1: Simple infinitives from the two regular classes

<table>
<thead>
<tr>
<th>E-Class</th>
<th>A-Class</th>
<th>√^-TH-INF</th>
</tr>
</thead>
<tbody>
<tr>
<td>jeɻkʰ-e-l</td>
<td>ռպու-e-l</td>
<td></td>
</tr>
<tr>
<td>‘to sing’</td>
<td>‘to live’</td>
<td></td>
</tr>
<tr>
<td>երգել ապրել</td>
<td></td>
<td></td>
</tr>
<tr>
<td>jeɻkʰ-e-l</td>
<td>ռպու-e-l</td>
<td></td>
</tr>
<tr>
<td>‘to read’</td>
<td>‘to speak’</td>
<td></td>
</tr>
<tr>
<td>կարդալ խօսալ</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Standard Eastern Armenian uses the same conjugation classes. In general, a given verb belongs to the same conjugation class in both lects. There are some exceptions though. For example, the verb ‘to speak’ uses the root χos-. In Iranian Armenian, this verb belongs to the A-Class: χos-ɒ-l ‘to speak’. In contrast in Standard Eastern Armenian, this verb belongs to the E-Class: χos-e-l.²

In terms of morphological structure, we treat theme vowels as meaningless empty morphs (Aronoff 1994). The choice of theme-vowel is root-conditioned and meaningless. For a theoretical analysis of Armenian theme vowels, see Guekguezian & Dolatian (in press). Their Standard Western Armenian analysis can easily extend to Iranian Armenian.

Having set up the basic classes, the next sections describes verbal inflection. Like Standard Eastern Armenian, verbal inflection Iranian Armenian is highly periphrastic. Before we describe these periphrastic forms, we first describe the auxiliary system in Iranian Armenian.

### 6.2 Auxiliaries

The verb ‘to be’ acts as both a copula in predicate sentences (2a), and as an auxiliary in periphrastic forms (2b).

(2) a. մարդու-ո տաքսման
     man-DEF sad     is.prs.3sg
     ‘The man is sad.’ (NK)

²It is possible that these few deviations have a diachronic reason. Modern Standard Eastern and Iranian Armenian utilize only two theme vowels: -e- and -a/-o-. But Classical Armenian had two additional theme vowels -i- and -u-. Reflexes of verbs with these theme vowels are assigned to one of the surviving classes, usually to the E-Class. For example, ‘to speak’ was an I-Class verb in Classical Armenian: χos-i-l. The fact that this verb became E-Class in Standard Eastern Armenian, but A-Class in Iranian Armenian suggests that more deviations would be found in the reflexes of Classical verbs with obsolete theme vowels.
In periphrastic constructions, the verb is in a converb form, e.g., the imperfective converb in (2b). Before discussing these converbs, we first lay out the paradigm of the auxiliary. The name of the auxiliary is [օժանդակ բայ] օժանդակ բայ ‘helper verb’ in Standard Eastern Armenian.

### 6.2.1 Present auxiliary

We show the present tense paradigm of the auxiliary in Table 6.2. Because the auxiliary can also function as a copula, we gloss both as just ‘is’. In the present tense, the auxiliary consists of the auxiliary’s marker -e-, and then a fused tense-agreement marker (t/agr or just agr). In the 3SG, there is no T/Agr marker. Instead, the inflected auxiliary is just the auxiliary marker -e- in Standard Eastern Armenian. In contrast in Iranian Armenian, the 3SG present uses an allomorph -ɒ- of the auxiliary.

<table>
<thead>
<tr>
<th></th>
<th>Standard Eastern</th>
<th>Iranian Armenian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>e-m է</td>
<td>e-m է</td>
</tr>
<tr>
<td></td>
<td>‘I am’</td>
<td>‘I am’</td>
</tr>
<tr>
<td>2SG</td>
<td>e-s է</td>
<td>e-s է</td>
</tr>
<tr>
<td>3SG</td>
<td>e բ</td>
<td>ɒ ա</td>
</tr>
<tr>
<td>1PL</td>
<td>e-ŋkʰ էՔ</td>
<td>e-ŋkʰ էՔ</td>
</tr>
<tr>
<td>2PL</td>
<td>e-kʰ բ</td>
<td>e-kʰ բ</td>
</tr>
<tr>
<td>3PL</td>
<td>e-n բ</td>
<td>e-n բ</td>
</tr>
<tr>
<td></td>
<td>is-agr</td>
<td></td>
</tr>
</tbody>
</table>

The Iranian Armenian 3SG form /ɒ/ is likely diachronically derived from an earlier /e/ form. In fact, the 3SG auxiliary /ɒ/ is found in the colloquial speech of Standard Eastern speakers in Armenia as /a/. For Iranian Armenian, the low-vowel form /ɒ/ form is simply grammaticalized as the only realization of the present 3SG auxiliary.

We utilize the following rules for Iranian Armenian. Tense and agreement are expressed via a single marker in the present.
Rule 2. Rules for marking present agreement

1SG \leftrightarrow -m
2SG, present \leftrightarrow -s
3SG, present \leftrightarrow -\emptyset
1PL \leftrightarrow -nkʰ
2PL \leftrightarrow -kʰ
3PL \leftrightarrow -n

Note that the 3PL suffix is underlingly /-nkʰ/ and the nasal assimilates in place to become [-ŋkʰ] (§2.1.3). This plural morpheme is a reflex of Classical *-mk. Compare modern [eŋkʰ] against Classical տուգ <emk’> (Thomson 1989: 26).

The markers of the 1SG and the plurals do not specify tense. As we see later, these markers are used throughout Iranian Armenian for these person-number combinations.

As for the auxiliary itself, it has allomorphs /e/ and /ɒ/. For the present 3SG, the auxiliary is expressed by /ɒ/ without an extra tense marker. We later revise the marker rules for the auxiliary.

Rule 3. Rules for the form of present auxiliaries (to be revised)

‘is’ \leftrightarrow ɒ- / _ prs.sg
          e- / elsewhere

6.2.2 Past auxiliary

For the present auxiliary, Standard Eastern and Iranian Armenian have few differences. But in the past form of the auxiliary, we find two major differences between the two lects. In Table 6.3, we provide zero markers for easier illustration. Note the glide is epenthetic.
Consider first the non-3SG forms. In Standard Eastern Armenian, the past form of the auxiliary is made up of three overt morphs: the auxiliary *e*, a past suffix *-i*, and then agreement. Tense and agreement are thus separate suffixes in the past. Vowel hiatus between the auxiliary and past suffix triggers glide epenthesis: 1PL */e-i-ngkʰ/* → [ej-i-ŋkʰ]. In contrast in Iranian Armenian, the auxiliary morpheme is covert in these contexts. Outside of the 3SG, there are only two overt morphs and these are the past suffix and the agreement suffix. For example, 1PL is [ej-i-ŋkʰ] in Standard Eastern but [i-ŋkʰ] in Iranian Armenian.

We analyze this difference as due to a morpheme-specific rule of vowel deletion in hiatus. This rule will delete the vowel *e* before the past morpheme *-i*. We call this rule *e*-deletion. The target of this rule is just a segment, while the trigger is a specific morph.

**Rule 4. e-Deletion:** Rule for deleting */e/* before past */i/*

\[
/e/ \rightarrow \emptyset \quad / \_ i
\]

where *i* is the past suffix

In morphological theory, the use of morpheme-specific phonological processes is controversial (Pater 2007, Siddiqi 2009, Haugen & Siddiqi 2016, Haugen 2016, Embick & Shwayder 2018). There are two pieces of evidence for treating the absence of the auxiliary *-e-* as morpheme-specific phonology instead of allomorphy. First, in the 3SG, the past suffix is covert, and the auxiliary is overt: *e*-∅-*i-* instead of *∅*-i-* or *∅*-∅-*i-. It thus seems that the absence of the auxiliary is conditioned by making the past suffix an overt vowel. Second, we will see in the synthetic past imperfective (§6.4.2), that the *-e-* theme vowel likewise deletes before the
past -i- suffix. In sum, the above rule possibly developed in Iranian Armenian as a morpheme-specific rule for repairing vowel hiatus.

The second difference between the lects concerns the 1SG. In Standard Eastern, the Agr morph is covert: e-i-∅ 'I was'. In Iranian Armenian, the Agr morph is an overt /m/: ∅-i-m. This /m/ morph is the same suffix used in the present 1SG [e-m]. Thus this morph /m/ has a more general distribution in Iranian Armenian than in Standard Eastern. We list the rules for the 1SG below for the two lects for the two tenses.

**Rule 5. Rules for the 1SG in the two lects**

<table>
<thead>
<tr>
<th></th>
<th>Standard Eastern</th>
<th>Iranian Armenian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>↔</td>
<td>↔</td>
</tr>
<tr>
<td>in the past</td>
<td>-∅ /</td>
<td>-m /</td>
</tr>
<tr>
<td>elsewhere</td>
<td></td>
<td>elsewhere</td>
</tr>
</tbody>
</table>

The use of -m as a general 1SG marker is rather common in Armenian lects in Iran (Ջահուկյան 1972: p. 103, feature 100.6). See Vaux in review: 55-6 for useful maps on the spread of this phenomenon across Iran. For the spread of the -m morph, it is possible that a contributing factor is that Persian uses a morph -æm as a generalized 1SG marker for both the present and past (Mahootian 2002: 229ff).

We list below the additional rules that are needed for Iranian Armenian 3SG. We do not need to list any rules for plural Agr, because they’re the same as for the present (§6.2.1).

**Rule 6. Rules for past tense and agreement in 3SG**

<table>
<thead>
<tr>
<th></th>
<th>PST</th>
<th>singular non-1st person</th>
</tr>
</thead>
<tbody>
<tr>
<td>↔</td>
<td>↔</td>
<td>↔</td>
</tr>
<tr>
<td>in 3SG</td>
<td>-∅ /</td>
<td>-ɻ /</td>
</tr>
<tr>
<td>elsewhere</td>
<td></td>
<td>elsewhere</td>
</tr>
</tbody>
</table>

The past 2SG and 3SG are syncretic for the agreement suffix (Karakaş et al. 2021). They both use the morph ɻ. The two paradigm cells are distinguished by tense being covert in the 2SG, but covert in the 3SG: ∅-i-ɻ ‘you were’ vs. e-∅-ɻ ‘he was’.

**6.2.3 Negation**

The previous subsections described the inflection of the auxiliary in the positive. Negation is straightforwardly marked by adding the negation prefix tʰ-. However, we see some divergences in the present 3SG.
**6 Verbal morphology**

Table 6.4 shows the paradigm for the negated present auxiliary for Standard Eastern and Iranian Armenian. For all but the present 3SG, negation is marked by adding the negation prefix t͡ʃʰ- to the auxiliary.

Table 6.4: Paradigm of negated present auxiliary in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th>Present: (NEG)-is-AGR</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Iranian Armenian</td>
<td></td>
</tr>
<tr>
<td>1SG</td>
<td>e-m</td>
<td>t͡ʃʰ-e-m</td>
</tr>
<tr>
<td>2SG</td>
<td>e-s</td>
<td>t͡ʃʰ-e-s</td>
</tr>
<tr>
<td>3SG</td>
<td>e-∅</td>
<td>t͡ʃʰ-i-∅</td>
</tr>
<tr>
<td>1PL</td>
<td>e-ŋkʰ</td>
<td>t͡ʃʰ-e-ŋkʰ</td>
</tr>
<tr>
<td>2PL</td>
<td>e-kʰ</td>
<td>t͡ʃʰ-e-kʰ</td>
</tr>
<tr>
<td>3PL</td>
<td>e-n</td>
<td>t͡ʃʰ-e-n</td>
</tr>
</tbody>
</table>

Table 6.5 shows the paradigm of the negated past auxiliary. Negation is marked by adding the negation prefix.

Table 6.5: Paradigm of negated past auxiliary in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th>Past: (NEG)-is-PST-AGR</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Iranian Armenian</td>
<td></td>
</tr>
<tr>
<td>1SG</td>
<td>ej-i-∅</td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>ej-i-r</td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td>e-∅-r</td>
<td></td>
</tr>
<tr>
<td>1PL</td>
<td>e-ŋkʰ</td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td>e-kʰ</td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td>e-n</td>
<td></td>
</tr>
</tbody>
</table>

Differences emerge in the present 3SG. When used as a verbal auxiliary in Table 6.6, the positive form is /ɒ/ in Iranian Armenian, and /e/ in Standard Eastern. The negative form is /t͡ʃʰ-/ for both lects. The negative auxiliary is placed before the verb.³

³The complete gloss for the copula and auxiliary in the tables are is.prs.3sg and is.prs.3sg. The complete gloss for the verb 'singing' is sing-impf.cvb.

Draft of May 31, 2022, 08:00
6.2 Auxiliaries

Table 6.6: Forms of negative auxiliary across Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>Pos.</th>
<th>Neg</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA</td>
<td>jeɾkʰ-um e Երգում է։</td>
<td>t͡ʃʰ-i jeɾkʰ-um չի երգում։</td>
</tr>
<tr>
<td>IA</td>
<td>jeɻkʰ-um ɒ Երգում ա։</td>
<td>t͡ʃʰ-i jeɻkʰ-um չի երգում։</td>
</tr>
<tr>
<td>Gloss</td>
<td>singing is</td>
<td>NEG-is singing</td>
</tr>
</tbody>
</table>

But when used as a copula, we find more significant dialectal differences in Table 6.7. In both the positive and negative, the copula is placed after the predicate. The positive form is /ɒ/ in Iranian Armenian and /e/ in Standard Eastern, as expected. When negated, Standard Eastern uses /t͡ʃʰ-e/. In Iranian Armenian, speakers can use either /t͡ʃʰ-e/ or /t͡ʃʰ-i/. We call the use of /t͡ʃʰ-e/ as the un-leveled form, while the use of /t͡ʃʰ-i/ as the leveled form. Such variation is also documented for Colloquial Eastern Armenian (Dum-Tragut 2009: 216).

Table 6.7: Forms of negative copula across Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>Pos.</th>
<th>Neg</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA</td>
<td>uɾɑχ e Ուրախ է։</td>
<td>t͡ʃʰ-e uɾɑχ չէ։</td>
</tr>
<tr>
<td>IA (un-leveled)</td>
<td>uɻɒχ ɒ Ուրախ ա։</td>
<td>t͡ʃʰ-e uɻɒχ չէ։</td>
</tr>
<tr>
<td>IA (leveled)</td>
<td>uɻɑχ ɒ Ուրախ ա։</td>
<td>t͡ʃʰ-i uɻɑχ չի։</td>
</tr>
<tr>
<td>Gloss</td>
<td>happy is</td>
<td>happy NEG-is</td>
</tr>
</tbody>
</table>

The above patterns require the following rules. For Standard Eastern, the verb ‘is’ surfaces as /i/ only when it is an auxiliary, negative, and present 3SG. In all other contexts, it surfaces as the elsewhere morph /e/.

**Rule 7.** Rules for the verb ‘is’ in Standard Eastern

\[
\text{‘is’} \leftrightarrow \text{i- / NEG _ PRS.3SG, used as auxiliary} \quad \text{e- / elsewhere}
\]

For Iranian Armenian, matters are slightly more complicated. Some speakers can use /i/ in the negative of both the auxiliary and the copula. All speakers use the form /ɒ/ in the positive of both the auxiliary and copula. This simpler leveled system uses the rules below. The rule for /i/ simply doesn’t reference the auxiliary vs. copula status of the verb. The verb surfaces as [ɒ] in the positive present 3SG, and as [e] elsewhere.
6 Verbal morphology

Rule 8. Rules for the verb ‘is’ in Iranian Armenian with full leveling

\[
\begin{align*}
\text{‘is’} & \leftrightarrow \text{i-} / \text{NEG \_ PRS.3SG} \\
\text{d-} & \leftrightarrow \text{\_ PRS.3SG} \\
\text{e-} & \leftrightarrow \text{elsewhere}
\end{align*}
\]

As for speakers who haven’t leveled the negative copula towards the negative auxiliary, they need the more complicated system below. These speakers use /i/ for the negative auxiliary, /ɒ/ for the positive verb, and /e/ elsewhere.

Rule 9. Rules for the verb ‘is’ without leveling

\[
\begin{align*}
\text{‘is’} & \leftrightarrow \text{i-} / \text{NEG \_ PRS.3SG, used as auxiliary} \\
\text{d-} & \leftrightarrow \text{\_ PRS.3SG} \\
\text{e-} & \leftrightarrow \text{elsewhere}
\end{align*}
\]

6.3 Periphrastic structures

Iranian Armenian uses periphrasis in order to realize most tense-aspect-mood combinations. These periphrastic forms all utilize a special form of the verb called the converb. Tense and agreement is marked on the auxiliary. The auxiliary follows the converb in the positive, and it precedes the converb in the negative.  

Throughout this grammar, we reserve the term ‘converb’ for non-finite verb forms that are restricted to verbal periphrasis. We use the term ‘participle’ for non-finite verb forms that can be used outside of periphrasis. This seems to be the intuition behind the use of these terms in the Eastern Armenian National Corpus.

Standard Eastern Armenian has an additional periphrastic construction that uses the simultaneous converb, also called the processual participle (Dum-Tragut 2009: 205). The converb is called [hәmәktәɾ deɾbaʃ] համակատար դերբայ in Standard Eastern Armenian. This converb is built by adding the suffix -is to infinitives. This construction is quite infrequent in Standard Eastern Armenian. For Iranian Armenian, NK reports that she never uses this participle, while KM reports that she does use it. AS reports that his consultants never use it. We do not report further on this converb because of the the limited data available to us.

4 The auxiliary can further move around the sentence because of focus and other syntactic factors (§3.3.1).

5 eanc.net/
6.3 Periphrastic structures

\(3\)  
\begin{align*}
a. \text{jerk}^h-e-l-is & \quad \text{e-m} \quad \text{(SEA)} \\
\text{jeɻk}^h-e-l-is & \quad \text{e-m} \quad \text{(IA)} \\
\text{sing-TH-INF-SIM.CVB is-1SG} & \\
\text{‘(While) I am singing.’} & \\
\end{align*}

\begin{align*} 
\text{Երգելիս եմ։} & \\
\end{align*}

\begin{align*} 
b. \text{kɑɾt}^h-a-l-is & \quad \text{e-m} \quad \text{(SEA)} \\
\text{kn.t}^h-d-l-is & \quad \text{e-m} \quad \text{(IA)} \\
\text{read-TH-INF-SIM.CVB is-1SG} & \\
\text{‘(While) I am reading.’} & \\
\end{align*}

\text{Երգում ենք։}

6.3.1 Indicative present and past imperfective

The first periphrastic construction that we describe is the indicative imperfective forms, called \(\text{[sɑhmɑnɑkɑn jeɾɑnɑk]}\) \(\text{սահմանական եղանակ}\) in Standard Eastern Armenian. This construction is used in the indicative present and the indicative past imperfective (also called the past imperfect). This construction is formed identically in Standard Eastern and Iranian Armenian.

The verb is in a converb form called the imperfective converb. Some grammar also use the term present participle (Dum-Tragut 2009: 219). In Standard Eastern Armenian, this converb is called \(\text{[ɑŋkɑtɑɾ deɾbɑj]}\) \(\text{անկատար դերբայ}\). Given the infinitive for a verb like \(\text{jeɻk}^h-e-l\) ‘to sing’, the imperfective converb is formed by replacing the theme vowel and infinitive with the suffix \(-\text{um}: \text{jeɻk}^h-\text{um}\). Tense and subject agreement are marked on the auxiliary. The present auxiliary is used to form the indicative present; the past auxiliary is used to form the indicative past imperfective.

\(4\)  
\begin{align*} 
a. \text{jeɻk}^h-\text{um} & \quad \text{e-ŋk}^h \\
\text{sing-IMPF.CVB is-1PL} & \\
\text{‘We are singing.’} & \quad \text{(NK)} \\
\end{align*}

\(\text{Երգում ենք։}\)

\begin{align*} 
b. \text{jeɻk}^h-\text{um} & \quad \emptyset-i-\text{ŋk}^h \\
\text{sing-IMPF.CVB is-PST-1PL} & \\
\text{‘We were singing.’} & \quad \text{(NK)} \\
\end{align*}

Negation is marked by placing the negated form of the auxiliary before the converb.
6 Verbal morphology

(5) a. \(tʰ\)-e-ŋkʰ jeɻkʰ-um
   NEG-is-1PL sing-IMPF.CVB
   'We are not singing.' (NK)
   չենք երգում:

b. \(tʰ\)-∅-i-ŋkʰ jeɻkʰ-um
   NEG-is-PST-1PL sing-IMPF.CVB
   'We were not singing.' (NK)
   չինք երգում:

The two conjugation classes (E-Class and A-Class) do not differ in constructing the imperfective converb, e.g., the converb of \(kɒɻtʰ-d-l\) 'to read' is \(kɒɻtʰ-um\). All tense-number-person combinations are straightforwardly marked by using the appropriate inflected auxiliary. The complete paradigm is given in Table 6.8. For clarity of presentation, we do not segment the internal structure of the auxiliary.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>jeɻkʰ-um em</td>
<td>jeɻkʰ-um im</td>
<td>tʃʰ-em   jeɻkʰ-um</td>
<td>tʃʰ-im   jeɻkʰ-um</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'I am singing'</td>
<td>'I was singing'</td>
<td>'I am not singing'</td>
<td>'I was not singing'</td>
<td></td>
</tr>
<tr>
<td></td>
<td>երգում եմ</td>
<td>երգում իմ</td>
<td>չեմ երգում</td>
<td>չիմ երգում</td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>jeɻkʰ-um es</td>
<td>jeɻkʰ-um iɻ</td>
<td>tʃʰ-es   jeɻkʰ-um</td>
<td>tʃʰ-iɻ   jeɻkʰ-um</td>
<td></td>
</tr>
<tr>
<td></td>
<td>երգում ես</td>
<td>երգում իր</td>
<td>չես երգում</td>
<td>չիր երգում</td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td>jeɻkʰ-um ɒ</td>
<td>jeɻkʰ-um eɻ</td>
<td>tʃʰ-i   jeɻkʰ-um</td>
<td>tʃʰ-eɻ   jeɻkʰ-um</td>
<td></td>
</tr>
<tr>
<td></td>
<td>երգում ա</td>
<td>երգում էր</td>
<td>չի երգում</td>
<td>չէր երգում</td>
<td></td>
</tr>
<tr>
<td>1PL</td>
<td>jeɻkʰ-um eŋkʰ</td>
<td>jeɻkʰ-um iŋkʰ</td>
<td>tʃʰ-eŋkʰ jeɻkʰ-um</td>
<td>tʃʰ-iŋkʰ jeɻkʰ-um</td>
<td></td>
</tr>
<tr>
<td></td>
<td>երգում ինք</td>
<td>երգում հր</td>
<td>չենք երգում</td>
<td>չինք երգում</td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td>jeɻkʰ-um ekʰ</td>
<td>jeɻkʰ-um ikʰ</td>
<td>tʃʰ-ekʰ jeɻkʰ-um</td>
<td>tʃʰ-ikʰ jeɻkʰ-um</td>
<td></td>
</tr>
<tr>
<td></td>
<td>երգում էք</td>
<td>երգում իք</td>
<td>չէք երգում</td>
<td>չիք երգում</td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td>jeɻkʰ-um en</td>
<td>jeɻkʰ-um in</td>
<td>tʃʰ-en   jeɻkʰ-um</td>
<td>tʃʰ-in   jeɻkʰ-um</td>
<td></td>
</tr>
<tr>
<td></td>
<td>երգում են</td>
<td>երգում ին</td>
<td>չեն երգում</td>
<td>չին երգում</td>
<td></td>
</tr>
</tbody>
</table>

\(√-IMPF.CVB\) is NEG-is \(√-IMPF.CVB\)

The imperfective converb suffix is simply \(-um\). If we assume that the theme vowels /e,ɒ/ are underlyingly present, then we need a rule that deletes theme vowels before the converb suffix, as a type of morpheme-specific vowel hiatus repair. For example, /jeɻkʰ-e-um/ \(\rightarrow\) [jeɻkʰ-∅-um].

**Rule 10.** Deleting theme vowels before the converb suffix

\(V \rightarrow \emptyset / _V₂\) (where \(V₂\) is part of converb suffix)
6.3 Periphrastic structures

6.3.2 Future and future perfect

The future uses periphrasis as well. The future converb is formed by taking the infinitive, and then adding the suffix -u. Both classes keep their theme vowel. This construction is formed identically in Standard Eastern and Iranian Armenian. The future converb is also called the future participle (Dum-Tragut 2009: 206), and it is called [[ապառնի դերբայ]] in Standard Eastern Armenian.

(6) **Forming the future converb for simple regular verbs**

<table>
<thead>
<tr>
<th>E-Class ‘to sing’</th>
<th>A-Class ‘to read’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>Future converb</td>
</tr>
<tr>
<td>jeɻkʰ-e-l</td>
<td>jeɻkʰ-e-l-u</td>
</tr>
<tr>
<td>√−TH-INF</td>
<td>√−TH-INF-FUT.CVB</td>
</tr>
</tbody>
</table>

The future converb suffix -u likely originates from the irregular dative suffix -u that’s used by some declension classes (traditionally called the second declension). Its use is grammaticalized here as part of the future converb.

The converb can take the present or past auxiliaries to respectively create the simple future or the future perfect. The future perfect is also called the ‘future in the past’ (Dum-Tragut 2009: 235). We show below the complete paradigm for the E-Class jeɻkʰ-e-l. The paradigm for the A-Class is analogously constructed with the converb [kɒɻtʰ-ɒ-l-u]. We don’t segment the auxiliary.

Table 6.9: Paradigm for the future and the future perfect for E-Class [jeɻkʰ-e-l] ‘to sing’

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Future</th>
<th>Future perfect</th>
<th>Neg.</th>
<th>Future</th>
<th>Future perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>jeɻkʰ-e-l-uw</td>
<td>em</td>
<td>tuf</td>
<td>tʃʰ-em</td>
<td>jeɻkʰ-e-l-u</td>
</tr>
<tr>
<td></td>
<td>‘I will sing’</td>
<td>‘I was going to sing’</td>
<td></td>
<td>‘I will not sing’</td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>jeɻkʰ-e-l-uw</td>
<td>es</td>
<td>tʃʰ-es</td>
<td>tʃʰ-iɻ</td>
<td>jeɻkʰ-e-l-u</td>
</tr>
<tr>
<td></td>
<td>‘I will sing’</td>
<td>‘I was going to sing’</td>
<td></td>
<td>‘I wasn’t going to sing’</td>
<td></td>
</tr>
<tr>
<td>3SG</td>
<td>jeɻkʰ-e-l-uw</td>
<td>o</td>
<td>tʃʰ-i</td>
<td>tʃʰ-eɻ</td>
<td>jeɻkʰ-e-l-u</td>
</tr>
<tr>
<td></td>
<td>‘I will sing’</td>
<td>‘I was going to sing’</td>
<td></td>
<td>‘I wasn’t going to sing’</td>
<td></td>
</tr>
<tr>
<td>1PL</td>
<td>jeɻkʰ-e-l-uw</td>
<td>enkʰ</td>
<td>tʃʰ-enkʰ</td>
<td>tʃʰ-ɨnlkʰ</td>
<td>jeɻkʰ-e-l-u</td>
</tr>
<tr>
<td></td>
<td>‘I will sing’</td>
<td>‘I was going to sing’</td>
<td></td>
<td>‘I wasn’t going to sing’</td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td>jeɻkʰ-e-l-uw</td>
<td>ekʰ</td>
<td>tʃʰ-ekʰ</td>
<td>tʃʰ-ɨnklkʰ</td>
<td>jeɻkʰ-e-l-u</td>
</tr>
<tr>
<td></td>
<td>‘I will sing’</td>
<td>‘I was going to sing’</td>
<td></td>
<td>‘I wasn’t going to sing’</td>
<td></td>
</tr>
<tr>
<td>3PL</td>
<td>jeɻkʰ-e-l-uw</td>
<td>enkʰ</td>
<td>tʃʰ-enkʰ</td>
<td>tʃʰ-ɨnklkʰ</td>
<td>jeɻkʰ-e-l-u</td>
</tr>
<tr>
<td></td>
<td>‘I will sing’</td>
<td>‘I was going to sing’</td>
<td></td>
<td>‘I wasn’t going to sing’</td>
<td></td>
</tr>
</tbody>
</table>

√−TH-INF-FUT.CVB is NEG-IS √−TH-INF-FUT.CVB
As before, the auxiliary shifts its position in the negated form. Note that vowel hiatus between the converb and the auxiliary triggers the insertion of [w], discussed in §3.1.2.

### 6.3.3 Present perfect and pluperfect

The last periphrastic construction that we discuss is the periphrastic perfective. Like the other periphrastic forms, this construction utilizes a special converb and the inflected auxiliary. The converb is called the perfective converb. Some grammars also use the term perfect participle (Dum-Tragut 2009: 213). It is called [վաղակատար դերբայ] վաղակատար դերբայ in Standard Eastern Armenian.

The perfective converb has subtle differences across the two lects. In Standard Eastern Armenian, the perfective converb is formed by adding the suffix -el. The theme vowel is deleted thanks to the vowel-hiatus rule in Rule 10. In Iranian Armenian, this suffix is -el for middle-aged and older speakers. But for younger speakers, the suffix is more often -eɻ.

<table>
<thead>
<tr>
<th>Infinitive Բառեղի</th>
<th>Perfective converb Բառեղի</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Eastern սերգել</td>
<td>jeɾkʰ-e-l</td>
</tr>
<tr>
<td>Iranian Armenian խաղել</td>
<td>jeɻkʰ-e-l</td>
</tr>
<tr>
<td></td>
<td>jeɻkʰ-eɻ</td>
</tr>
<tr>
<td>√-TH-INF</td>
<td>√-PERF.CVB</td>
</tr>
</tbody>
</table>

For the same speaker, the choice of liquid can vary between [-el] or [-eɻ] without semantic motivation. It is possible that [-el] feels more formal for our speakers.

(7) ես խաղել այուսի մամից սովորել եմ։

‘This song that I learned from my mom.’ (NK)

In some social phrases, AS reports that the liquid is conventionally a lateral.

(8) կարօտել եմ քեզ։

‘I’ve missed you.’ (AS)
6.3 Periphrastic structures

Diachronically, the rhotic form [-eɻ] may have developed from the lateral form [-el]. This development has been attested in other Armenian lects (Gregoryan 2018).

Iranian Armenian has grammaticalized a process of liquid deletion for this perfective converb suffix. When this suffix is used in the positive before the inflected auxiliary, the liquid surfaces. But when the auxiliary has shifted leftward as in negation, the suffix’s liquid is deleted, and sometimes pronounced as [h].

<table>
<thead>
<tr>
<th></th>
<th>Positive present perfect 1SG</th>
<th>Negative present perfect 1SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA</td>
<td>jerkʰ-el em</td>
<td>tʃʰ-em jerkʰ-el</td>
</tr>
<tr>
<td>IA</td>
<td>jeɻkʰ-el em</td>
<td>tʃʰ-em jeɻkʰ-e</td>
</tr>
<tr>
<td></td>
<td>‘I have sung.’</td>
<td>‘I have not sung.’</td>
</tr>
</tbody>
</table>

The behavior of the perfective suffix in Iranian Armenian suggests that the final liquid is a floating segment or latent segment: -e(l) or -e(ɻ) (cf. ghost consonants: Tranel 1996, Côté 2011, Zimmermann 2019). The above paradigm suggests that the liquid is licensed when it is followed by the auxiliary. The conditions for surfacing or deleting this liquid are discussed in §3.3. For now, we just provide the relevant rules.

Rule 11. Rule for the perfective converb

\[
\text{PERF.CVB} \leftrightarrow \begin{cases} -e(l) & (\text{older speakers}) \\ -e(ɻ) & (\text{younger speakers}) \end{cases}
\]

The above data concerns constructing the perfective converb for the E-Class. In the A-Class, the same suffix is used. However, a meaningless affix -tʃʰ- is added between the theme vowel and the converb suffix.

6AS reports that some archaic registers use the form [-i], such as in the sentence [vɔksɔn e-n tʃɔɻ-i] glossed as ‘vaccine is-3pl.find-PERF.CVB’, meaning ‘They’ve found a vaccine’. We found this sentence in our transcribed sample text, uttered by an actor who was putting on an archaic accent.
6 Verbal morphology

Table 6.12: Perfective converb in Standard Eastern and Iranian Armenian for the E-Class vs. A-Class verb

<table>
<thead>
<tr>
<th></th>
<th>E-Class</th>
<th>A-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>երգել երգել, երգեր</td>
<td>կարդալ կարդացել, կարդացեր</td>
</tr>
<tr>
<td>Perf. converb</td>
<td>երգել, երգեր</td>
<td>կարդացել, կարդացեր</td>
</tr>
<tr>
<td>SEA</td>
<td>jeɾkʰ-e-l</td>
<td>kartʰ-a-l</td>
</tr>
<tr>
<td>IA</td>
<td>jeɻkʰ-e-l</td>
<td>kartʰ-a-tsʰ-el</td>
</tr>
<tr>
<td>√-TH-INF</td>
<td>√-TH-INF</td>
<td>√-TH-INF</td>
</tr>
</tbody>
</table>

In the traditional literature on Armenian, the meaningless -tsʰ- is called the aorist suffix. We gloss the additional meaningless suffix tsʰ as aor. The suffix is used to mark synthetic past perfective verbs for the A-Class, but it also used meaninglessly in other constructions. In the case of the perfective converb, this -tsʰ- is being used morphomically. The use of this suffix in the A-Class perfective converb is treated as using an aorist stem. Such a stem is morphomic (Aronoff 1994). For a discussion and analysis of aorist stems in Armenian, see Dolatian & Guéguzian (accepted). In this grammar, we do not provide rules for generating this meaningless aorist suffix.

For descriptive purposes, the full paradigm is given in Table 6.13 for the E-Class.
### 6.3 Periphrastic structures

#### Table 6.13: Paradigm for the present perfect and the pluperfect for E-Class [jeɻkʰ-e-l] ‘to sing’

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Present perfect</th>
<th>Pluperfect</th>
<th>Neg.</th>
<th>Present perfect</th>
<th>Pluperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>jeɻkʰ-el em</td>
<td>jeɻkʰ-el im</td>
<td>tʰ-em</td>
<td>jeɻkʰ-e</td>
<td>tʰ-em</td>
</tr>
<tr>
<td></td>
<td>tʰ-im jeɻkʰ-e</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>'I have sung'</td>
<td></td>
<td></td>
<td>'I haven’t sung'</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tʰ-em</td>
<td>tʰ-im</td>
<td>tʰ-im</td>
<td>tʰ-im</td>
<td>tʰ-im</td>
</tr>
<tr>
<td></td>
<td>tʰ-im</td>
<td>tʰ-im</td>
<td>tʰ-im</td>
<td>tʰ-im</td>
<td>tʰ-im</td>
</tr>
<tr>
<td>2SG</td>
<td>jeɻkʰ-el es</td>
<td>jeɻkʰ-el iɻ</td>
<td>tʰ-es</td>
<td>jeɻkʰ-e</td>
<td>tʰ-es</td>
</tr>
<tr>
<td></td>
<td>tʰ-iɻ</td>
<td>tʰ-iɻ</td>
<td>tʰ-iɻ</td>
<td>tʰ-iɻ</td>
<td>tʰ-iɻ</td>
</tr>
<tr>
<td></td>
<td>es</td>
<td>iɻ</td>
<td>es</td>
<td>iɻ</td>
<td>es</td>
</tr>
<tr>
<td></td>
<td>iɻ</td>
<td>iɻ</td>
<td>iɻ</td>
<td>iɻ</td>
<td>iɻ</td>
</tr>
<tr>
<td>3SG</td>
<td>jeɻkʰ-el w</td>
<td>jeɻkʰ-el eɻ</td>
<td>tʰ-w</td>
<td>jeɻkʰ-e</td>
<td>tʰ-w</td>
</tr>
<tr>
<td></td>
<td>tʰ-eɻ</td>
<td>tʰ-eɻ</td>
<td>tʰ-eɻ</td>
<td>tʰ-eɻ</td>
<td>tʰ-eɻ</td>
</tr>
<tr>
<td></td>
<td>w</td>
<td>eɻ</td>
<td>w</td>
<td>eɻ</td>
<td>w</td>
</tr>
<tr>
<td></td>
<td>eɻ</td>
<td>eɻ</td>
<td>eɻ</td>
<td>eɻ</td>
<td>eɻ</td>
</tr>
<tr>
<td>1PL</td>
<td>jeɻkʰ-el enkʰ</td>
<td>jeɻkʰ-el iŋkʰ</td>
<td>tʰ-enkʰ</td>
<td>jeɻkʰ-e</td>
<td>tʰ-enkʰ</td>
</tr>
<tr>
<td></td>
<td>tʰ-iŋkʰ</td>
<td>tʰ-iŋkʰ</td>
<td>tʰ-iŋkʰ</td>
<td>tʰ-iŋkʰ</td>
<td>tʰ-iŋkʰ</td>
</tr>
<tr>
<td></td>
<td>enkʰ</td>
<td>iŋkʰ</td>
<td>enkʰ</td>
<td>iŋkʰ</td>
<td>enkʰ</td>
</tr>
<tr>
<td></td>
<td>iŋkʰ</td>
<td>iŋkʰ</td>
<td>iŋkʰ</td>
<td>iŋkʰ</td>
<td>iŋkʰ</td>
</tr>
<tr>
<td>2PL</td>
<td>jeɻkʰ-el ekʰ</td>
<td>jeɻkʰ-el ikʰ</td>
<td>tʰ-ekʰ</td>
<td>jeɻkʰ-e</td>
<td>tʰ-ekʰ</td>
</tr>
<tr>
<td></td>
<td>tʰ-ikʰ</td>
<td>tʰ-ikʰ</td>
<td>tʰ-ikʰ</td>
<td>tʰ-ikʰ</td>
<td>tʰ-ikʰ</td>
</tr>
<tr>
<td></td>
<td>ekʰ</td>
<td>ikʰ</td>
<td>ekʰ</td>
<td>ikʰ</td>
<td>ekʰ</td>
</tr>
<tr>
<td></td>
<td>ikʰ</td>
<td>ikʰ</td>
<td>ikʰ</td>
<td>ikʰ</td>
<td>ikʰ</td>
</tr>
<tr>
<td>3PL</td>
<td>jeɻkʰ-el en</td>
<td>jeɻkʰ-el in</td>
<td>tʰ-en</td>
<td>jeɻkʰ-e</td>
<td>tʰ-en</td>
</tr>
<tr>
<td></td>
<td>tʰ-in</td>
<td>tʰ-in</td>
<td>tʰ-in</td>
<td>tʰ-in</td>
<td>tʰ-in</td>
</tr>
<tr>
<td></td>
<td>en</td>
<td>in</td>
<td>en</td>
<td>in</td>
<td>en</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>in</td>
<td>in</td>
<td>in</td>
<td>in</td>
</tr>
</tbody>
</table>

\(\sqrt{-\text{perf.cvb}}\) is \(\text{NEG}-\text{is} \sqrt{-\text{perf.cvb}}\)

When the perfective participle is used with the present auxiliary, the construction denotes the present perfect. If we use the past auxiliary, then the construction denotes the pluperfect. The paradigm for the A-Class ‘to read’ is analogously constructed with the converb [kɒɻtʰ-ɒ-t͡sʰ-el]. We don’t segment the auxiliary. As before, the auxiliary shifts its position in the negated form.
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6.4 Synthetic forms

A large chunk of Iranian Armenian verbal inflection is handled via periphrasis. There are however some pockets of synthetic constructions. These include the aorist (past perfective), subjunctives, and imperatives. Conditionals show split behavior: synthetic in the positive, periphrastic in the negative. Prohibitives are derived from imperatives via the addition of a particle.

6.4.1 Past perfective or aorist form

Impressionistically, the past perfective or aorist is the most common synthetic construction. It is used to denote the simple past. But as the examples in Table 6.14 illustrate, the two classes use markedly different affixes to generate the past perfective. The past perfective of the A-Class is formed in essentially the same way for the two lects, while the E-Class uses a markedly different construction.

Table 6.14: Past perfective 1PL for E-Class and A-Class

<table>
<thead>
<tr>
<th>E-Class</th>
<th>A-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>SEA</td>
</tr>
<tr>
<td>Infinitive</td>
<td>jeɻkʰ-e-l</td>
</tr>
<tr>
<td>‘to sing’</td>
<td>ʃ]-TH-INF</td>
</tr>
<tr>
<td>Past perf.</td>
<td>jeɻkʰ-ɒ-ŋkʰ</td>
</tr>
<tr>
<td>‘we sang’</td>
<td>ʃ]-pst-1pl</td>
</tr>
<tr>
<td>թերձում</td>
<td>թերձեսինք</td>
</tr>
</tbody>
</table>

The name of the past perfective is [անցխակարգային] in Standard Eastern Armenian.

We first describe the A-Class in Iranian Armenian, whose past perfective is formed essentially the same in Standard Eastern. The past perfective is formed by taking the stem of the A-Class (root and theme vowel), and adding the aorist suffix -tʰ-. The -tʰ- is a marker of perfectivity (Donabédian 2016). We then add the past marker /i/ and agreement markers. For brevity, we say that A-Class verbs use the /-tsʰ-i/ template for marking the past perfective. We gloss -tsʰ- as -AOR- in both the past perfective (where it is meaningful) in non-past paradigms, as in the perfective converb of the A-Class (§ 6.3.3).

The complete paradigm is shown in Table 6.15 for the A-Class in Standard Eastern and Iranian Armenian. Negation is formed by adding the prefix ʧʰ-, which
surfaces with a schwa before consonant-initial verbs. The only morphological difference between the two lects is that the 1SG marker /-m/ is used in Iranian Armenian (§6.2.2), while Standard Eastern uses a zero suffix.

Table 6.15: Paradigm of past perfective of A-Class [kɒɻtʰ-ɒ-l] ‘to read’ in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SEA</td>
<td>IA</td>
</tr>
<tr>
<td>1SG</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-m</td>
</tr>
<tr>
<td></td>
<td>‘I read (past)’</td>
<td>‘I read (past)’</td>
</tr>
<tr>
<td></td>
<td>կարդացի կարդացիմ</td>
<td>կարդացի կարդացիմ</td>
</tr>
<tr>
<td>2SG</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-ɻ</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-ɻ</td>
</tr>
<tr>
<td></td>
<td>կարդացիր կարդացիր</td>
<td>կարդացիր կարդացիր</td>
</tr>
<tr>
<td>3SG</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-n</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-n</td>
</tr>
<tr>
<td></td>
<td>կարդաց կարդաց</td>
<td>կարդաց կարդաց</td>
</tr>
<tr>
<td>1PL</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-ŋkʰ</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>կարդացինք կարդացինք</td>
<td>կարդացինք կարդացինք</td>
</tr>
<tr>
<td>2PL</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-kʰ</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-kʰ</td>
</tr>
<tr>
<td></td>
<td>կարդացիք կարդացիք</td>
<td>կարդացիք կարդացիք</td>
</tr>
<tr>
<td>3PL</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-n</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-n</td>
</tr>
<tr>
<td></td>
<td>կարդացին կարդացին</td>
<td>կարդացին կարդացին</td>
</tr>
</tbody>
</table>

For illustration, Table 6.16 provide a fuller segmentation that shows zero markers for the positive. For contrast, we also repeat the paradigm of the past auxiliary.

Table 6.16: Full segmentation of past perfective for A-Class [kɑɾtʰ-ɑ-t͡sʰ-i] ‘to read’ and past auxiliary

<table>
<thead>
<tr>
<th></th>
<th>Past perf. with zero markers</th>
<th>Past auxiliary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-m</td>
<td>կարդացի-ի-m</td>
</tr>
<tr>
<td></td>
<td>կարդացի-ի-m</td>
<td>կարդացի-ի-m</td>
</tr>
<tr>
<td>2SG</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-ɻ</td>
<td>կարդացի-ի-ɻ</td>
</tr>
<tr>
<td></td>
<td>կարդացի-ի-ɻ</td>
<td>կարդացի-ի-ɻ</td>
</tr>
<tr>
<td>3SG</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-n</td>
<td>կարդացի-ի-n</td>
</tr>
<tr>
<td></td>
<td>կարդացի-ի-n</td>
<td>կարդացի-ի-n</td>
</tr>
<tr>
<td>1PL</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-ŋkʰ</td>
<td>կարդացի-ի-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>կարդացի-ի-ŋkʰ</td>
<td>կարդացի-ի-ŋkʰ</td>
</tr>
<tr>
<td>2PL</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-kʰ</td>
<td>կարդացի-ի-kʰ</td>
</tr>
<tr>
<td></td>
<td>կարդացի-ի-kʰ</td>
<td>կարդացի-ի-kʰ</td>
</tr>
<tr>
<td>3PL</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-i-n</td>
<td>կարդացի-ի-n</td>
</tr>
<tr>
<td></td>
<td>կարդացի-ի-n</td>
<td>կարդացի-ի-n</td>
</tr>
</tbody>
</table>

For the past perfective in the 3SG, both the past suffix and the agreement suffix are covert. Elsewhere for the A-Class, the past suffix is /i/ in the past imperfective,
Verbal morphology

Just as in past auxiliaries. Outside of the 3SG, the agreement morphs likewise match the morphs used in the past auxiliary: \( i-\eta k^h \) ‘we were’. We list below some other example A-Class words in the past perfective that we have collected.

Table 6.17: Past perfective 2SG of some A-Class verbs

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Past perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA 3əpt-ɒ-l</td>
<td>IA 3əpt-ɒ-tsʰ-i-ɻ</td>
</tr>
<tr>
<td>‘to smile’</td>
<td>‘You.sg smiled’</td>
</tr>
<tr>
<td>ʒəpt-ɒ-l</td>
<td>ʒəpt-ɒ-t͡sʰ-i-ɻ</td>
</tr>
<tr>
<td>ʒəpt-ɑ-t͡sʰ-i-ɾ</td>
<td>ʃəpt-ɑ-t͡sʰ-i-ɾ</td>
</tr>
<tr>
<td>hɒvɒt-ɒ-l</td>
<td>hɒvɒt-ɑ-t͡sʰ-i-∅</td>
</tr>
<tr>
<td>‘to believe’</td>
<td>‘I believed’</td>
</tr>
<tr>
<td>hwəvənt-ɒ-l</td>
<td>hwəvənt-ɑ-t͡sʰ-i-∅</td>
</tr>
<tr>
<td>hwəvənt-ɑ-tsʰ-i-∅</td>
<td>hwəvənt-ɑ-tsʰ-i-∅</td>
</tr>
<tr>
<td>√-TH-INF</td>
<td>√-TH-AOR-PST-AGR</td>
</tr>
</tbody>
</table>

For the E-Class, the past perfective has a more complicated construction. In Standard Eastern, the past perfective is formed in the same way as for the A-Class, except for a difference in theme vowel: \[ jɛɾkʰ-e-tsʰ-i-ŋkʰ \] ‘we sang’. Thus the Standard Eastern E-Class uses the template /-t͡sʰ-i/. In contrast, the Iranian Armenian form drops the theme vowel and the aorist, and uses a different past allomorph /-ɒ/: \[ jeɻkʰ-ɒ-ŋkʰ \] ‘we sang’. For brevity, we say that the Iranian Armenian E-Class uses the template /-ɒ-ɒ/ where -ɒ is a covert perfective or aorist marker.

The paradigm is given below for both lects. The negative is formed by just adding the negation prefix \( tʃʰə- \). In order to save space we do not show zero morphs.
### Table 6.18: Paradigm of past perfective of E-Class ‘to sing’ in both lects

<table>
<thead>
<tr>
<th></th>
<th>Standard Eastern</th>
<th>Iranian Armenian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td><strong>1SG</strong></td>
<td>jeɾkʰ-e-t͡sʰ-i</td>
<td>t͡ʃʰə-jeɾkʰ-e-t͡sʰ-i</td>
</tr>
<tr>
<td></td>
<td>‘I sang’</td>
<td>‘I did not sing’</td>
</tr>
<tr>
<td></td>
<td>երգեցի</td>
<td>չերգեցի</td>
</tr>
<tr>
<td><strong>2SG</strong></td>
<td>jeɾkʰ-e-t͡sʰ-i-ɾ</td>
<td>t͡ʃʰə-jeɾkʰ-e-t͡sʰ-i-ɾ</td>
</tr>
<tr>
<td></td>
<td>երգեցիր</td>
<td>չերգեցիր</td>
</tr>
<tr>
<td><strong>3SG</strong></td>
<td>jeɾkʰ-e-t͡sʰ</td>
<td>t͡ʃʰə-jeɾkʰ-e-t͡sʰ</td>
</tr>
<tr>
<td></td>
<td>երգեց</td>
<td>չերգեց</td>
</tr>
<tr>
<td><strong>1PL</strong></td>
<td>jeɾkʰ-e-t͡sʰ-i-ŋkʰ</td>
<td>t͡ʃʰə-jeɾkʰ-e-t͡sʰ-i-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>երգեցիինք</td>
<td>չերգեցիինք</td>
</tr>
<tr>
<td><strong>2PL</strong></td>
<td>jeɾkʰ-e-t͡sʰ-i-kʰ</td>
<td>t͡ʃʰə-jeɾkʰ-e-t͡sʰ-i-kʰ</td>
</tr>
<tr>
<td></td>
<td>երգեցիք</td>
<td>չերգեցիք</td>
</tr>
<tr>
<td><strong>3PL</strong></td>
<td>jeɾkʰ-e-t͡sʰ-i-n</td>
<td>t͡ʃʰə-jeɾkʰ-e-t͡sʰ-i-n</td>
</tr>
<tr>
<td></td>
<td>երգեցին</td>
<td>չերգեցին</td>
</tr>
</tbody>
</table>

In the 3SG of the E-Class, Iranian Armenian uses an overt /v/ morph for past, and /v/ for agreement. Standard Eastern uses covert nodes for both. The 1SG uses an overt agreement morph /m/ in Iranian Armenian, but covert in Standard Eastern.

To showcase the widespread difference between Standard Eastern and Iranian Armenian for the E-Class perfective, the following table lists some frequent E-Class verbs, and an example past perfective form.
### Table 6.19: Past perfective form of some E-Class verbs

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Past perfective form</th>
<th>SEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>IA</td>
<td>SEA</td>
</tr>
<tr>
<td>χαμ-e-l</td>
<td>χαμ-ί-Ł</td>
<td>χαμ-ί-Ł</td>
</tr>
<tr>
<td>tσκ-e-l</td>
<td>tσκ-ί</td>
<td>tσκ-ί</td>
</tr>
<tr>
<td>tσρ-e-l</td>
<td>tσρ-Ł</td>
<td>tσρ-Ł</td>
</tr>
<tr>
<td>ψοɾf-e-l</td>
<td>ψοɾf-Ł</td>
<td>ψοɾf-Ł</td>
</tr>
<tr>
<td>kʊɾf³-e-l</td>
<td>kʊɾf³-Ł</td>
<td>kʊɾf³-Ł</td>
</tr>
<tr>
<td>mekn-e-l</td>
<td>mekn-Ł</td>
<td>mekn-Ł</td>
</tr>
<tr>
<td>barn-e-l</td>
<td>barn-Ł</td>
<td>barn-Ł</td>
</tr>
<tr>
<td>kʊŋg(ə)n-e-l</td>
<td>kʊŋg(ə)n-Ł</td>
<td>kʊŋg(ə)n-Ł</td>
</tr>
<tr>
<td>k³ŋj-e-l</td>
<td>k³ŋj-Ł</td>
<td>k³ŋj-Ł</td>
</tr>
<tr>
<td>υɾɔk-e-l</td>
<td>υɾɔk-Ł</td>
<td>υɾɔk-Ł</td>
</tr>
<tr>
<td>ϝɾ-e-l</td>
<td>ϝɾ-Ł</td>
<td>ϝɾ-Ł</td>
</tr>
<tr>
<td>gœɾ-e-l</td>
<td>gœɾ-Ł</td>
<td>gœɾ-Ł</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Th inf</strong></th>
<th><strong>Pst-2sg</strong></th>
<th><strong>Th-aor-pst-agr</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>-th-inf</td>
<td>-pst-2sg</td>
<td>-th-aor-pst-agr</td>
</tr>
</tbody>
</table>

In terms of morphological structure, we assume that the Iranian Armenian past perfective of the E-Class contains a covert aorist perfective suffix to license perfective meaning. The theme vowel is then deleted before the /ɒ/ vowel as a morpheme-specific rule of vowel-hiatus repair.

**Rule 12.** Delete theme vowels before the past suffix /ɒ/

\[
/e/ \rightarrow \emptyset / _ D
\]

(where /e/ is a theme vowel, and /ɒ/ is a past marker)

We show below the underlying and surface structure of the past perfective 1PL for both the A-Class and E-Class in Iranian Armenian. The aorist suffix marks perfective aspect ASP.

**Representation 1.** Underlying and surface structure of past perfective 1PL in Iranian Armenian
Before we provide complete rules for these morphemes in Iranian Armenian, readers might wonder about the origin of this /ɒ/ morph. In Standard Eastern, the cognate of this morph is the past morph /ɑ/. This /ɑ/ is restricted to certain irregular classes and in some regular complex verbs such as inchoatives. In fact, the /ɑ/ morph is treated as the restricted or marked past allomorph in Standard Eastern and in Western Armenian (Dolatian & Guekguezian 2021, Karakaş et al. 2021), while /i/ is the elsewhere morph. In contrast in Iranian Armenian, the /ɒ/ morph has developed a larger distribution, while /i/ shrank in its distribution. Similarly for the aorist/perfective suffix, the morph /t͡sʰ/ is the elsewhere morph in Standard Eastern, while a covert -∅ is restricted to some irregular verbs.

The table below illustrates the distribution of these four morphs. For Standard Eastern, the perfective-past sequence of morphs is /-t͡sʰ-i/ for E-Class and A-Class verbs, while this sequence is /-∅-ɑ/ for suppletive verbs like *ut-e-l* ‘to eat’. In contrast for Iranian Armenian, the /∅-n/ sequence is now generalized to the perfective of E-Class, while /-t͡sʰ-i/ shrank in its distribution. We show the deleted theme vowels and covert aspect.
Table 6.20: Past perfective 1PL for E-Class, A-Class, and suppletive verbs

(a) Infinitive and 1PL past imperfective form

<table>
<thead>
<tr>
<th></th>
<th>A-Class</th>
<th>E-Class</th>
<th>Suppletive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘to read’</td>
<td>‘to sing’</td>
<td>‘to eat’</td>
</tr>
<tr>
<td>SEA</td>
<td>Inf.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-l</td>
<td>jerkʰ-e-l</td>
<td>ut-e-l</td>
</tr>
<tr>
<td></td>
<td>Past Impf. 3PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑj-i-n</td>
<td>jerkʰ-ej-i-n</td>
<td>ut-ej-i-n</td>
</tr>
<tr>
<td>IA</td>
<td>Inf.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-tʰ-i-ŋkʰ</td>
<td>jerkʰ-e-tʰ-i-ŋkʰ</td>
<td>ker-∅-∅-ɑ-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>Past Impf. 3PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-j-i-n</td>
<td>jerkʰ-ej-i-n</td>
<td>ut-ej-i-n</td>
</tr>
</tbody>
</table>

(b) Past perfective 1PL form

<table>
<thead>
<tr>
<th></th>
<th>A-Class</th>
<th>E-Class</th>
<th>Suppletive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘we read’</td>
<td>‘we sang’</td>
<td>‘we ate’</td>
</tr>
<tr>
<td>SEA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-tʰ-i-ŋkʰ</td>
<td>jerkʰ-e-tʰ-i-ŋkʰ</td>
<td>ker-∅-∅-ɑ-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>√-TH-AOR-PST-1PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>կարդալ երգել ուտել</td>
<td>կարդացինք երգեցինք կերանք</td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-tʰ-i-ŋkʰ</td>
<td>jerkʰ-e-tʰ-i-ŋkʰ</td>
<td>ker-∅-∅-ɑ-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>√-TH-AOR-PST-1PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>կարդացինք երգանք կերանք</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is a separate diachronic question to determine what caused these changes. One possible source is that the /ɑ/ morph is used in high-frequency irregular and suppletive verbs in Standard Eastern Armenian. Iranian Armenian speakers thus generalized the distribution of /ɑ,ɒ/ from high-frequency verbs to regular verbs, as illustrated above. Such a diachronic change is attested across different Armenian lects of Iran (Աճառյան 1961: 201; Martirosyan 2019) and Colloquial Eastern Armenian in Yerevan (Dum-Tragut 2009: 230 citing Ղարագյուլյան 1981: 98; Ավետյան 2020). Tehrani Iranian Armenian is special in how widescale this change is.\(^7\)

We leave a full-scale diachronic investigation to future work. For now, we focus on a synchronic analysis of Iranian Armenian.\(^8\) The generalization is that

---

\(^7\)Some dialectological sources are more vague because they conflate the use of a zero perfective -∅ with a past /-ɑ, -ɒ/ (Ծաղիկյան 1972: p. 102, feature 95).

\(^8\)For the perfective of the A-Class, one could argue that the reason why the aorist -tʰ- and past suffix /i/ are used is to maintain a contrast between a past perfective 1PL form like [kɑɾtʰ-ɑ-tʰ-i-ŋkʰ] ‘we read.pst’ (where /ɑ/ is the past morph) vs. a subjunctive present form kɑɾtʰ-ɑ-ŋkʰ and subjective past imperfective kɑɾtʰ-ɑ-ŋkʰ ‘if we read.pst’ (where /ɑ/ is the theme vowel). See §6.4.2 for a fuller discussion of subjunctives.
in Standard Eastern, the default template for the past perfective is /-t\textsuperscript{h}-i/, while it is /-∅-a/ in Iranian Armenian. In auxiliaries and in the past imperfective (§6.4.2), the past is uniformly just /-i/. These generalizations are formalized below, based on the A-Class, suppletive ‘to eat’, and E-Class.

For the perfective or aorist morpheme, the zero morph -∅ is used for the suppletive verb ‘to eat’ in both Standard Eastern and Iranian Armenian. The morph /-t\textsuperscript{h}/ is used elsewhere. In Iranian Armenian, the zero morph is the elsewhere case, while the /-t\textsuperscript{h}/ morph is for the A-Class. Note the switch in which morph is the elsewhere case.

**Rule 13. Rules for the perfective suffix for A/E-Class and suppletive ‘to eat’**

**Standard Eastern**

\[
\begin{align*}
\text{AOR} & \leftrightarrow -∅ / \sqrt{\text{eat}} \text{ TH } _ - \\
& -t\text{h} / \text{ elsewhere}
\end{align*}
\]

**Iranian Armenian**

\[
\begin{align*}
\text{AOR} & \leftrightarrow -t\text{h} / \sqrt{\text{A-Class}} \text{ TH } _ - \\
& -∅ / \text{ elsewhere}
\end{align*}
\]

For the past morpheme, the marker is /-i/ in the imperfective and in auxiliaries. We treat imperfectivity as the lack of an aspect suffix. In the past perfective in Standard Eastern, the past marker is /-a/ for the suppletive ‘to eat’, and /-i/ elsewhere. In Iranian Armenian, the /-i/ is for the A-Class, while /-∅/ is elsewhere in the past perfective.

**Rule 14. Rules for past marker in A/E-Class and suppletive ‘to eat’**

**Standard Eastern**

\[
\begin{align*}
\text{PST} & \leftrightarrow -a / \sqrt{\text{eat}} \text{ TH AOR } _ - \\
& -i / \text{ elsewhere}
\end{align*}
\]

**Iranian Armenian**

\[
\begin{align*}
\text{PST} & \leftrightarrow -∅ / \text{ AOR } _ - \\
& -i / \sqrt{\text{A-Class}} \text{ TH AOR } _ - \\
& / \text{ elsewhere (when verb is auxiliary or imperfective)}
\end{align*}
\]

The rules are quiet convoluted. But the core generalization is that in the past perfective, the default template is /-t\textsuperscript{h}-i/, while /-∅-a/ is the restricted or marked template. Iranian Armenian instead does the reverse, with /-∅-∅/ as default while /-t\textsuperscript{h}-i/ is restricted or marked. We next discuss subjunctives, where we again find the past marker /-i/.
6 Verbal morphology

6.4.2 Subjunctives

The subjunctive is a synthetic construction. It includes present and past imperfec-
tives. In brief, these synthetic subjunctive forms contrast from the periphrastic
indicative forms by placing T/Agr suffixes on the verb itself instead of on the
auxiliary. We illustrate below for the A-Class verb [kɒɻtʰ-ɒ-l] ‘to read’ in Iranian
Armenian.

Table 6.21: Synthetic subjunctives vs. periphrastic indicatives for the
1PL in Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>Present 1PL</th>
<th>Past imperfective PL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicative</strong></td>
<td>kɒɻtʰ-um e-ŋkʰ</td>
<td>kɒɻtʰ-um Ǿ-i-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>√-IMPF.CVB is-1PL</td>
<td>√-IMPF.CVB is-PST-1PL</td>
</tr>
<tr>
<td></td>
<td>կարդում ենք</td>
<td>կարդում ինք</td>
</tr>
<tr>
<td></td>
<td>‘we read’</td>
<td>‘we were reading’</td>
</tr>
<tr>
<td><strong>Subjunctive</strong></td>
<td>kɒɻtʰ-ɒ-ŋkʰ</td>
<td>kɒɻtʰ-ɒj-i-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>√-TH-1PL</td>
<td>√-TH-PST-1PL</td>
</tr>
<tr>
<td></td>
<td>կարդանք</td>
<td>կարդայինք</td>
</tr>
<tr>
<td></td>
<td>‘(if) we read’</td>
<td>‘(if) we were reading’</td>
</tr>
</tbody>
</table>

The subjunctive mood is called [ըղձական եղանակ] ɣq̣dzak'akan ǰeɾənaq in Stan-
dard Eastern Armenian. Diachronically, the modern subjunctive construction is
a reflex of the Classical indicative (Vaux 1995).

We first illustrate with the present subjunctive for the E-Class in Table 6.22 and
the A-Class in Table 6.23. Negation is marked by adding the prefix /tʰ-/ which
triggers schwa epenthesis before a consonant. We juxtapose these subjunctive
forms with their indicative periphrastic forms. For illustration, we also provide
the Standard Eastern subjunctive present which does not morphologically differ
from Iranian Armenian. As before, we treat the present tense suffix as fused with
the agreement suffix.
### 6.4 Synthetic forms

Table 6.22: Paradigm of subjunctive present in simple E-Class verbs in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th>Iranian Armenian</th>
<th>Standard Eastern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subj. present</strong></td>
<td><strong>Indc. present</strong></td>
</tr>
<tr>
<td><strong>1SG</strong></td>
<td></td>
</tr>
<tr>
<td>jeɻkʰ-e-m</td>
<td>tʃʰə-jeɻkʰ-e-m</td>
</tr>
<tr>
<td>‘(if) I sing’</td>
<td>‘(if) I did not sing’</td>
</tr>
<tr>
<td>երգեմ</td>
<td>չերգեմ</td>
</tr>
<tr>
<td><strong>2SG</strong></td>
<td></td>
</tr>
<tr>
<td>jeɻkʰ-e-s</td>
<td>tʃʰə-jeɻkʰ-e-s</td>
</tr>
<tr>
<td>երգես</td>
<td>չերգես</td>
</tr>
<tr>
<td><strong>3SG</strong></td>
<td></td>
</tr>
<tr>
<td>jeɻkʰ-i</td>
<td>tʃʰə-jeɻkʰ-i</td>
</tr>
<tr>
<td>երգի</td>
<td>չերգի</td>
</tr>
<tr>
<td><strong>1PL</strong></td>
<td></td>
</tr>
<tr>
<td>jeɻkʰ-e-ŋkʰ</td>
<td>tʃʰə-jeɻkʰ-e-ŋkʰ</td>
</tr>
<tr>
<td>երգենք</td>
<td>չերգենք</td>
</tr>
<tr>
<td><strong>2PL</strong></td>
<td></td>
</tr>
<tr>
<td>jeɻkʰ-e-kʰ</td>
<td>tʃʰə-jeɻkʰ-e-kʰ</td>
</tr>
<tr>
<td>երգէք</td>
<td>չերգէք</td>
</tr>
<tr>
<td><strong>3PL</strong></td>
<td></td>
</tr>
<tr>
<td>jeɻkʰ-e-n</td>
<td>tʃʰə-jeɻkʰ-e-n</td>
</tr>
<tr>
<td>երգեն</td>
<td>չերգեն</td>
</tr>
<tr>
<td><strong>(NEG)-√–TH-AGR</strong></td>
<td><strong>√–IMPF.CVB IS-AGR</strong></td>
</tr>
</tbody>
</table>
Table 6.23: Paradigm of subjunctive present in simple A-Class verbs in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th>Iranian Armenian</th>
<th>Standard Eastern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subj. present</strong></td>
<td><strong>Neg.</strong></td>
</tr>
<tr>
<td><strong>Pos.</strong></td>
<td><strong>Pos.</strong></td>
</tr>
<tr>
<td>1SG</td>
<td>kɒɻtʰ-d-m</td>
</tr>
<tr>
<td></td>
<td>‘(if) I read’</td>
</tr>
<tr>
<td>2SG</td>
<td>kɑɾtʰ-a-s</td>
</tr>
<tr>
<td>3SG</td>
<td>kɑɾtʰ-α</td>
</tr>
<tr>
<td>1PL</td>
<td>kɑɾtʰ-OnClick-d-ŋkʰ</td>
</tr>
<tr>
<td>2PL</td>
<td>kɑɾtʰ-OnClick-d-kʰ</td>
</tr>
<tr>
<td>3PL</td>
<td>kɑɾtʰ-OnClick-d-n</td>
</tr>
<tr>
<td>(NEG)-√-TH-AGR</td>
<td>√-IMPF.CVB IS-AGR</td>
</tr>
</tbody>
</table>

For all but the 3SG, the distribution of the Agr suffixes follows straightforwardly. The same Agr suffixes as used in the present auxiliary are placed onto the subjunctive verb. In the A-Class, we see that the 3SG morph is covert in the present subjunctive: [kɒɻtʰ-∅] ‘he reads’. Similarly, the present 3SG auxiliary is just /∅/. But for the E-Class, the /e/ theme vowel is replaced by /i/: [jeɻkʰ-e-∅] ‘he sings’ instead of *jeɻkʰ-e-∅. Explaining this apparent allomorphy has multiple options:

**Rule 15.** Hypothetical rules to explain the subjunctive present 3SG

1. /i/ is the marker of the theme vowel /e/ but it has changed to [i] in the 3SG.

   /jeɻkʰ-e-∅/ → [jeɻkʰ-i-∅]

2. /i/ is the allomorph of the E-Class theme vowel in the present 3SG.

   /jeɻkʰ-i-∅/ |

3. /i/ is the marker of the E-Class 3SG Agr suffix, and the theme /e/ is deleted before /i/.

   /jeɻkʰ-e-i/ → [jeɻkʰ-∅-i]
4. /i/ is the fused marker of the theme vowel /e/ and 3SG. /jeɻkʰ-i/ with glossing √-TH.3SG

5. /i/ is the result of autosegmental docking of the theme vowel /e/ and the E-Class 3SG floating feature [+HIGH]
   /jeɻkʰ-e-[+ HIGH]/ → [jeɻkʰ-i]

Any of the above options must restrict the relevant change to the E-Class, while the A-Class and auxiliary would use a zero morph for the 3SG. We’re partial to a floating feature analysis (cf. Akinlabi 2011) and we use that for illustration. We likewise suspect that such allomorphy isn’t triggered by classes themselves, but by the identity of the actual theme vowel. That is, the present 3SG is [+HIGH] after the /e/ theme vowel, but a zero -∅ elsewhere.

**Rule 16. Rule for the present 3SG agreement suffix**

\[
\text{PRS.3SG} \leftrightarrow [\text{[+HIGH]}] / e_{\text{Th}} - ∅ / \text{elsewhere}
\]

One reason why we are partial to this floating feature analysis over alternatives involving allomorphs is that in Standard Western Armenian, the present 3SG is uniformly a zero for both the E-Class and the A-Class: [jerkʰ-e-∅] ‘he sings’ and [kɑɾtʰ-ɑ-∅] ‘he reads’ [√-TH-PRS/1SG]. Thus, it is likely that Standard Eastern and Iranian Armenian are innovative in causing this /e/→[i] change in the present 3SG.

Moving on to the past imperfective, the subjunctive forms again involve placing the T-Agr suffixes directly onto the verb instead of the auxiliary. We provide paradigms below for E-Class jeɻkʰ-e-l and A-Class kɒɻtʰ-ɑ-l. The abstract morphological structure of subjunctive past imperfective verbs is the same in Standard Eastern and Iranian Armenian. We show deleted and zero morphs. Negation is again formed by adding [tʃʰ(ə)-].
## 6 Verbal morphology

Table 6.24: Paradigm of subjunctive past imperfective in simple E-Class verbs in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th>Iranian Armenian</th>
<th>Standard Eastern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pos.</strong></td>
<td><strong>Neg.</strong></td>
</tr>
<tr>
<td>1SG</td>
<td>jeɻkʰ-∅-i-ɻ</td>
</tr>
<tr>
<td>'if I were singing'</td>
<td>'if I were not singing'</td>
</tr>
<tr>
<td>2SG</td>
<td>jeɻkʰ-∅-i-ɻ</td>
</tr>
<tr>
<td>'I was singing'</td>
<td>'if I were singing'</td>
</tr>
<tr>
<td>3SG</td>
<td>jeɻkʰ-∅-i-ɻ</td>
</tr>
<tr>
<td>'I was singing'</td>
<td>'if I were singing'</td>
</tr>
</tbody>
</table>

Table 6.25: Paradigm of subjunctive past imperfective in simple A-Class verbs in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th>Iranian Armenian</th>
<th>Standard Eastern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pos.</strong></td>
<td><strong>Neg.</strong></td>
</tr>
<tr>
<td>1SG</td>
<td>kɒɻtʰ-∅-i-ɻ</td>
</tr>
<tr>
<td>'if I were reading'</td>
<td>'if I were not reading'</td>
</tr>
<tr>
<td>2SG</td>
<td>kɒɻtʰ-∅-i-ɻ</td>
</tr>
<tr>
<td>'I was reading'</td>
<td>'if I were reading'</td>
</tr>
<tr>
<td>3SG</td>
<td>kɒɻtʰ-∅-i-ɻ</td>
</tr>
<tr>
<td>'I was reading'</td>
<td>'if I were reading'</td>
</tr>
</tbody>
</table>
6.4 Synthetic forms

The markers of tense and agreement in the subjunctive past imperfective all follow from the same rules used for auxiliaries.

Morphophonologically, vowel hiatus between the theme vowel and past /i/ causes deletion of the /e/ theme vowel in Iranian Armenian, while [j] is epenthesized after the /ɒ/ theme vowel. In Standard Eastern, the /e/ theme vowel is not deleted; instead [j] is epenthesized to resolve vowel hiatus. We illustrate below for the 1PL.

**Derivation 1.** Vowel hiatus repair in subjunctive past imperfective

<table>
<thead>
<tr>
<th></th>
<th>A-Class 1PL</th>
<th>E-Class 1PL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘(if) we were reading’</td>
<td>‘(if) we were singing’</td>
</tr>
<tr>
<td>SEA</td>
<td>kɑɾtʰ-ɑ-i-ŋkʰ</td>
<td>jeɾkʰ-e-i-ŋkʰ</td>
</tr>
<tr>
<td>IA</td>
<td>kɑɾtʰ-ɑj-i-ŋkʰ</td>
<td>jeɾkʰ-ej-i-ŋkʰ</td>
</tr>
<tr>
<td>Input</td>
<td>/kɑɾtʰ-ɑ-i-ŋkʰ</td>
<td>/jeɾkʰ-e-i-ŋkʰ</td>
</tr>
<tr>
<td>Epenthesis</td>
<td>kɑɾtʰ-ɑj-i-ŋkʰ</td>
<td>jeɾkʰ-ej-i-ŋkʰ</td>
</tr>
<tr>
<td>Deletion</td>
<td>/kɑɾtʰ-ɑ-i-ŋkʰ</td>
<td>/jeɾkʰ-e-i-ŋkʰ</td>
</tr>
</tbody>
</table>

Glide epenthesis is a general rule of hiatus repair in Armenian, while deletion requires morpheme-specific deletion rules.

**Rule 17.** Delete the /e/ theme vowel before past /i/

/e/  →  ∅  / _ i

(where /e/ is a theme vowel, /i/ is past)

There is evidence that the Armenian dialects of Iran vary in the application of theme vowel deletion before the past marker /i/. In Standard Eastern Armenian, neither the theme vowel /ɑ/ nor the theme vowel /e/ is deleted before past /-i/. In Iranian Armenian, only /e/ is deleted. But in New Julfa Armenian (Isfahan), both theme vowels are deleted (Աճառյան 1940, Vaux in prep: §275).

Before closing this section, we document how we elicited such subjunctives. These subjunctive forms can be elicited in diverse contexts with various meanings (Dum-Tragut 2009: 239ff). In our fieldwork, we used the following sentence where the verb ‘to want’ selects for a subjunctive clause. Note that this sentence is not a control or ECM (exceptional case-marking) construction. The embedded clause can have a different subject than the main clause. The embedded subject can be made overt as a pronoun. The complementizer voɻ can be optionally added.

(9) a. uz-um e-m (voɻ) (iɻɒŋkʰ) jeɻkʰ-e-n
    want-impf.cvb is-1sg (that) (they.nom) sing-th-3pl
    ’I want them to sing.’ (NK)
6 Verbal morphology

6.4.3 Conditional

Conditionals are derived from subjunctives via prefixation in the positive. But their negative forms use periphrasis with a converb called the connegative.

(10) a. kə- kədətʰ -d -ŋkʰ
    cond- read-th -1pl
    ‘We shall read.’ (NK)
    Կը կարդանք։

b. tʃʰ- e -ŋkʰ kədətʰ-d-∅
    neg- is -1pl read-th-cn.cvb
    ‘We shall not read.’ (NK)
    Չենք կարդայ։

The conditional has intricate meanings (Dum-Tragut 2009: 251). For our consultants, it can denote a wish, a future condition, or an optative. It can be used to denote an action in the immediate future, where the agent has a strong desire to perform the action. It can be loosely translated as an emphatic English ‘shall’. The conditional is called [պայմանական եղանակ] պայմանական եղանակ in Standard Eastern Armenian.

In the positive, the conditional is formed by adding the prefix k- to the subjunctive form. A schwa is added to repair any consonant clusters created by this prefix. Complications arise when the root starts with [je] (§3.1.1). When the prefix is added to a subjunctive present verb, the meaning is conditional or conditional future. When added to a subjunctive past imperfective verb, the meaning is the conditional future perfect. We do not provide the Standard Eastern Armenian forms because Standard Eastern Armenian likewise builds this tense from the subjunctive.
6.4 Synthetic forms

Table 6.26: Paradigm of positive conditional future and conditional future perfect in Iranian Armenian

<table>
<thead>
<tr>
<th>Conditional future</th>
<th>Conditional future perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1SG</strong></td>
<td></td>
</tr>
<tr>
<td>E-Class</td>
<td>A-Class</td>
</tr>
<tr>
<td>кə-jejɛkʰ-e-m</td>
<td>кə-ko DriverManager</td>
</tr>
<tr>
<td>‘I shall sing.’</td>
<td>‘I shall read.’</td>
</tr>
<tr>
<td>կը երգեմ</td>
<td>կը կարդամ</td>
</tr>
<tr>
<td>‘I wanted to sing.’</td>
<td>‘I wanted to read.’</td>
</tr>
<tr>
<td>կը երգիր</td>
<td>կը կարդայ</td>
</tr>
<tr>
<td><strong>2SG</strong></td>
<td></td>
</tr>
<tr>
<td>E-Class</td>
<td>A-Class</td>
</tr>
<tr>
<td>кə-jejɛkʰ-e-s</td>
<td>кə-ko DriverManager</td>
</tr>
<tr>
<td>‘I shall sing.’</td>
<td>‘I shall read.’</td>
</tr>
<tr>
<td>կը երգես</td>
<td>կը կարդաս</td>
</tr>
<tr>
<td>‘I wanted to sing.’</td>
<td>‘I wanted to read.’</td>
</tr>
<tr>
<td>կը երգիր</td>
<td>կը կարդայ</td>
</tr>
<tr>
<td><strong>3SG</strong></td>
<td></td>
</tr>
<tr>
<td>E-Class</td>
<td>A-Class</td>
</tr>
<tr>
<td>кə-jejɛkʰ-i-∅</td>
<td>кə-ko DriverManager</td>
</tr>
<tr>
<td>‘I shall sing.’</td>
<td>‘I shall read.’</td>
</tr>
<tr>
<td>կը երգի</td>
<td>կը կարդայ</td>
</tr>
<tr>
<td>‘I wanted to sing.’</td>
<td>‘I wanted to read.’</td>
</tr>
<tr>
<td>կը երգի</td>
<td>կը կարդայ</td>
</tr>
<tr>
<td><strong>1PL</strong></td>
<td></td>
</tr>
<tr>
<td>E-Class</td>
<td>A-Class</td>
</tr>
<tr>
<td>кə-jejɛkʰ-e-ŋkʰ</td>
<td>кə-ko DriverManager</td>
</tr>
<tr>
<td>‘I shall sing.’</td>
<td>‘I shall read.’</td>
</tr>
<tr>
<td>կը երգենք</td>
<td>կը կարդանք</td>
</tr>
<tr>
<td>‘I wanted to sing.’</td>
<td>‘I wanted to read.’</td>
</tr>
<tr>
<td>կը երգինք</td>
<td>կը կարդայինք</td>
</tr>
<tr>
<td><strong>2PL</strong></td>
<td></td>
</tr>
<tr>
<td>E-Class</td>
<td>A-Class</td>
</tr>
<tr>
<td>кə-jejɛkʰ-e-kʰ</td>
<td>кə-ko DriverManager</td>
</tr>
<tr>
<td>‘I shall sing.’</td>
<td>‘I shall read.’</td>
</tr>
<tr>
<td>կը երգեք</td>
<td>կը կարդաք</td>
</tr>
<tr>
<td>‘I wanted to sing.’</td>
<td>‘I wanted to read.’</td>
</tr>
<tr>
<td>կը երգիք</td>
<td>կը կարդայիք</td>
</tr>
<tr>
<td><strong>3PL</strong></td>
<td></td>
</tr>
<tr>
<td>E-Class</td>
<td>A-Class</td>
</tr>
<tr>
<td>кə-jejɛkʰ-e-n</td>
<td>кə-ko DriverManager</td>
</tr>
<tr>
<td>‘I shall sing.’</td>
<td>‘I shall read.’</td>
</tr>
<tr>
<td>կը երգեն</td>
<td>կը կարդան</td>
</tr>
<tr>
<td>‘I wanted to sing.’</td>
<td>‘I wanted to read.’</td>
</tr>
<tr>
<td>կը երգին</td>
<td>կը կարդային</td>
</tr>
</tbody>
</table>

We assume the prefix /k-/ is a conditional mood marker.

The above focused on construction the conditional when the verb is positive. But when the verb is negative, then we use an entirely different periphrastic construction. Tense and agreement is on a negative auxiliary (§6.2). The verb is in the connegative converb form, also called the negative participle (Dum-Tragut 2009: 214). The converb is called [չախտական դերբայ] չախտական դերբայ in Standard Eastern Armenian. The converb is constructed differently for the two classes. The converb suffix is a zero morph in the A-Class. In the E-Class, the theme vowel is replaced by /i/.

Table 6.27: Connegative converbs for the E-Class and A-Class

<table>
<thead>
<tr>
<th></th>
<th>E-Class ‘to sing’</th>
<th>A-Class ‘to read’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>je.ɛkʰ-e-l</td>
<td>ko.DriverManager</td>
</tr>
<tr>
<td></td>
<td>√-TH-INF</td>
<td></td>
</tr>
<tr>
<td>Connegative</td>
<td>je.ɛkʰ-i</td>
<td>ko.DriverManager</td>
</tr>
<tr>
<td>Possible analysis:</td>
<td>je.ɛkʰ-i-∅</td>
<td>ko.DriverManager</td>
</tr>
<tr>
<td></td>
<td>√-TH-CN.CVB</td>
<td></td>
</tr>
</tbody>
</table>
6 Verbal morphology

In terms of segmentation, we treat the connegative converb as a zero suffix in the A-Class. In the E-Class, we assume the connegative is a floating [+HIGH] feature that docks onto the /e/ theme vowel, thus changing /e/ to [i]. This is the same analytical strategy that we used for the subjunctive present 3SG (Rule 16). The alternatives in (Rule 15) would also work.

Rule 18. Rule for the connegative converb

\[
\text{CN.CVB} \leftrightarrow [+\text{HIGH}] / e_- / \text{elsewhere}
\]

We show the negative paradigm below.

Table 6.28: Paradigm of negative conditional future and negative conditional future perfect in Iranian Armenian

<table>
<thead>
<tr>
<th>E-Class</th>
<th>A-Class</th>
<th>E-Class</th>
<th>A-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>tʃʰ-em jeɻkʰ-i-ɻ</td>
<td>tʃʰ-em koɾtʰ-n-ʊ</td>
<td>tʃʰ-im jeɻkʰ-i-ɻ</td>
</tr>
<tr>
<td></td>
<td>'I shall not sing'</td>
<td></td>
<td>'I would not have sing'</td>
</tr>
<tr>
<td>2SG</td>
<td>tʃʰ-es jeɻkʰ-i-ɻ</td>
<td>tʃʰ-es koɾtʰ-n-ʊ</td>
<td>tʃʰ-iɻ jeɻkʰ-i-ɻ</td>
</tr>
<tr>
<td></td>
<td>'I shall not read'</td>
<td></td>
<td>'I would not have read'</td>
</tr>
<tr>
<td>3SG</td>
<td>tʃʰ-i jeɻkʰ-i-ɻ</td>
<td>tʃʰ-i koɾtʰ-n-ʊ</td>
<td>tʃʰ-eɻ jeɻkʰ-i-ɻ</td>
</tr>
<tr>
<td></td>
<td>'I shall not sing'</td>
<td></td>
<td>'I would not have sing'</td>
</tr>
<tr>
<td>1PL</td>
<td>tʃʰ-enkʰ jeɻkʰ-i-ɻ</td>
<td>tʃʰ-enkʰ koɾtʰ-n-ʊ</td>
<td>tʃʰ-inkʰ jeɻkʰ-i-ɻ</td>
</tr>
<tr>
<td></td>
<td>'I shall not sing'</td>
<td></td>
<td>'I would not have sing'</td>
</tr>
<tr>
<td>2PL</td>
<td>tʃʰ-ekʰ jeɻkʰ-i-ɻ</td>
<td>tʃʰ-ekʰ koɾtʰ-n-ʊ</td>
<td>tʃʰ-ikʰ jeɻkʰ-i-ɻ</td>
</tr>
<tr>
<td></td>
<td>'I shall not read'</td>
<td></td>
<td>'I would not have read'</td>
</tr>
<tr>
<td>3PL</td>
<td>tʃʰ-en jeɻkʰ-i-ɻ</td>
<td>tʃʰ-en koɾtʰ-n-ʊ</td>
<td>tʃʰ-in jeɻkʰ-i-ɻ</td>
</tr>
<tr>
<td></td>
<td>'I shall not sing'</td>
<td></td>
<td>'I would not have sing'</td>
</tr>
</tbody>
</table>

We do not show Standard Eastern Armenian because it displays the exact same patterns, factoring out the phonological differences in the low vowel and rhotic, i.e., the connegative of ‘to read’ in Iranian Armenian [koɾtʰ-ʊ] corresponds to [kɑɾtʰ-ɑ] in Standard Eastern. We do not provide full segmentation for the auxiliary; for that see §6.2.3.

6.4.4 Imperatives and prohibitives

Imperatives and prohibitives are formed almost identically between Standard Eastern and Iranian Armenian. They are restricted to the second person. The
markers of imperative and prohibitive morphology depend on verb class. We show the imperative paradigms in Table 6.29. We use zero morphs to represent deleted theme vowels and covert 2SG suffixes.

Table 6.29: Paradigm of imperatives in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>E-Class</th>
<th>A-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SEA IA</td>
<td>SEA IA</td>
</tr>
<tr>
<td>Infinitive</td>
<td>jeɾkʰ-e-l</td>
<td>jeɻkʰ-e-l</td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-l</td>
<td>kɒɻtʰ-ɑ-l</td>
</tr>
<tr>
<td></td>
<td>'to sing'</td>
<td>'to read'</td>
</tr>
<tr>
<td></td>
<td>երգել</td>
<td>կարդալ</td>
</tr>
<tr>
<td>Imperative 2SG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colloquial</td>
<td>jeɾkʰ-∅-iɾ</td>
<td>jeɻkʰ-∅-i</td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-∅</td>
<td>kɒɻtʰ-ɑ-∅</td>
</tr>
<tr>
<td></td>
<td>'to sing'</td>
<td>'to read'</td>
</tr>
<tr>
<td></td>
<td>երգիր</td>
<td>կարդա</td>
</tr>
<tr>
<td>Imperative 2PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>jeɾkʰ-∅-ekʰ</td>
<td>jeɻkʰ-∅-ekʰ</td>
</tr>
<tr>
<td></td>
<td>kɑɾtʰ-ɑ-tsʰ-ekʰ</td>
<td>kɒɻtʰ-ɑ-tsʰ-ekʰ</td>
</tr>
<tr>
<td></td>
<td>'sing.pl'</td>
<td>'read.pl'</td>
</tr>
<tr>
<td></td>
<td>երգեք</td>
<td>կարդացեք</td>
</tr>
</tbody>
</table>

The imperative is called [հրամայական եղանակ] հրամայակային եղանակ in Standard Eastern Armenian. In the imperative 2SG, the A-Class is inflected by adding nothing to the theme vowel in both lects. The imperative 2SG suffix is thus covert for the A-Class: kɒɻtʰ-ɑ-∅ 'read!'.

But for the E-Class, there is significant cross-dialectal variation. In Standard Eastern Armenian, the theme vowel is deleted, and followed by the overt imperative 2SG suffix -iɾ: jeɾkʰ-ir 'sing!' In Colloquial Eastern Armenian, the suffix can be optionally reduced to -i: jeɾkʰ-i (Dum-Tragut 2009: 273; Քամալյան 2015: 164; Գրիգորյան 2019). Iranian Armenian uses only -i: jeɻkʰ-i 'sing!' . In contrast in Standard Western Armenian, both the E-Class and A-Class use a covert suffix without a vowel change: jeɾkʰ-e 'sing!' երգէ, գարtʰ-a 'read!' դասիկ.

For the imperative 2PL, the two lects align. The E-Class is inflected by adding the imperative 2PL suffix -ekʰ to the root, deleting the theme vowel: jeɻkʰ-ekʰ 'sing.pl'. In the A-Class, the aorist suffix -tsʰ- is added between the theme vowel and the -ekʰ: kɒɻtʰ-d-tsʰ-ekʰ 'read.pl'. The use of the aorist here is morphomic and meaningless, and is traditionally analyzed as part of an ‘aorist stem’.\(^9\) For

---

\(^9\)One could argue that the reason why the A-Class imperative 2PL uses the morphomic aorist in [kɒɻtʰ-d-tsʰ-ekʰ] ‘read.pl’ is to prevent ambiguity with the present subjunctive 2PL [kɒɻtʰ-
the E-Class, more prescriptive uses of Standard Eastern Armenian utilize the aorist stem for the E-Class imperative 2PL as well (Dum-Tragut 2009: 272). But it has become increasingly common to abandon the aorist stem for the E-Class imperative 2PL in Standard Eastern Armenian.

The prohibitive is formed by simply adding the proclitic mi before the imperative form: *mi kɒɻtʰ-ɒ* ‘don’t read!’.

**Table 6.30: Paradigm of prohibitives in Standard Eastern and Iranian Armenian**

<table>
<thead>
<tr>
<th></th>
<th>E-Class</th>
<th>IA</th>
<th>A-Class</th>
<th>IA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infinitive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>jeɾkʰ-e-l</td>
<td>jeɻkʰ-e-l</td>
<td>kartʰ-ɑ-l</td>
<td>kɑɾtʰ-ɑ-l</td>
</tr>
<tr>
<td></td>
<td>√-TH-INF 'to sing'</td>
<td>√-TH-INF 'to read'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>տադռու</td>
<td>տադռո</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prohibitive 2SG</strong></td>
<td>mi jeɾkʰ-∅-ir</td>
<td>mi jeɻkʰ-∅-i</td>
<td>mi kartʰ-∅-ir</td>
<td>mi kɑɾtʰ-∅-i</td>
</tr>
<tr>
<td>Colloquial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mi jeɾkʰ-∅-i</td>
<td>mi jeɻkʰ-∅-i</td>
<td>mi kartʰ-∅-i</td>
<td>mi kɑɾtʰ-∅-i</td>
</tr>
<tr>
<td></td>
<td>PROH √-TH-IMP.2SG</td>
<td>PROH √-TH-IMP.2SG</td>
<td>PROH √-TH-IMP.2SG</td>
<td>PROH √-TH-IMP.2SG</td>
</tr>
<tr>
<td></td>
<td>ուհ տադռո</td>
<td>ուհ տադռո</td>
<td>ուհ տադռո</td>
<td>ուհ տադռո</td>
</tr>
<tr>
<td><strong>Prohibitive 2PL</strong></td>
<td>mi jeɾkʰ-∅-ekʰ</td>
<td>mi jeɻkʰ-∅-ekʰ</td>
<td>mi kartʰ-∅-ekʰ</td>
<td>mi kɑɾtʰ-∅-ekʰ</td>
</tr>
<tr>
<td></td>
<td>PROH √-TH-IMP.2PL</td>
<td>PROH √-TH-IMP.2PL</td>
<td>PROH √-TH-AOR-IMP.2PL</td>
<td>PROH √-TH-AOR-IMP.2PL</td>
</tr>
<tr>
<td></td>
<td>ուհ տադռու</td>
<td>ուհ տադռո</td>
<td>ուհ տադռու</td>
<td>ուհ տադռու</td>
</tr>
</tbody>
</table>

For illustration, the verbs below show the imperative and prohibitive form of various verbs that we had elicited over the years.

---

*d-kʰ* ‘if you.pl read’. Analyzing the use of morphomic aorist as due to contrast-preservation is attractive. However, it would not extend to other paradigm cells for the A-Class like the subject participle, which also uses the morphomic aorist *[kɑɾtʰ-∅-tsʰ-oɾ]* ‘reader’ without any contrasting form *[*kɑɾtʰ-∅-oɾ]*.
6.4 Synthetic forms

Table 6.31: Elicited imperatives and prohibitives

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Finite form</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>nəst-e-l 'to sit'</td>
<td>nəst-i</td>
<td>Imp 2SG նախ</td>
</tr>
<tr>
<td>kʰən-e-l 'to sleep'</td>
<td>kʰən-i</td>
<td>Imp 2SG քան</td>
</tr>
<tr>
<td>ɡəɻ-e-l 'to write'</td>
<td>ɡəɻ-i</td>
<td>Imp 2SG գրի</td>
</tr>
<tr>
<td>ɡəɻ-ekʰ Proh 2PL</td>
<td>մի գրի</td>
<td>մի գրի</td>
</tr>
<tr>
<td>bərn-e-l 'to hold/catch'</td>
<td>bərn-i</td>
<td>Proh 2SG բռնի</td>
</tr>
<tr>
<td>kʰən-i Imp 2SG</td>
<td>քնի</td>
<td>քնի</td>
</tr>
<tr>
<td>ɡəɻ-ekʰ Proh 2PL</td>
<td>մի գրէք</td>
<td>մի գրէք</td>
</tr>
<tr>
<td>t͡səχ-e-l 'to smoke'</td>
<td>t͡səχ-i</td>
<td>Proh 2SG ծխի</td>
</tr>
<tr>
<td>ɡəɻ-ekʰ Proh 2PL</td>
<td>մի գրէք</td>
<td>մի գրէք</td>
</tr>
<tr>
<td>χɒʁ-ɒ-l 'to play'</td>
<td>χţi-ɾau</td>
<td>Proh 2SG խաղա</td>
</tr>
<tr>
<td>ɡəɻ-ekʰ Proh 2PL</td>
<td>մի գրէք</td>
<td>մի գրէք</td>
</tr>
<tr>
<td>mən-ɒ-l ‘to remain’</td>
<td>mən-ɒ</td>
<td>Proh 2SG մնա</td>
</tr>
<tr>
<td>ɡəɻ-ekʰ Proh 2PL</td>
<td>մի գրէք</td>
<td>մի գրէք</td>
</tr>
<tr>
<td>ʒəpt-ɒ-l ‘to smile’</td>
<td>ʒəpt-ɒ</td>
<td>Proh 2SG ժպտա</td>
</tr>
<tr>
<td>ɡəɻ-ekʰ Proh 2PL</td>
<td>մի գրէք</td>
<td>մի գրէք</td>
</tr>
</tbody>
</table>

One thing to note though is that our Iranian Armenian speakers frequently prefer to use the negative subjunctive present 2PL in lieu of the prohibitive 2PL. We suspect this is an influence from Persian. AS reports that Persian often utilizes the subjunctive 2PL in lieu of the negative imperative 2PL. Note how for the E-Class, the surface sequence -ekʰ has different morphological parses in the subjunctive vs. prohibitive.

Table 6.32: Negative subjunctive vs. prohibitive 2PL in Iranian Armenian

<table>
<thead>
<tr>
<th>E-Class ‘to sing’</th>
<th>Prohibitive 2PL</th>
<th>Negative subj. 2PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>mi jeɻkʰ-ekʰ</td>
<td>tʃə-jeɻkʰ-e-kʰ</td>
<td></td>
</tr>
<tr>
<td>PROH ɹ-IMP.2PL</td>
<td>NEG-ɹ-TH-2PL</td>
<td></td>
</tr>
<tr>
<td>վեր տուրեղը</td>
<td>ՀԱՆԵՐԸ</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A-Class ‘to read’</th>
<th>Prohibitive 2PL</th>
<th>Negative subj. 2PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>mi k’dɛɻh-tšʰ-ekʰ</td>
<td>tʃə-k’dɛɻh-tšʰ-e-kʰ</td>
<td></td>
</tr>
<tr>
<td>PROH ɹ-TH-AOR-IMP.2PL</td>
<td>NEG-ɹ-TH-2PL</td>
<td></td>
</tr>
<tr>
<td>վեր կարդացեղը</td>
<td>ՀԱՆԵՐԸ</td>
<td></td>
</tr>
</tbody>
</table>

6.4.5 Participles

Alongside converbs, Iranian Armenian utilizes a set of participles derived from verbs. These participles cannot be used in periphrastic constructions. They are
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restricted to use as adjectives or nouns. Participle formation in Iranian Armenian is identical to that in Standard Eastern.

There are two types of participles: the subject participle and the resultative participle. The subject participle uses the suffix [-oʁ]. The resultative participle uses the suffix [-ɒt͡sʰ] in Iranian Armenian, [-ɑt͡s] in Standard Eastern. For the E-Class, these suffixes are added directly after the root, deleting the theme vowel. We use zero morphs to show the deleted theme vowel. For A-Class verbs, these suffixes trigger a morphomic aorist suffix -t͡sʰ- between the theme and suffix, i.e., an aorist stem.

Table 6.33: Paradigm of subject and resultative participles

<table>
<thead>
<tr>
<th></th>
<th>E-Class</th>
<th>IA</th>
<th>A-Class</th>
<th>IA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SEA</td>
<td>IA</td>
<td>SEA</td>
<td>IA</td>
</tr>
<tr>
<td>Infinitive</td>
<td>jɛɾkʰ-e-l</td>
<td>jɛɻkʰ-e-l</td>
<td>kɑɾtʰ-ɑ-l</td>
<td>kɒɻtʰ-ɒ-l</td>
</tr>
<tr>
<td></td>
<td>‘to sing’</td>
<td>√^-TH-INF</td>
<td>√^-TH-INF</td>
<td></td>
</tr>
<tr>
<td>Subject participle</td>
<td>jɛɾkʰ-ɔ-ɔ̱</td>
<td>jɛɻkʰ-ɔ-ɔ̱</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-ɔ̱</td>
<td>kɒɻtʰ-ɒ-t͡sʰ-ɔ̱</td>
</tr>
<tr>
<td></td>
<td>√^-TH-SPTCP</td>
<td>√^-TH-SPTCP</td>
<td>√^-TH-AOR-SPTCP</td>
<td>√^-TH-AOR-SPTCP</td>
</tr>
<tr>
<td>Resultative participle</td>
<td>jɛɾkʰ-ɔ̱-ɑtˢ</td>
<td>jɛɻkʰ-ɔ̱-ɑtˢ</td>
<td>kɑɾtʰ-ɑ-t͡sʰ-ɑtˢ</td>
<td>kɒɻtʰ-ɑ-t͡sʰ-ɑtˢ</td>
</tr>
<tr>
<td></td>
<td>√^-TH-RPTCP</td>
<td>√^-TH-RPTCP</td>
<td>√^-TH-AOR-RPTCP</td>
<td>√^-TH-AOR-RPTCP</td>
</tr>
</tbody>
</table>

In Standard Eastern Armenian, the resultative participle is called [hɑɾɑkɑtɑɾ deɾbɑj] հարակատար դերբայ, and the subject participle is called [jentʰɑkɑjɑkɑn deɾbɑj] ենթակայական դերբայ.

The following are examples with these participles in Iranian Armenian.

(11) a. Subject participle
   jɛɻkʰ-ɔ-ɔ̱ jɛv kɑɾtʰ-ɑ-t͡sʰ-ɔ̱-ɔ̱
   sing-SPTCP-DEF and read-TH-AOR-SPTCP-DEF
   ‘the singer and the reader’
   երգողը և կարդացողը

b. Resultative participle

10 As explained in §2.1.1, some Iranian Armenian speakers aspirate the resultative suffix as [-ɒt͡sʰ], while some do not. Throughout this section, we aspirate this suffix because our main consultant NK used aspiration.
6.5 Complex regular verb class

The previous section demonstrated the synthetic and periphrastic inflection of simple regular verbs. This section describes the inflection of complex verbs. Complex verbs are divided into passives, causatives, and inchoatives. These differ from simple verbs by including additional verbal material, such as the passive suffix. Their inflections differ from simple verbs in some but not all paradigm cells.

6.5.1 Passives

Passive verbs are formed by adding the suffix -v-. The suffix is added directly after the root of an E-Class verb. For an A-Class verb, the passive triggers the morphemic aorist -tʻsh- (an aorist stem). Passive formation is the same in the two lects. We show the deleted theme vowel as a zero morph.

Table 6.34: Passive verbs in Standard Eastern and Iranian Armenian

<table>
<thead>
<tr>
<th></th>
<th>E-Class</th>
<th></th>
<th>A-Class</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SEA</td>
<td>IA</td>
<td>SEA</td>
<td>IA</td>
</tr>
<tr>
<td>Infinitive</td>
<td>jeřkʰ-e-l</td>
<td>jeɻkʰ-e-l</td>
<td>kartʰ-a-l</td>
<td>kɒɻtʰ-ɒ-l</td>
</tr>
<tr>
<td>√-TH-INF</td>
<td>'to sing'</td>
<td>'to read'</td>
<td>√-TH-INF</td>
<td>√-TH-AOR-INF</td>
</tr>
<tr>
<td></td>
<td>տաքտի</td>
<td>տաքտի</td>
<td>կարդամի</td>
<td>կարդամի</td>
</tr>
<tr>
<td>Passive</td>
<td>jeřkʰ-∅-v-e-l</td>
<td>jeɻkʰ-∅-v-e-l</td>
<td>kartʰ-∅-tsʰ-v-e-l</td>
<td>kɒɻtʰ-∅-tsʰ-v-e-l</td>
</tr>
<tr>
<td>√-TH-PASS-TH-INF</td>
<td>'to be sung'</td>
<td>'to be read'</td>
<td>√-TH-AOR-PASS-TH-INF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>տաքտի</td>
<td>տաքտի</td>
<td>կարդամի</td>
<td>կարդամի</td>
</tr>
</tbody>
</table>

The name of the passive is [kəɾavonakan] երական in Standard Eastern Armenian.

Semantically, the passive suffix demotes the object argument of the active verb. The passive can likewise trigger a host of other argument-reducing operations.
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such as reflexivization, anticausativization, and so on (Haspelmath 1993; Dum-Tragut 2009: 175). However, there are some high-frequency intransitive verbs that have the passive suffix like skas-v-e-l ‘to begin’, but don’t really have passive semantics, just intransitive semantics. For consistently, we gloss all instances of the passive suffix -v- as just pass even though its semantics can vary for some verbs.

Morphologically, the passive takes its own theme vowel -e-. We list some passives below.

Table 6.35: Example passive verbs in Iranian Armenian

<table>
<thead>
<tr>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>bərn-e-l ‘to catch’</td>
<td>bərnə-v-e-l ‘to be caught’</td>
</tr>
<tr>
<td>kotɻ-e-l ‘to break’</td>
<td>kotəɻ-v-e-l ‘to be broken’</td>
</tr>
<tr>
<td>skas-e-l ‘to start (trans.)’</td>
<td>skas-v-e-l ‘to begin’</td>
</tr>
<tr>
<td>nənt-e-l ‘to free’</td>
<td>nənt-v-e-l ‘to be freed’</td>
</tr>
<tr>
<td>ɒvɒɻt-e-l ‘to finish’</td>
<td>ɒvɒɻtv-e-l ‘to graduate (school)’</td>
</tr>
</tbody>
</table>

Passive verbs are inflected as simple E-Class verbs. For example, in the past perfective, they take the past morph /-ɒ/.

Table 6.36: Past perfective of passive verbs in Iranian Armenian

<table>
<thead>
<tr>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>bərnə-v-e-l ‘to be caught’</td>
<td>bərnə-v-d-m ‘I was caught’</td>
</tr>
<tr>
<td>kotəɻ-v-e-l ‘to be broken’</td>
<td>kotəɻ-v-d-v ‘it broke’</td>
</tr>
<tr>
<td>nənt-v-e-l ‘to be freed’</td>
<td>nənt-v-d-n ‘they were freed’</td>
</tr>
<tr>
<td>ɒvɒɻtv-e-l ‘to graduate’</td>
<td>ɒvɒɻtv-d-v ‘he graduated’</td>
</tr>
</tbody>
</table>

The passive triggers schwa epenthesis after a CC cluster that cannot form a licit word-medial complex coda. For example, we see a schwa in [bərnə-v-e-l] ‘to be caught’ but not in [jeɻkʰ-v-e-l] ‘to be sung’. For an analysis of this phenomenon in Standard Eastern and Standard Western Armenian, see Vaux (1998b: 29,82) and Dolatian (in review).

6.5.2 Inchoatives

Inchoatives are productively formed by adding the sequence [-ɒ-n-ɒ-l] to a noun or adjective. The nasal is the inchoative affix. It is followed by the /ɒ/ theme

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vowel. Depending on the lexeme, the pre-nasal vowel is either /ɒ/ or /e/. But the low vowel is more common. We assume this pre-nasal vowel is a meaningless linking vowel (LV) (Dolatian & Guekguezian 2021).

Table 6.37: Inchoative constructions

<table>
<thead>
<tr>
<th>LV is /ɒ/</th>
<th>LV is /e/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>Inchoative</td>
</tr>
<tr>
<td>ʧʰɒ-t-č-n-d-l</td>
<td>ʧʰɒ-t-č-n-d-l</td>
</tr>
<tr>
<td>‘dry’</td>
<td>‘to become dry’</td>
</tr>
<tr>
<td>չոր</td>
<td>չորանալ</td>
</tr>
</tbody>
</table>

The meaning of an inchoative can be loosely paraphrased as ‘to become X’. Note the contrast below between using the adjective as a predicate vs. as an inchoativized verb.

(12) a. բանչ el-n-e-l  happy be-vx-th-inf  ‘to be happy’ նաիկ էլնել b. բանչ-ա n-e-l happy-lv-inch-th-inf ‘to become happy’ նաիկանալ

We list below various morphologically inchoative verbs that we have elicited.12

Table 6.38: Example inchoative verbs

<table>
<thead>
<tr>
<th>verb</th>
<th>translation</th>
<th>translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>մահ-ա-n-d-l</td>
<td>‘to die’</td>
<td>մահանալ</td>
</tr>
<tr>
<td>հասկ-ա-n-d-l</td>
<td>‘to understand’</td>
<td>հասկանալ</td>
</tr>
<tr>
<td>գոր-ա-n-d-l</td>
<td>‘to steal’</td>
<td>գողանալ</td>
</tr>
<tr>
<td>իմ-ա-n-d-l</td>
<td>‘to know’</td>
<td>իմանալ</td>
</tr>
<tr>
<td>լու-ա-n-d-l</td>
<td>‘to wash’</td>
<td>լուանալ</td>
</tr>
<tr>
<td>արթ-ա-n-d-l</td>
<td>‘to awake’</td>
<td>արթնանալ</td>
</tr>
<tr>
<td>ցան-ա-n-d-l</td>
<td>‘to wish’</td>
<td>ցանկանալ</td>
</tr>
<tr>
<td>հանգս-ա-n-d-l</td>
<td>‘to relax’</td>
<td>հանգստանալ</td>
</tr>
<tr>
<td>յու-ա-n-d-l</td>
<td>‘to have/own’</td>
<td>յումանալ</td>
</tr>
</tbody>
</table>

Inchoatives are inflected similarly to A-Class verbs but with some deviations, such as the imperative 2SG. Inchoatives use the morphomic aorist suffix (aorist

12Some of these verbs like գոր-ա-n-d-l ‘to steal’ have inchoative morphology, but are transitive in their semantics and argument structure.
stem) in more contexts than typical A-Class verbs. When the aorist is used, the inchoative affix and its theme vowel are deleted. We show a partial paradigm below, just for the Iranian Armenian forms. We show only the deviations between the inchoative and A-Class. All other paradigm cells are formed the same. We don’t use zero morphs to show deleted theme vowels and deleted inchoatives. We place an asterisk for those paradigm cells where the inchoative nasal is deleted, and where the aorist stem is instead used.

Table 6.39: Partial paradigm of inchoatives vs. A-Class verbs

<table>
<thead>
<tr>
<th></th>
<th>A-Class</th>
<th>Inchoative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infinitive</strong></td>
<td>‘to read’</td>
<td>‘to become happy’</td>
</tr>
</tbody>
</table>
|                  | kɒɻtʰ-d-l | պարտ-չ-ն-դ-
|                  | √^-TH-INF | նախապատ-չ-
|                  | կարդալ | ուրախանալ |
| **Past. perf. 1SG** | kɒɻtʰ-d-t⁷s⁵-d-m | պարտ-չ-ն-դ-
|                  | √^-TH-AOR-PST-1SG | նախապատ-չ-
|                  | կարդացամ | ուրախացամ |
| **Imp. 2SG**    | kɒɻtʰ-d-∅ | պարտ-չ-ն-դ-
|                  | √^-TH-IMP.2SG | նախապատ-
|                  | կարդալ | ուրախացի |
| **Imp. 2PL**    | kɒɻtʰ-d-t⁷s⁵-ekʰ | պարտ-չ-ն-դ-
|                  | √^-TH-AOR-IMP.2PL | նախապատ-
|                  | կարդացէք | ուրախացէք |
| **Subj. Part.** | kɒɻtʰ-d-t⁷s⁵-ob | պարտ-չ-ն-դ-
|                  | √^-TH-AOR-SPTCP | նախապատ-
|                  | կարդալ | ուրախացող |
| **Res. Part.**  | kɒɻtʰ-d-t⁷s⁵-dtsʰ | պարտ-չ-ն-դ-
|                  | √^-TH-AOR-RPTCP | նախապատ-
|                  | կարդացած | ուրախացած |
| **Perf. Cvb.**  | kɒɻtʰ-d-t⁷s⁵-el | պարտ-չ-ն-դ-
|                  | √^-TH-AOR-PERF.CVB | նախապատ-
|                  | կարդացել | ուրախացել |

13Inchoatives are inflected similarly in Standard Eastern. The main difference is that in Standard Eastern, inchoatives are exceptional because they are inflected with the past tense morph /ա/. Iranian Armenian on the other hand uses the past tense morph /ո/ which is the default form for the past perfective. For an analysis and documentation of similar facts in Standard Western Armenian, see Dolatian & Guekguezian (2021).
Prohibitives are formed by adding the proclitic *mi*- before the imperative forms. For the other paradigm cells, inchoatives are inflected like A-Class verbs. These cells are the other converbs, the subjunctive, and the conditional. Complete paradigms are provided in the online archive.

### 6.5.3 Causatives

A causative infinitive consists of a stem plus the sequence -\(\text{t}^{\text{b}}\text{n}\)-e-l. The causative suffix is -\(\text{t}^{\text{b}}\text{n}\)- and it takes the -e- theme vowel. The stem of the causative can be the root of a simple verb and its theme vowel. Causatives can also be derived from non-verbs and from inchoative verbs. When a causative is derived from an inchoative, the inchoative suffix and its theme vowel are deleted.\(^{14}\)

**Table 6.40: Forming causatives**

(a) Causatives from simple verbs

<table>
<thead>
<tr>
<th>Simple verb</th>
<th>Causative</th>
</tr>
</thead>
<tbody>
<tr>
<td>sovoɻ-e-l</td>
<td>sovoɻ-e-t(\text{b})n-e-l</td>
</tr>
<tr>
<td>√-TH-INF</td>
<td>√-TH-CAUS-TH-INF</td>
</tr>
<tr>
<td>‘to learn’</td>
<td>‘teach’</td>
</tr>
</tbody>
</table>

(b) Causatives from non-verbs or inchoatives

<table>
<thead>
<tr>
<th>Non-verb</th>
<th>Inchoative verb</th>
<th>Causative</th>
</tr>
</thead>
<tbody>
<tr>
<td>uɻɒχ</td>
<td>uɻɒχ-ɒ-n-ɒ-l</td>
<td>uɻɒχ-ɒ-t(\text{b})n-e-l</td>
</tr>
<tr>
<td>√</td>
<td>√-LV-INCH-TH-INF</td>
<td>√-LV-CAUS-TH-INF</td>
</tr>
<tr>
<td>‘happy’</td>
<td>‘to become happy’</td>
<td>‘to make happy’</td>
</tr>
<tr>
<td>նարամ</td>
<td>նարամանալ</td>
<td>նարամացնել</td>
</tr>
</tbody>
</table>

The name of the causative is [pattʃarakan] պատճառական in Standard Eastern Armenian.

Our consultants feel that deriving causatives from simple verbs is not very productive in Iranian Armenian. In contrast, causativization is more productive in Standard Eastern and Western Armenian (Daniel & Khurshudian 2015, Dolatian & Guekguezian 2021). Deriving causatives from inchoatives is productive in Iranian Armenian (Megerdoomian 2005). Furthermore, in many cases when

6 Verbal morphology

A causative is derived from a simple verb, the post-root theme vowel differs between the simple verb and causative in Iranian Armenian.\(^{15}\)

Table 6.41: Differing pre-causative theme vowels

<table>
<thead>
<tr>
<th>Theme vowel changes</th>
<th>Theme vowel stays constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(kʰən-e-l)</td>
<td>(kɒɻtʰ-ɒ-l)</td>
</tr>
<tr>
<td>(\sqrt{\text{TH-INF}})</td>
<td>(\sqrt{\text{-TH-CAUS-TH-INF}})</td>
</tr>
<tr>
<td>‘to sleep’</td>
<td>‘to make sleep’</td>
</tr>
<tr>
<td>(\sqrt{\text{TH-INF}})</td>
<td>(\sqrt{\text{-TH-CAUS-TH-INF}})</td>
</tr>
<tr>
<td>‘to read’</td>
<td>‘to make read’</td>
</tr>
<tr>
<td>(kʰən-d-tʰn-e-l)</td>
<td>(kɒɻtʰ-d-tʰn-e-l)</td>
</tr>
<tr>
<td>(\sqrt{\text{-TH-CAUS-TH-INF}})</td>
<td>(\sqrt{\text{-TH-CAUS-TH-INF}})</td>
</tr>
</tbody>
</table>

Some common causatives are listed below. It is common to find causative verbs without any pre-causative vowel.

Table 6.42: Other common causative verbs in Iranian Armenian

<table>
<thead>
<tr>
<th>Causative</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>(hɒŋɡəst-d-tʰn-e-l)</td>
<td>‘to calm down’</td>
</tr>
<tr>
<td>(ve(ɻ)-tʰn-e-l)</td>
<td>‘to take’</td>
</tr>
<tr>
<td>(lə-tʰn-e-l)</td>
<td>‘to fill/pour’</td>
</tr>
<tr>
<td>(dɒɻ-tʰn-e-l)</td>
<td>‘to turn into’</td>
</tr>
<tr>
<td>(\sqrt{\text{-TH-CAUS-TH-INF}})</td>
<td></td>
</tr>
</tbody>
</table>

In terms of inflection, causatives are inflected primarily as E-Class verbs but with some deviation. In the past perfective, the causative suffix uses a special allomorph \(-tʰɻ-\). This allomorph is likewise used in disparate paradigm slots. These are slots which tend to show morphemic aorist stems in other verb classes. We show a partial paradigm below. We only show the causative paradigm cells which differ from simple E-Class verbs. We place an asterisk for those paradigm cells where the \(-tʰɻ-\) allomorph is used, meaning where we see the aorist stem. The theme vowel is deleted in most of these cells.

\(^{15}\text{Megerdoomian (2005) lists many more cases of causative verbs that are derived from simple verbs but utilize a theme-vowel change.}\)
6.6 Irregular verbs

<table>
<thead>
<tr>
<th></th>
<th>E-Class</th>
<th>Causative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>sovoɻ-e-l</td>
<td>sovoɻ-e-tsʰn-e-l</td>
</tr>
<tr>
<td></td>
<td>√~TH-INF</td>
<td>√~TH-CAUS-TH-INF</td>
</tr>
<tr>
<td></td>
<td>տուռնել</td>
<td>տուռնեցնել</td>
</tr>
<tr>
<td>Past. perf. 1SG *</td>
<td>sovoɻ-o-m</td>
<td>sovoɻ-e-tsʰɻ-o-m</td>
</tr>
<tr>
<td></td>
<td>√~PST-1SG</td>
<td>√~TH-CAUS-PST-1SG</td>
</tr>
<tr>
<td></td>
<td>տուռնամ</td>
<td>տուռնեցրամ</td>
</tr>
<tr>
<td>Imp. 2SG *</td>
<td>sovoɻ-i</td>
<td>sovoɻ-e-tsʰɻ-i</td>
</tr>
<tr>
<td></td>
<td>√~IMP.2SG</td>
<td>√~TH-CAUS-IMP.2SG</td>
</tr>
<tr>
<td></td>
<td>տուռնի</td>
<td>տուռնեցրու</td>
</tr>
<tr>
<td>Imp. 2PL *</td>
<td>sovoɻ-e-kʰ</td>
<td>sovoɻ-e-tsʰɻ-e-kʰ</td>
</tr>
<tr>
<td></td>
<td>√~IMP.2PL</td>
<td>√~TH-CAUS-IMP.2PL</td>
</tr>
<tr>
<td></td>
<td>տուռնէք</td>
<td>տուռնեցրէք</td>
</tr>
<tr>
<td>Subj. Part.</td>
<td>sovoɻ-oʁ</td>
<td>sovoɻ-e-tsʰn-oʁ</td>
</tr>
<tr>
<td></td>
<td>√~SPTCP</td>
<td>√~TH-CAUS-SPTCP</td>
</tr>
<tr>
<td></td>
<td>տուռնող</td>
<td>տուռնեցնող</td>
</tr>
<tr>
<td>Res. Part. *</td>
<td>sovoɻ-o-t͡sʰ</td>
<td>sovoɻ-e-tsʰɻ-o-t͡sʰ</td>
</tr>
<tr>
<td></td>
<td>√~RPTCP</td>
<td>√~TH-CAUS-RPTCP</td>
</tr>
<tr>
<td></td>
<td>տուռնած</td>
<td>տուռնեցրած</td>
</tr>
<tr>
<td></td>
<td>√~PERF.CVB</td>
<td>√~TH-CAUS-PERF.CVB</td>
</tr>
<tr>
<td></td>
<td>տուռնել</td>
<td>տուռնեցրել</td>
</tr>
</tbody>
</table>

Prohibitives are formed by adding the proclitic *mi*- before the imperative forms. For the other paradigm cells, causatives are inflected like E-Class verbs. These cells are the other converbs, the subjunctive, and the conditional. The Iranian Armenian forms do not differ from Standard Eastern except for the past perfective. The Standard Eastern past perfective of causatives uses the past tense morph /i/ instead of /ŋ/: Iranian Armenian *sovoɻ-e-tsʰɻ-o-t-n* vs. Standard Eastern *sovɔɾ-e-tʃʰ-r-i-n* ‘they taught’. Complete paradigms are provided in the online archive.

6.6 Irregular verbs

The regular verb classes were discussed in the previous section. These classes constitute the majority of verbs in the Iranian Armenian lexicon. This section goes over some irregular classes. These are all rather low-frequency in terms
of types, but seem high-frequency in their tokens. These irregulars can be di-
vided into different subclasses: infixed verbs, suppletive verbs, defective verbs,
and other verbs.

This section focuses on providing paradigms just for Iranian Armenian. To
contrast these irregular paradigms with Standard Eastern, see Dum-Tragut (2009:
277ff). Complete paradigms are provided in the online archive.

6.6.1 Infixed verbs

In the infinitive form, simple regular verbs consist of a root, theme vowel, and the
infinitive suffix -l. Iranian Armenian likewise has a set of irregular verbs where
a meaningless morph /-n-/ surfaces between the root and theme vowel. We gloss
this meaningless verbal stem-extender as vx.16

<table>
<thead>
<tr>
<th>IA</th>
<th>SEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>mət-n-e-l</td>
<td>mət-n-e-l</td>
</tr>
<tr>
<td>tes-n-e-l</td>
<td>tes-n-e-l</td>
</tr>
<tr>
<td>ʰar-n-e-l</td>
<td>ʰar-n-e-l</td>
</tr>
<tr>
<td>el-n-e-l</td>
<td>jel-n-e-l</td>
</tr>
<tr>
<td>ʰtʰar-n-e-l</td>
<td>ʰtʰar-n-e-l</td>
</tr>
<tr>
<td>ʰəŋ-gə-n-e-l</td>
<td>ʰəŋ-gə-n-e-l</td>
</tr>
<tr>
<td>ʰɪʃʰ-n-e-l</td>
<td>ʰɪʃʰ-n-e-l</td>
</tr>
<tr>
<td>√-vx-th-inf</td>
<td>√-vx-th-inf</td>
</tr>
</tbody>
</table>

Across Armenian lects, this nasal morph /-n-/ is diachronically a reflex of the
Proto-Indo-European nasal infix (Greppin 1973, Hamp 1975, Kocharov 2019). Stan-
dard Eastern Armenian has these same verbs. However, for some of these verbs,
the meaningless morph is an affricate in Standard Eastern Armenian. It seems
that Iranian Armenian has lost the affricate morph, and now all the infixed verbs
just use the nasal morph.17

16 For the verb ʰəŋ-gə-n-e-l ‘to fall,’ the second schwa is epenthetic. It is absent before a vowel:
ʰəŋ-g-o-nkʰ ‘we fell’ [ʰ- pst-1pl].
17 The replacement of the affricate infix with the nasal infix is likewise attested in Colloquial
Eastern Armenian (Dum-Tragut 2009: 172).
6.6 Irregular verbs

Table 6.45: Infixed irregular verbs with affricates in Standard Eastern, but nasals in Iranian Armenian

<table>
<thead>
<tr>
<th>IA</th>
<th>SEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>pʰɒχ-n-e-l</td>
<td>փախնել</td>
</tr>
<tr>
<td>tʰər-n-e-l</td>
<td>թռնել</td>
</tr>
<tr>
<td>√-VX-TH-INF</td>
<td>√-VX-TH-INF</td>
</tr>
</tbody>
</table>

What is irregular about this class is that the nasal is dropped in some but not all paradigm cells. Whenever the verb lacks this nasal, the verb is said to use its aorist stem. For example, the nasal surfaces in the subjunctive present and the subjunctive past imperfective. But the nasal is deleted in the past perfective. The surface morphs are just the root and T-Agr suffixes.

Table 6.46: Nasal deletion in infixed verbs vs. E-Class verbs in Iranian Armenian

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Irregular infixed verb</th>
<th>Regular E-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>mer-n-e-l</td>
<td>√-VX-TH-INF</td>
<td></td>
</tr>
<tr>
<td>'to die'</td>
<td>մեռնել</td>
<td>jeɻkʰ-e-l √-TH-INF</td>
</tr>
<tr>
<td></td>
<td>մեռնենք</td>
<td>jeɻkʰ-ɒ-ŋkʰ √-pst-1pl</td>
</tr>
<tr>
<td>Subj. present 1PL</td>
<td>mer-n-e-ŋkʰ √-VX-TH-1PL</td>
<td>jeɻkʰ-e-ŋkʰ √-TH-1PL</td>
</tr>
<tr>
<td>Past perf. 1PL</td>
<td>mer-d-ŋkʰ √-PST-1PL</td>
<td>jeɻkʰ-d-ŋkʰ √-PST-1PL</td>
</tr>
<tr>
<td></td>
<td>պատրասենք</td>
<td></td>
</tr>
</tbody>
</table>

The partial paradigm below shows the finite and non-finite forms of this irregular class. An asterisk is placed next to each cell that shows the deletion of this nasal morph. This class is inflected the same as the regular E-Class; the only difference is the deletion of the nasal morph in certain slots.\(^{18}\)

---

\(^{18}\)In Standard Eastern Armenian, the infixed verbs are irregular in the past perfective not only because they drop the nasal, but also because they use the past T marker /ɑ/: [mer-ɑ-v] ‘to die’ [√-VX-TH-INF]. But in Iranian Armenian, the use of the past T marker /ɒ/ is a regular feature.
Table 6.47: Distribution of nasal deletion in Iranian Armenian with [mer-n-e-l] ’to die’

<table>
<thead>
<tr>
<th>Cell</th>
<th>Form</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>mer-n-e-l</td>
<td>√~VX-TH-INF</td>
</tr>
<tr>
<td>Imperfective converb</td>
<td>mer-n-um</td>
<td>√~VX-IMPF.CVB</td>
</tr>
<tr>
<td>Future converb</td>
<td>mer-n-e-l-u</td>
<td>√~VX-TH-INF-FUT.CVB</td>
</tr>
<tr>
<td>Perfective converb *</td>
<td>mer-el, mer-eɭ</td>
<td>√~PERF.CVB</td>
</tr>
<tr>
<td>Connegative converb</td>
<td>mer-n-i</td>
<td>√~VX-CN.CVB</td>
</tr>
<tr>
<td>Subject participle</td>
<td>mer-n-oŋk</td>
<td>√~VX-SPTCP</td>
</tr>
<tr>
<td>Resultative participle *</td>
<td>mer-ðtsʰ</td>
<td>√~RPTCP</td>
</tr>
<tr>
<td>Subj. Present 1PL</td>
<td>mer-n-e-ŋkʰ</td>
<td>√~VX-TH-1PL</td>
</tr>
<tr>
<td>Subj. Past Impf. 1PL</td>
<td>mer-n-i-ŋkʰ</td>
<td>√~VX-PST-1PL</td>
</tr>
<tr>
<td>Past Perf. 1PL *</td>
<td>mer-ŋkʰ</td>
<td>√~PST-1PL</td>
</tr>
<tr>
<td>Imperative 2SG *</td>
<td>mer-i</td>
<td>√~IMP.2SG</td>
</tr>
<tr>
<td>Imperative 2PL *</td>
<td>mer-ekʰ</td>
<td>√~IMP.2PL</td>
</tr>
<tr>
<td>Causative *</td>
<td>mer-ðtsʰn-e-l</td>
<td>√~CAUS-TH-INF</td>
</tr>
<tr>
<td>Passive</td>
<td>N/A</td>
<td>√~VX-PASS-TH-INF</td>
</tr>
</tbody>
</table>

For brevity, the above paradigm omits zero morphs (theme vowels). For the finite forms, we only show the 1PL; the other agreement cells behave the same with respect to the nasal. We omit the following:

- The negatives that derive from simple prefixation of ʃʰ- onto a subjunctive or past perfective base.
- The positive conditional that is derived by prefixing k(ə)- to the subjunctive.
- The prohibitives that are derived by adding the proclitic mi to the imperative base.

It is difficult to find a single infixed verb that can be both causativized and passivized. Causativization generally deletes the nasal morph, as seen in Table 6.47. Passivization generally keeps the nasal morph.

Table 6.48: Passivization of infixed verbs

<table>
<thead>
<tr>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>tes-n-e-l</td>
<td>√~VX-TH-INF</td>
</tr>
<tr>
<td>‘to see’</td>
<td>√~VX-PASS-TH-INF</td>
</tr>
<tr>
<td>ռետունել</td>
<td>ռետունելուց</td>
</tr>
</tbody>
</table>

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6.6 Irregular verbs

For a typical infixed verb like *mer-n-e-l* ‘to die’, the imperative 2SG is formed by dropping the nasal and using the imperative 2SG suffix -i. A subset of these infixed verbs have an irregular imperative 2SG. This set is listed below. The prohibitive 2SG is derived from this imperative by adding the proclitic *mi*.

Table 6.49: Irregular imperative 2SG within irregular infixed verbs

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Imperative 2SG</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>tes-n-e-l</em></td>
<td><em>tes</em></td>
</tr>
<tr>
<td><em>ɒr-n-e-l</em></td>
<td><em>ɒr</em></td>
</tr>
<tr>
<td><em>tʰoɾ-n-e-l</em></td>
<td><em>tʰoɾ</em></td>
</tr>
</tbody>
</table>

There isn’t a semantic or morphosyntactic correlation that unites that various cells which show the deletion of the nasal. The distribution is morphemic, and is traditionally described as utilizing an aorist stem. The distribution of nasal dropping is the same in Standard Eastern Armenian, and essentially in Standard Western Armenian as well. Dolatian & Guekguezian (accepted) analyze the cognate infixed verbs of Standard Western Armenian as morphemic and provide an analysis of aorist stems.

For the infixed verb ‘to let’ [tʰoɾ-n-e-l] թողնել, AS reports that the fricative /ʁ/ can be optionally deleted in some of the inflected forms, such the imperfective converb [tʰoɾ-n-um] or [tʰo-n-um]. We haven’t systematically studied this deletion, but it’s likely just grammaticalized lenition in a highly-frequent verb. Similar deletion is attested in function words like [əste(ʁ)] ‘here’ (§5.2).

6.6.2 Suppletive verbs

A small class of irregular verbs are suppletive. These inflect as E-Class verbs in many parts of the paradigm. But in other parts, they use a different root allomorph and irregular imperative suffixes. Suppletive verbs can be categorized into three groups or subclasses, which we catalog below.

The first group of verbs is listed in Table 6.50. For a suppletive verb like ‘to eat’ *ut-e-l*, the root maintains a constant form *ut-* in many paradigm cells. In some other cells, the root uses a morphologically-conditioned allomorph *keɻ-*. We call *keɻ-* the restricted allomorph, while *ut-* is the elsewhere allomorph.\(^{19}\) In the traditional literature, the restricted morph is also called the aorist stem.

\(^{19}\)For some of our speakers like NK, the suppletive verb *don-e-l* ‘to put’ is pronounced with an initial voiceless stop [t] in all its allomorphs. In contrast, AS and NK report [d], just as in Standard Eastern Armenian.
6 Verbal morphology

Table 6.50: Suppletive verbs in Iranian Armenian - Group 1

<table>
<thead>
<tr>
<th>Elsewhere allomorph:</th>
<th>'to eat'</th>
<th>'to do'</th>
<th>'to take to'</th>
<th>'to put'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>ut-</td>
<td>on-</td>
<td>tən-</td>
<td>dən-</td>
</tr>
<tr>
<td></td>
<td>ut-e-l</td>
<td>on-e-l</td>
<td>tən-e-l</td>
<td>dən-e-l</td>
</tr>
<tr>
<td></td>
<td>ուտել</td>
<td>անել</td>
<td>տանել</td>
<td>դնել</td>
</tr>
<tr>
<td>Subj. present 1PL</td>
<td>ut-e-ŋkʰ</td>
<td>on-e-ŋkʰ</td>
<td>tən-e-ŋkʰ</td>
<td>dən-e-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>ուտենք</td>
<td>անենք</td>
<td>տանենք</td>
<td>դնենք</td>
</tr>
<tr>
<td>Restricted allomorph:</td>
<td>keɻ-</td>
<td>ɒɻ-</td>
<td>tɒɻ-</td>
<td>dəɻ-</td>
</tr>
<tr>
<td>Past perf. 1PL</td>
<td>keɻ-ɒ-ŋkʰ</td>
<td>ɒɻ-ɒ-ŋkʰ</td>
<td>tɒɻ-ɒ-ŋkʰ</td>
<td>dəɻ-ɒ-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>կերանք</td>
<td>արանք</td>
<td>տարանք</td>
<td>դրանք</td>
</tr>
<tr>
<td>Imperative 2SG</td>
<td>keɻ</td>
<td>ɒɻ</td>
<td>tɒɻ</td>
<td>dɻ</td>
</tr>
<tr>
<td></td>
<td>կեր</td>
<td>արա</td>
<td>տար</td>
<td>դիր</td>
</tr>
</tbody>
</table>

For the verb 'to eat', the imperative 2SG is formed by just using the restricted allomorph without further suffixation. In contrast, some suppletive verbs like 'to do' use an additional suffix. Some verbs like 'to put' use a special additional root allomorph that’s only found in the imperative 2SG. We list the imperative 2SG of the suppletive verbs in Table 6.50. The prohibitive 2SG is derived from this imperative by adding the proclitic *mi*.

The above suppletive verbs all use the -e- theme vowel in their infinitive form. Outside of the imperative 2SG, they pattern the same in the distribution of their root allomorphs.

The partial paradigm in Table 6.51 lists the distribution of the root allomorphs for Group 1 verbs. An asterisk is placed next to each cell that shows the restricted allomorph. As with the infixed verbs, in Standard Eastern Armenian, many of the suppletive verbs are irregular in the past perfective not only because they use a different root allomorph, but also because they use the past T marker /ɑ/:[keɾ-ɑ-v] 'he ate' [/-pst-3sg]. But in Iranian Armenian, the use of the past T marker /ɒ/ is a regular feature in Iranian Armenian.
Table 6.51: Distribution of root allomorphs in Iranian Armenian for [ut-e-l] ‘to eat’

<table>
<thead>
<tr>
<th>Cell</th>
<th>Form</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>ut-e-l</td>
<td>√-TH-INF</td>
</tr>
<tr>
<td>Imperfective converb</td>
<td>ut-um</td>
<td>√-IMPF.CVB</td>
</tr>
<tr>
<td>Future converb</td>
<td>ut-e-l-u</td>
<td>√-TH-INF-FUT.CVB</td>
</tr>
<tr>
<td>Perfective converb *</td>
<td>keɻ-el, keɻ-eɻ</td>
<td>√-PERF.CVB</td>
</tr>
<tr>
<td>Connegative converb</td>
<td>ut-i</td>
<td>√-CN.CVB</td>
</tr>
<tr>
<td>Subject participle</td>
<td>ut-ơ</td>
<td>√-SPTCP</td>
</tr>
<tr>
<td>Resultative participle *</td>
<td>keɻ-ɒt̚sʰ</td>
<td>√-RPTCP</td>
</tr>
<tr>
<td>Subj. Present 1PL</td>
<td>ut-e-ʃkʰ</td>
<td>√-TH-1PL</td>
</tr>
<tr>
<td>Subj. Past Impf. 1PL</td>
<td>ut-i-ʃkʰ</td>
<td>√-PST-1PL</td>
</tr>
<tr>
<td>Past Perf. 1PL *</td>
<td>keɻ-ɒ-ʃkʰ</td>
<td>√-PST-1PL</td>
</tr>
<tr>
<td>Imperative 2SG *</td>
<td>keɻ</td>
<td>√</td>
</tr>
<tr>
<td>Imperative 2PL *</td>
<td>keɻ-ekʰ</td>
<td>√-IMP.2PL</td>
</tr>
</tbody>
</table>

The paradigm in Table 6.51 omits zero morphs (theme vowels). For the finite forms, we only show the 1PL; the other agreement cells behave the same with respect to the root allomorphy. We omit the following:

- The negatives that derive from simple prefixation of ʃkʰ- onto a subjunctive or past perfective base.
- The positive conditional that is derived by prefixing k- to the subjunctive.
- The prohibitives that are derived by adding the proclitic mi to the imperative base.

The second group of suppletive verbs consists of only the verb [etʰ-ɒ-l] ‘to go’. It acts as an A-Class verb in terms of the distribution of theme vowels, the aorist suffix, and the past marker /i/. Its irregularity is that some of its paradigm cells utilize a restricted root allomorph ɡən-. We show a partial paradigm below. The asterisk is used to mark the cells that utilize the restricted allomorph.21

---

21 Some speakers pronounce the elsewhere root allomorph as eɻtʰ- instead of etʰ-. Some speakers can make the subj. past impf. utilize the restricted root ɡən-, e.g. the 1PL form [ɡən-ʊj-i-ʃkʰ]. Some speakers use the restricted allomorph in the connegative converb: [ɡən-ʊ] instead of [etʰ-ʊ]. But others have told us that using ɡən- root in these contexts sounds more ‘Eastern’ instead of Iranian Armenian. In Standard Eastern Armenian, the root ɡən- is used form a regular non-suppletive A-Class verb ɡən-ʊ-1 ‘to go’. Some of our speakers use this separate verb as well.
6 Verbal morphology

Table 6.52: Distribution of root allomorphs in Iranian Armenian for [etʰ-ɒ-l] ‘to go’

<table>
<thead>
<tr>
<th>Cell</th>
<th>Form</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>etʰ-ɒ-l</td>
<td>√-TH-INF</td>
</tr>
<tr>
<td>Imperfective converb</td>
<td>etʰ-um</td>
<td>√-IMPF.CVB</td>
</tr>
<tr>
<td>Future converb</td>
<td>etʰ-d-l- u</td>
<td>√-TH-INF-FUT.CV</td>
</tr>
<tr>
<td>Perfective converb *</td>
<td>gən-d-tsh-el</td>
<td>√-TH-AOR-PERF.CV</td>
</tr>
<tr>
<td>Connegative converb</td>
<td>etʰ-d</td>
<td>√-TH</td>
</tr>
<tr>
<td>Subject participle *</td>
<td>gən-d-tsh-oɾ</td>
<td>√-TH-AOR-SPTCP</td>
</tr>
<tr>
<td>Resultative participle *</td>
<td>gən-d-tsh-dts</td>
<td>√-TH-AOR-RPTCP</td>
</tr>
<tr>
<td>Subj. Present 1PL</td>
<td>etʰ-d-ŋkʰ</td>
<td>√-TH-1PL</td>
</tr>
<tr>
<td>Subj. Past Impf. 1PL</td>
<td>etʰ-dj-i-ŋkʰ</td>
<td>√-TH-PST-1PL</td>
</tr>
<tr>
<td>Past Perf. 1PL *</td>
<td>gən-d-tsh-iŋkʰ</td>
<td>√-TH-AOR-PST-1PL</td>
</tr>
<tr>
<td>Imperative 2SG *</td>
<td>gən-ŋ</td>
<td>√-TH-AOR-IMP.2PL</td>
</tr>
</tbody>
</table>

Finally, there is a third group of suppletive verbs, made up of two members: [t-d-l] ‘to give’ and [g-d-l] ‘to come’. These verbs use the -d- theme vowel, and the elsewhere root allomorph is a single consonant. These two verbs have restricted allomorphs in the past perfective. Each has a separate allomorph used in the imperative 2SG.

Table 6.53: Suppletive verbs with mono-consonantal root

<table>
<thead>
<tr>
<th>Elsewhere allomorph</th>
<th>‘to give’</th>
<th>‘to come’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>t-</td>
<td>g-</td>
</tr>
<tr>
<td>Subj. present 1PL</td>
<td>t-d-l</td>
<td>g-d-l</td>
</tr>
<tr>
<td></td>
<td>ռանք</td>
<td>գանք</td>
</tr>
<tr>
<td>Restricted allomorph</td>
<td>tən-d-ŋkʰ</td>
<td>ek-d-ŋkʰ</td>
</tr>
<tr>
<td>Past perf. 1PL</td>
<td>tən-d-ŋkʰ</td>
<td>ek-d-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>ռուանք</td>
<td>էկանք</td>
</tr>
<tr>
<td>Imperative 2SG</td>
<td>tən-d-ŋkʰ</td>
<td>ek-d-ŋkʰ</td>
</tr>
<tr>
<td></td>
<td>ռուանք</td>
<td>էկանք</td>
</tr>
</tbody>
</table>

These two verbs also use a special construction for forming the imperfective converb. Whereas A-Class verbs use the template √-um, these two verbs use
the template \( \sqrt{-\text{-d-l-is}} \). The suffix \(-is\) is an irregular imperfective converb suffix. The final fricative is a latent segment, meaning this segment is deleted when the auxiliary has moved such as in negation. This segment’s distribution parallels that of the perfective converb’s latent segment; see §3.3.4.

Table 6.54: Imperfective converb for suppletive mono-consonantal root

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>‘to give’</th>
<th>‘to come’</th>
<th>( \sqrt{-\text{TH-INF}} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impf. converb</td>
<td>t-\text{-d-l-is}</td>
<td>g-\text{-d-l-is}</td>
<td>( \sqrt{-\text{TH-INF-IMPF.CVB}} )</td>
</tr>
<tr>
<td>Indc. Pres. 1PL</td>
<td>t-\text{-d-l-is e-ŋk}^b</td>
<td>g-\text{-d-l-is e-ŋk}^b</td>
<td>( \sqrt{-\text{TH-INF-IMPF.CVB is-1PL}} )</td>
</tr>
<tr>
<td>Neg. indc. Pres. 1PL</td>
<td>tʃʰ=e-ŋk e-\text{-d-l-i}</td>
<td>tʃʰ=e-ŋk e-\text{-d-l-i}</td>
<td>NEG-is-1PL ( \sqrt{-\text{TH-INF-IMPF.CVB}} )</td>
</tr>
</tbody>
</table>

The partial paradigm of the verb ‘to give’ is shown below. The verb ‘to come’ is inflected similarly. These verbs further differ from the previous set of suppletive verbs in that their subject participles utilize the restricted allomorph. Their subjunctive forms pattern like A-Class verbs.
6 Verbal morphology

Table 6.55: Distribution of root allomorphs in Iranian Armenian for [t-ɒ-l] ‘to give’

<table>
<thead>
<tr>
<th>Cell</th>
<th>Form</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>t-ɒ-l</td>
<td>√-TH-INF</td>
</tr>
<tr>
<td>Imperfective converb</td>
<td>t-ɒ-l-is</td>
<td>√-TH-INF-IMPF.CVB</td>
</tr>
<tr>
<td>Future converb</td>
<td>t-ɒ-l-u</td>
<td>√-TH-INF-FUT.CVB</td>
</tr>
<tr>
<td>Perfective converb *</td>
<td>təv-el, təv-eɭ</td>
<td>√-PERF.CVB</td>
</tr>
<tr>
<td>Connegative converb</td>
<td>t-ɒ</td>
<td>√-TH</td>
</tr>
<tr>
<td>Subject participle *</td>
<td>təv-ɔk</td>
<td>√-SPTCP</td>
</tr>
<tr>
<td>Resultative participle *</td>
<td>təv-otsʰ</td>
<td>√-RPTCP</td>
</tr>
<tr>
<td>Subj. Present 1PL</td>
<td>t-ɒ-ŋkʰ</td>
<td>√-TH-1PL</td>
</tr>
<tr>
<td>Subj. Past Impf. 1PL</td>
<td>t-ɒj-i-ŋkʰ</td>
<td>√-TH-PST-1PL</td>
</tr>
<tr>
<td>Past Perf. 1PL *</td>
<td>təv-ɗ-ŋkʰ</td>
<td>√-PST-1PL</td>
</tr>
<tr>
<td>Imperative 2SG *</td>
<td>tʊɭ</td>
<td>√</td>
</tr>
<tr>
<td>Imperative 2PL *</td>
<td>təv-ekʰ</td>
<td>√-IMP.2PL</td>
</tr>
</tbody>
</table>

It’s difficult to make generalizations when it comes causativizing or passiviz- ing suppletive verbs. We’ve come across causatives of [ut-e-l] ‘to eat’ that use the elsewhere root allomorph: [ut-e-t͡sn-e-l] ‘to feed’ ուտեցնել. But we’ve also come across speakers who prefer not causativizing this verb at all. For passivization, Standard Eastern Armenian uses the restricted root allomorph to passivize ‘to take to’, ‘to put’, and ‘to give’. Some (more literate) Iranian Armenian speakers do this as well: [tɒɭ-v-e-l] ‘to be taken to’ տարուել, [dəɭ-v-e-l] ‘to be put’ դրուել, [təɭ-v-e-l] ‘to be given’ տրուել. Some Iranian Armenian speakers prefer not passivizing these at all.

6.6.3 Defective verbs

There is a small set of defective verbs in Iranian Armenian. These verbs are defective in not having all possible types of finite and non-finite forms.

One defective verb is the copula, which only appears in the present tense and the past tense. We discussed the copula in §6.2 under the guise of the auxiliary.

Two other defective verbs are the verbs ‘to exist’ [k-ɒ-m] and ‘to have’ [un-e-m].\textsuperscript{23} The verb ‘to exist’ is used to mark existential sentences like ‘there is X’. The verb ‘to have’ is more accurately translated as ‘to own’. This verb only marks possession and is not an auxiliary.

\textsuperscript{23}For the verb ‘to exist’, the initial stop is usually voiceless k-ɒ-m, but some speakers voice it: g-ɒ-m.
6.6 Irregular verbs

We show a partial paradigm below with just the 1SG. Both of these verbs are used only in the indicative present and past, along with the corresponding negated forms. Unlike regular verbs, the indicative of these verb is formed synthetically. The two verbs use the same T-Agr morphs as the subjunctive of the regular A-Class and E-Class respectively.

Table 6.56: Defective verbs 'to exist' and 'to own'

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>'to exist'</th>
<th>'to have'</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Indc. pres. 1SG</td>
<td>k-ɒ-m</td>
<td>un-e-m</td>
</tr>
<tr>
<td>Neg. indc. pres. 1SG</td>
<td>tʃʰ-un-e-m</td>
<td>neg-√~TH-1SG</td>
</tr>
<tr>
<td>Indc. past 1SG</td>
<td>k-ɒj-i-m</td>
<td>un-∅-i-m</td>
</tr>
<tr>
<td>Neg. indc. past 1SG</td>
<td>tʃʰ-un-∅-i-m</td>
<td>neg-√~TH-PST-1SG</td>
</tr>
</tbody>
</table>

Note that the past markers are the ones used for the subjunctive past imperfective. But for these defective verbs, the meaning can be perfective as in the following example.

(13) a. kɒtu un-∅-i-m
    cat  have-TH-PST-1SG
    'I had a cat.' (NK)
    Կատու ունիմ։

b. tʃɒʃ k-ɒ-∅-l
    food exist-TH-PST-3SG
    'There was food.' (NK)
    Ճաշ կար։

For the verb 'to have', all other tenses are expressed by using the regular inchoative verb [un-e-n-ɒ-l] 'to have; own'. There is no alternative construction for 'to exist'.

Standard Eastern Armenian has a few additional defective verbs. But in Iranian Armenian, these have either been replaced, or are not used in general.\footnote{It's difficult to be sure if these verbs truly don't exist in IA because of diglossia between IA and SEA.}

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6 Verbal morphology

Table 6.57: Loss of defective verbs from Standard Eastern to Iranian Armenian

<table>
<thead>
<tr>
<th>Defective in Standard Eastern</th>
<th>Status in Iranian Armenian</th>
</tr>
</thead>
<tbody>
<tr>
<td>√-TH-1SG</td>
<td></td>
</tr>
<tr>
<td>հուս-ա-մ  'I hope'</td>
<td>հուամ  doesn’t exist</td>
</tr>
<tr>
<td>արժ-է-մ  'I am worth'</td>
<td>արժա  doesn’t exist</td>
</tr>
<tr>
<td>գիտ-է-մ  'I know'</td>
<td>գիտեմ  replaced by</td>
</tr>
<tr>
<td></td>
<td>իմանալ</td>
</tr>
</tbody>
</table>

6.6.4 Other irregular verbs

This section discusses verbs that have some irregularity in their conjugation, but don’t neatly fit into the previous categories.

Two irregular verbs in Table 6.58 are conjugated as regular E-Class verbs in most of the paradigm except for the imperative 2SG (and prohibitive 2SG).

Table 6.58: E-Class verbs that are irregular in only the imperative 2SG

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>աս-ե-լ</td>
<td>ասա բեր</td>
</tr>
<tr>
<td>բերել</td>
<td>բեր</td>
</tr>
</tbody>
</table>

The verb ‘to bring’ has an irregular imperative 2SG also in SEA բեր and SWA քեր. The verb ‘to say’ has an irregular imperative 2SG in also SEA ասա but not SWA աս-ե կա.

Among inchoative verbs, the verb [dәɾ-ն-օ-լ] has some irregularities. Before the nasal inchoative suffix, the rhotic surfaces as a trill /ɾ/. But before the aorist suffix, the rhotic is a retroflex approximant /ɻ/.

The inchoative ‘to wash’ is irregular because it uses the past T marker /i/ in the past perfective. Its imperative 2SG is likewise irregular.

One can argue this verb is actually heteroclitic (= ե)

25 We’ve gotten some contradictory information from some informants. It’s possible that some more innovative speakers use a retroflex /ɻ/ throughout this verb’s paradigm, while other more conservative speakers have a /ɾ/-/ɻ/ change as we describe above. Note that this verb has an irregular imperative 2SG in Standard Eastern Armenian: [dәɾʃ̥]. In Iranian Armenian, the imperative 2SG is regular.

26 The origin of the imperative 2SG of ‘to wash’ is likely from the synonymous A-Class verb [լավ-ա-լ] which exists in Standard Eastern Armenian but not Iranian Armenian.
mixed) with the A-Class because its past perfective and imperative pattern with the A-Class instead of with inchoatives.

Table 6.59: Two irregular inchoatives against the regular inchoative ‘to become happy’

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Past perf. 1PL</th>
<th>Imperative 2SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘to become happy’</td>
<td>ուրախանալ ուրախացանք ուրախացի</td>
<td>ուրախ-աոր-պստ-1PL ուրախ-աոր-իամպ.2SG</td>
</tr>
<tr>
<td>‘to turn into’</td>
<td>դառնալ դարձանք դարձի</td>
<td>դառ-աոր-պստ-1PL դառ-աոր-իամպ.2SG</td>
</tr>
<tr>
<td>‘to wash’</td>
<td>լուանալ լուացինք լուա</td>
<td>լուա-աոր-պստ-1PL լուա</td>
</tr>
</tbody>
</table>

There is evidence that Iranian Armenian has leveled out some irregularities in verbal inflection. The following verbs are irregular in Standard Eastern Armenian but they either a) are regular verbs in Iranian Armenian, or b) have been replaced by regular verbs in Iranian Armenian.

Table 6.60: Lost of irregulars in Iranian Armenian, relative to Standard Eastern

<table>
<thead>
<tr>
<th>Irregular in SEA</th>
<th>Status in IA</th>
</tr>
</thead>
<tbody>
<tr>
<td>zɑɾk-e-ɭ</td>
<td>replaced by E-Class</td>
</tr>
<tr>
<td>լա-ɭ</td>
<td>replaced by E-Class</td>
</tr>
<tr>
<td>bɑt͡sʰ-e-ɭ</td>
<td>regularized E-Class</td>
</tr>
<tr>
<td>kɛn-ɑ-ɭ</td>
<td>replaced by E-Class</td>
</tr>
</tbody>
</table>

One convoluted case involves the Standard Eastern words [lin-e-ɭ] ‘to be’ and [jel-n-e-ɭ] ‘to get up’ or ‘to go up’. The first is suppletive; the second is an infixed verb. In Iranian Armenian, the form of the second verb is used as the verb ‘to be’, without an initial glide: [el-n-e-ɭ]. The meaning of ‘to get up’ or ‘to go up’ is periphrastic with another verb.
We have noted some degree of optional heteroclisis (Stump 2006), meaning that a verb changes its conjugation class in some paradigm cells. Consider the common verb սիրել 'to like'. This verb is primarily a regular E-Class verb and is inflected as such. But in the past perfective, some speakers conjugate the verb as E-Class and some as A-Class. NK sometimes produced perfective converbs with the aorist stem, following the A-Class pattern.

Some speakers consider the A-Class forms to be normal, but others perceive them as ‘done in jest’. It’s difficult to tell if this is genuine inter-speaker variation, or if it’s due to hyper-correction from Standard Eastern Armenian.

Another possible case of heteroclisis that we found was for the A-Class verb [չոս-ու] 'to speak'. NK inflects this as an A-Class almost always, but sometimes she produced an imperative 2PL that followed the E-Class pattern [չոս-եկʰ] instead of the A-Class pattern [չոս-ու-ու-շ-եկʰ] կառավար. She likewise once produced an E-Class infinitive [չոս-ու] instead of [չոս-ու]. Obviously, more data is needed to see the extent of lexical or speaker variation in such mixing of conjugation classes. It is possible that such class changes are a form of dialect-mixing between IA and SEA.
7 Syntax

In terms of its syntax, Iranian Armenian is largely identical to Standard Eastern Armenian. As such, we do not go over the syntax of Iranian Armenian in depth. In terms of general typological features, Iranian Armenian is SOV (1a), has optional post-verbal objects (1b), and uses pro-drop (1c). More in-depth studies of Standard Eastern Armenian syntax exist (Dum-Tragut 2009, Yeghiazaryan 2010, Su 2012, Hodgson 2019b, Khurshudian & Donabédian 2021) and these descriptions largely apply to Iranian Armenian. Furthermore, there are some studies of ‘Eastern Armenian’, but these are actually done based on data from Iranian Armenian speakers who are bi-dialectal (Tamrazian 1994, Megerdoomian 2009).

(1) a. ետրոն-ո ինձ մքհու-դ-վ
   John-DEF I.DAT clean-pst-3SG
   ‘John cleaned me.’
   Ջոնը ինձ մաքրավ։
   (NK)

   b. ետրոն-ո մքհու-դ-վ ինձ
      John-DEF clean-pst-3SG I.DAT
      ‘John cleaned me.’
      Ջոնը ինձ մաքրավ։
      (NK)

   c. մքհու-ժ e-m
      clean is-1SG
      ‘I am clean.’
      Մաքուր եմ։
      (NK)

This chapter focuses on describing those aspects of Iranian Armenian syntax that are innovative when compared to Standard Eastern. Some of these are grammaticalized from attested colloquial and optional properties of Standard Eastern Armenian. Some of these changes were likely encouraged by the use of similar structures in Persian (cf. other language-contact effects in the region Donabedian & Sitaridou 2021). These changes are the following:

(2) Syntactic innovations and grammaticalizations in Iranian Armenian:
7 Syntax

a. Using second person possessive suffixes as object clitics (§7.1)
   → borrowed from Persian
b. Preference for using resumptive pronouns over case-marked relativizers (§7.2)
   → language-internal but encouraged from Persian
c. Preference for subjunctive marking in complement clauses (§7.3)
   → language-internal but encouraged from Persian
d. Variation in expressing subject marking in participle clauses (§7.4)
   → language-internal

In previous sections of this grammar, we did briefly discuss some major aspects of Iranian Armenian syntax. This include auxiliary movement (§3.3.1) and interrogative questions (§5.3). Their syntax does not significantly differ from Standard Eastern Armenian.

Throughout this chapter, Persian sentences were elicited from Nazila Shafiei (NS), an Iranian syntactician. We use the glossing that she provided. The IPA transcriptions were double-checked with Koorosh Ariyaee, an Iranian phonologist. The Standard Eastern Armenian sentences were judged by the consultants mentioned in §1.4.

7.1 Object clitic for second person

Due to contact with Persian, Iranian Armenian has extended the use of the 2SG possessive suffix /-t/ into an object clitic. Within Armenian dialectology, the use of /-t/ as an object clitic has been previously attested for Armenian dialects in Iran (Sayeed & Vaux 2017: 1159, citing Աճառեան 1911: 284, Մուրադյան et al. 1977: item 675; Khurshudian 2020: 340; Hodgson review; Martirosyan 2019: 87; Vaux in review: §4.1).

For the Armenian community of Tehran and the diaspora, AS reports that this use of the clitic is “prevalent in generation Y’s vernacular”, where generation Y is anyone born in the 80’s or 90’s. The use of the clitic is stigmatized because it is part of a ‘very informal register’. Speakers are aware of the register difference.

Most of our consultants could use the Armenian possessive as an object clitic. Some Iranian Armenians who were born and raised in the diaspora however said they had never heard of such constructions.

1 Ariyaee notes that what he transcribe as a Persian [ɒ] may be closer to [ɑ] for Iranian Persian speakers. See footnote 5 in §2.1.4 for discussion.
7.1 Object clitic for second person

7.1.1 General use of the object clitic

In its typical uses, the morpheme /-(ə)t/ acts as a second person possessive suffix on nouns.

(3) senjɒk-ət
    room=POSS.2SG
  'Your room.'

But in Iranian Armenian, this morpheme also functions as an object clitic. As a clitic, this morpheme has some correlations with tense, mood, and valency. For example, many instances of the clitic are found for verbs with the conditional future. The clitic is mostly used to replace the direct object of a transitive verb.

(4) a. kə-χəpʰ-e-m  kʰez
    COND-hit-TH-1SG YOU.SG.DAT
  'I shall hit you.'  (NK, AP, KM)
    Կը խփեմ քեզ։

b. kə-χəpʰ-e-m=ət
    COND-hit-TH-1SG=POSS.2SG
  'I shall hit you.'  (NK, AP, KM)
    Կը խփեմդ։

Throughout this chapter, we gloss the /-(ə)t/ morpheme consistently as a posses- sive, even though it is functioning as an object clitic.

Note that although the second person possessive /-(ə)t/ can function as an object clitic, the first person possessive /-(ə)s/ cannot.

(5) a. kə-χəpʰ-e-n  indz
    COND-hit-TH-3PL I.DAT
  'They shall hit me.'  (NK)
    Կը խփեն ինձ։

b. *kə-χəpʰ-e-n=əs
    COND-hit-TH-3PL=POSS.1SG
  Intended: 'They shall hit me.'  (*NK)
    Կը խփենդ։

Similarly, the definite suffix is used for third person possessive marking, but it cannot be used as an object clitic.
The use of the possessive /-t/ as an object clitic likely developed by contact from Persian, which has an entire set of pronominal clitics that act as object clitics for every person-number combination (Mahootian 2002: 138; Samvelian & Tseng 2010). The object of a transitive verb can be either present (7a) or absent (7b). When the object is absent, Persian uses object clitics on the verb (7b).

Although Persian allows object clitics for every person-number combination, IA has an object clitic /-t/ for only the 2SG. It is unclear why this restriction exists.

Furthermore, as we discuss in the following sections, the object clitic prefers certain tenses and moods; it is unclear to us if these restrictions were also copied from Persian.

7.1.2 Object clitic for direct objects in the conditional future

As stated earlier, the most typical use of the object clitic is to replace the direct object of a verb in the conditional future. The conditional future is marked by the prefix /k-/.

The object clitic can be used for a range of verbs. These all seem to be verbs of physical action. More data is needed to determine if this is a general restriction or
7.1 Object clitic for second person

a tendency. For some cases, the use of the clitic carries an emphatic connotation, e.g., \textit{kə-spn-e-m=ət} ‘(I am so mad that) I shall kill you’.

(8) \begin{enumerate}[a.]
\item \begin{enumerate}[i.]
\item \textit{kə-spn-e-m} \textit{kʰez}
\textit{COND-kill-TH-1SG you.SG.DAT}
‘I shall kill you.’ \quad \text{(NK)}
\item \textit{kə-spn-e-m=ət}
\textit{COND-kill-TH-1SG=POSS.2SG}
‘I shall kill you.’ \quad \text{(NK)}
\end{enumerate}
\item \begin{enumerate}[i.]
\item \textit{kə-χeχt-e-m} \textit{kʰez}
\textit{COND-strangle-TH-1SG you.SG.DAT}
‘I shall strangle you.’ \quad \text{(NK)}
\item \textit{kə-χeχt-e-m=ət}
\textit{COND-strangle-TH-1SG=POSS.2SG}
‘I shall strangle you.’ \quad \text{(NK)}
\end{enumerate}
\item \begin{enumerate}[i.]
\item \textit{kə-bərn-e-m} \textit{kʰez}
\textit{COND-hold-TH-1SG you.SG.DAT}
‘I shall hold you.’ \quad \text{(NK)}
\item \textit{kə-bərn-e-m=ət}
\textit{COND-hold-TH-1SG=POSS.2SG}
‘I shall hold you.’ \quad \text{(NK)}
\end{enumerate}
\end{enumerate}

For some transitives, the clitic cannot be used by AP. Some of them can be used by KM.

(9) \begin{enumerate}[a.]
\item \begin{enumerate}[i.]
\item \textit{kə-tən-e-m} \textit{kʰez}
\textit{COND-take-TH-1SG you.SG.DAT}
‘I shall take you.’ \quad \text{(AP)}
\end{enumerate}
ii. *kə-tɒn-e-m=ət  
COND-take-TH-1SG=POSS.2SG  
‘I shall take you.’   (*AP, okay KM)  
Կը տանեմդ։

b. i. kə-pʰəntɻ-e-m  kʰez  
COND-take-TH-1SG you.sg.dat  
‘I shall look for you.’  (AP)  
Կը փնտռեմ քեզ։

ii. *kə-pʰəntɻ-e-m=ət  
COND-take-TH-1SG=POSS.2SG  
Intended: ‘I shall look for you.’  (*AP)

The verb [mɒt͡ʃʰel] ‘to kiss’ can’t take the clitic for NK.

(10)  
a. kə-mɒt͡ʃʰ-e-m  kʰez  
COND-kiss-TH-1SG you.sg.dat  
‘I shall like you.’  (NK)  
Կը մաչեմ քեզ։

b. *kə-mɒt͡ʃʰ-e-m=ət  
COND-kiss-TH-1SG=POSS.2SG  
Intended: ‘I shall kiss you.’  (*NK)

In the domain of verbs of speech, the transitive verbs [kɒnt͡ʃʰel] ‘to call’ and [zɒŋɡel] ‘to phone’ can take the clitic for some speakers.

(11)  
a. i. kə-kɒnt͡ʃʰ-e-m  kʰez  
COND-call-TH-1SG you.sg.dat  
‘I shall call you.’  (AP)  
Կը կանչեմ քեզ։

ii. kə-kɒnt͡ʃʰ-e-m=ət  
COND-call-TH-1SG=POSS.2SG  
‘I shall call you.’  (AP)  
Կը կանչեմդ։

b. i. kə-zɒŋɡ-e-m  kʰez  
COND-phone-TH-1SG you.sg.dat  
‘I shall phone you.’  (AS)  
Կը զանգեմ քեզ։
7.1 Object clitic for second person

ii. կու-զանգե-մ=ատ
    COND-call-TH-1SG=POSS.2SG
    ‘I shall phone you.’
    Կը զանգեմ։
    (AS)

AS provides a common example with the verb ‘to see’. He reports that this is a social expression and a calque from Persian.

(12) գու-գու-ւ կու-տեսն-ե-մ=ատ
    COND-come-TH-2SG COND-see-TH-1SG=POSS.2SG
    ‘Come, let me see you.’
    Կը գաս կը տեսնեմ։
    (AS)

Some verbs like [siɭel] ‘to like’ can’t take the clitic for some speakers. It is unclear if this is idiosyncratic, or if it reflects a restriction against verbs of non-physical action.

(13) a. կու-սիր-ե-մ ղեզ
    COND-like-TH-1SG you.sg.dat
    ‘I shall like you.’
    Կը սիրեմ Քեզ։
    (NK)

b. կու-սիր-ե-մ=ատ
    COND-like-TH-1SG=POSS.2SG
    ‘Intended: ‘I shall like you.’
    Կը սիրեմ։
    (*NK)

7.1.3 Object clitic for other tenses and moods

The previous section focused on examples of the object clitic when the verb is in the conditional future mood. It is rather difficult to find cases where the clitic is added for other tenses and moods for some of our consultants.

In other synthetic tenses, NK expressed uncertainty about using the clitic in the subjunctive.

(14) a. ուզ-ում ե-մ ղեզ չափի-ե-մ
    want-IMPF.CVB is-1SG you.sg.dat hit-TH-1SG
    ‘I want to hit you.’
    Ուզում եմ Քեզ խփեմ։
    (NK)
7 Syntax

b. ?uz-um e-m χəpʰ-e-m=ət
   want-IMPF.CVB is-1SG hit-TH-1SG=POSS.2SG
   Intended: 'I want to hit you.' (?NK)

AS however provides examples in the subjunctive. He reports that these are social expressions and calques from Persian.

(15) դու տեսն-e-m=ət
   come.IMP.2SG see-TH-1SG=POSS.2SG
   'Come, let me see you.' (AS)

For the past perfective, NK reports that she cannot use the object clitic.

(16) a. χəpʰ-ɒ-m kʰez
   hit-PST-1SG you.sg.dat
   'I hit (past) you.' (NK)
   Խփամ քեզ։

b. *χəpʰ-ɒ-m=ət
   hit-PST-1SG=POSS.2SG
   Intended: 'I hit (past) you.' (*NK)

For periphrastic tenses, AS reports that the object clitic can be used. In such cases, the clitic would cliticize onto the auxiliary. Such cliticization is also reported in the Iranian dialect of Urmia (Ղարիբյան 1941: 282). It’s unclear to us if Persian also allows adding object clitics to similar verb+auxiliary constructions.

(17) a. i. nɒj-um e-m kʰez
    look-IMPF.CVB is-1SG you.sg.dat
    'I am looking at you.' (AS)
    Նայում եմ քեզ։

ii. nɒj-um e-m=ət
    look-IMPF.CVB is-1SG=POSS.2SG
    'I am looking at you.' (AS)
    Նայում եմ:

b. i. spɒs-um e-m kʰez
    wait-IMPF.CVB is-1SG you.sg.dat
    'I am waiting for you.' (AS)
    Սպասում եմ քեզ։
7.1 Object clitic for second person

ii. spɔs-um e-m=ət wait-IMPF.CVB is-1SG=POSS.2SG

‘I am waiting for you.’

Սպասում եմդ։  \( (\text{AS}) \)

c. i. kɔɻot-el e-m kʰez miss-IMPF.CVB is-1SG you.SG.DAT

‘I’ve missed you.’

Կարօտել եմ քեզ։  \( (\text{AS}) \)

ii. kɔɻot-el e-m=ət miss-IMPF.CVB is-1SG=POSS.2SG

‘I’ve missed you.’

Կարօտել եմդ։  \( (\text{AS}) \)

7.1.4 Cliticizing other verbal arguments

All previous examples were cases where the object clitic replaced the direct object of a transitive verb. For other types of verbal arguments, we have found mixed judgments. We go through these other possible arguments.

The clitic has varying grammaticality when used to replace an indirect object. For NK, she felt that use of the clitic was possible but sounded ‘silly’. KM cannot say these.

(18) a. kɒs-e-m kʰez cond-say–th-1sg you.sg.dat

‘I will tell you.’

Կասեմ քեզ։  \( (\text{NK}) \)

b. kɒs-e-m=ət cond-say–th-1sg=poss.2sg

‘I will tell you.’

Կասեմդ։  \( (\text{NK, KM}) \)

AS reports an example of an indirect object in the subjunctive.

(19) me bən ɒs-e-m=ət

INDF thing tell–th-1sg=poss.2sg

‘Let me tell you something’.  \( (\text{AS}) \)

Մի բան ասեմդ

As before, the indirect object clitic is not used in the past perfective.
7 Syntax

(20) a. ɒs-ɒ-m kʰez
     say-PST-1SG you.SG.DAT
     ‘I told you.’
     Ասամ քեզ։  

b. *ɒs-ɒ-m=ət
     say-PST-1SG=POSS.2SG
     Intended: ‘I told you.’ (*NK)

So far, it seems there is significant speaker variation for using the object clitic in place of an indirect object. Much stronger negative judgments are found for other possible arguments. For example, benefactives can’t be replaced by the object clitic.

(21) a. jes kə-jeɻkʰ-e-m kʰo hոմդի
     I COND-sing-TH-1SG you.SG.GEN for
     ‘I shall sing for you.’
     Ես կը երգեմ քո համար։

b. *jes kə-jeɻkʰ-e-m=ət
     I COND-sing-TH-1SG=POSS.2SG
     Intended: ‘I shall sing for you.’ (*NK)

However, AP report can add the clitic onto the benefactive postposition.

(22) a. kʰo hոմդի kə-jeɻkʰ-e-m
     you.SG.GEN for COND-sing-TH-1SG
     ‘I shall sing for you.’
     Քո համար կը երգեմ։

b. hոմդի-ət kə-jeɻkʰ-e-m
     for=POSS.2SG COND-sing-TH-1SG
     ‘I shall sing for you.’
     Համարդ կը երգեմ։

Second-person substantives cannot be replaced by the object clitic.

(23) a. jes kʰo jeɻkʰ-ə kə-jeɻkʰ-e-m
     I you.SG.GEN song-DEF COND-sing-TH-1SG
     ‘I shall sing your song.’
     Ես քո երգը կը երգեմ։
7.2 Resumptive pronouns in relative clauses

b. jes kʰon-ə kə-jeɻkʰ-e-m
   I yours-DEF cond-sing-th-1sg
   ‘I shall sing yours.’ (NK)

c. *jes kə-jeɻkʰ-e-m-ət
   I cond-sing-th-1sg=poss.2sg
   Intended: ‘I shall sing yours’. (*NK)

Nor can we turn the indirect object of the verb ‘to speak’ into an object clitic (24e). More accurately, the restriction could be against comitatives.

(24) a. kə-χos-d-m
   cond-speak-th-1sg
   ‘I shall speak.’ (NK)

b. jes es lezu-n kə-χos-d-m
   I this language-DEF cond-speak-th-1sg
   ‘I shall speak this language.’ (NK)

c. jes es lezu-n dʒon-i het kə-χos-d-m
   I this language-DEF John-gen with cond-speak-th-1sg
   ‘I shall speak this language with John.’ (NK)

d. jes es lezu-n kʰo het kə-χos-d-m
   I this language-DEF you.sg.gen with cond-speak-th-1sg
   ‘I shall speak this language with you.’ (NK)

e. *jes es lezu-n kə-χos-d-m=ət
   I this language-DEF cond-speak-th-1sg=poss.2sg
   Intended: ‘I shall speak this language with you’. (*NK)

7.2 Resumptive pronouns in relative clauses

In Standard Eastern Armenian, relative clauses utilize case marking on the relativizer (relative pronoun vor: 25a). The use of a resumptive pronoun is judged as ungrammatical, unnatural, or excessive for speakers (25b), and it is not even mentioned in the Dum-Tragut grammar (2009: 478).
7 Syntax

(25)  SEA

a. ɑjn kin-ǝ vor-itsʰ ajs girkʰ-ǝ ver-tsʰr-e-tsʰ-i-∅
    that woman-DEF that-ABL this book-DEF buy-CAUS-TH-AOR-PST-1SG
    ‘that woman from whom I bought this book’  (MA, VK, VP)
    այն կինը որից այս գիրքը վերցրեցի
def}

b. ɑjn kin-ǝ vor iren-itsʰ ajs girkʰ-ǝ
    that woman-DEF that she-ABL this book-DEF
    ver-tsʰr-e-tsʰ-i-∅
    buy-CAUS-TH-AOR-PST-1SG
    ‘that woman from whom I bought this book’  (MA, ?VK, *VP)
    այն կինը որ իրենից այս գիրքը վերցրեցի

MA felt the use of a resumptive pronoun was grammatical but “includes complexity that we can avoid”.

Similarly for Standard Western Armenian, HD’s judgments are that using a case-marked relativizer is the norm (26a). Using a separate resumptive pronoun (26b) doesn’t sound ungrammatical, but does sound ‘excessively clunky.’ It creates a sense that the relative clause is an after-thought.

(26)  SWA

a. ɑjn gin-ǝ vor-m-e ajs kʰirkʰ-ǝ kʰənn-e-tsʰ-i-∅
    that woman-DEF that-NX-ABL this book-DEF buy-TH-AOR-PST-1SG
    ‘that woman from whom I bought this book’  (HD)
    այն կինը որից այս գիրքը վերցրեցի
def}

b. ?ɑjn gin-ǝ vor ɪr-m-e ajs kʰirkʰ-ǝ
    that woman-DEF that she-NX-ABL this book-DEF
    kʰənn-e-tsʰ-i-∅
    buy-TH-AOR-PST-1SG
    ‘that woman from whom I bought this book’  (?HD)
    այն կինը որ իրից այս գիրքը վերցրեցի

However, resumptive pronouns are attested in some colloquial Colloquial Eastern Armenian registers (Polinsky 1995: 100; Hodgson 2020b: ex:5). Such resumptive pronouns are also attested and seem to be more common in Classical and Middle Armenian (Hewitt 1978; Hodgson 2020b: sec:3.3) and some other Armenian dialects (Aslanbeg: Vaux 2001: 53).

In contrast in Iranian Armenian, both strategies are attested (27a), at least for clauses where the head noun acts as an ablative argument in the relative clause.
7.3 Subjunctive marking in complement clauses

For a bi-dialectal speaker like KM, both options were possible, while the resumptive pronoun feels more common (27b). For a mono-lectal speaker like NK, the resumptive pronoun strategy was the default, while using a case-marked complementizer felt odd.

(27) IA

a. en kın-ǝ vol-utšʰ es giɭkʰ-ǝ veɭ-tsʰɭ-d-m
   that woman-DEF that-ABL this book-DEF take-CAUS-PST-1SG
   ‘that woman from whom I took this book’ (KM, ?NK)

b. en kın-ǝ vol jes îpn-itsʰ es giɭkʰ-ǝ veɭ-tsʰɭ-d-m
   that woman-DEF that I she-ABL this book-DEF take-CAUS-PST-1SG
   ‘that woman from whom I took this book’ (KM, NK)

It’s unknown if the preference for resumptive pronouns is constant across all possible types of case-marking (nominative, accusative, genitive/dative, instrumental, and locative). However, as Katherine Hodgson reminds us, the Relativization Accessibility Hierarchy (Keenan & Comrie 1977) says that resumptives should be more common with ‘lower’ roles like ablative than with ‘higher’ ones like subject.

The preference for resumptive pronouns is likely due to contact with Persian. In Persian, if the head noun has oblique case in the relative clause, then the only strategy is to use a resumptive pronoun (Mahootian 2002: 34; Abdollahnejad 2018: 2). The relativizer /ke/ cannot be case-marked.

(28) Persian

un zæn-i ke æz-æʃ in ketob-ro xærid-æm
   that woman-DEF that from-her this book-OM bought-1SG
   ‘The woman from whom I bought this book.’ (NS)

7.3 Subjunctive marking in complement clauses

In Standard Eastern Armenian, a modal verb like ‘want’ can select complement clauses where the verb is an infinitive (29a). The implicit subject of the complement clause is the subject of the main clause. An alternative strategy is to include a complementizer vor, and then change the verb into a finite subjunctive
verb (29b). Both of these two options are judged as prescriptive norms. A third alternative however is to omit the complementizer but still use a subjunctive verb (29c). This third alternative is judged as quite colloquial (Dum-Tragut 2009: 425-427).

(29) SEA

a. uz-um e-n iz gorts-i dan-e-l
   want-impf.cvb is-3pl I.DAT work-DAT put-th-inf
   ‘They want to make me work.’ (MA, VK, VP)

b. uz-um e-n vor iz gorts-i dan-e-n
   want-impf.cvb is-3pl that I.DAT work-DAT put-th-3pl
   ‘They want to make me work.’ (MA, VK, VP)

c. uz-um e-n iz gorts-i dan-e-n
   want-impf.cvb is-3pl I.DAT work-DAT put-th-3pl
   ‘They want to make me work.’ (MA, VK, VP)

Similar judgments apply for Standard Western Armenian. The norm is to use an infinitive (30a) or a complementizer (30b). Using a subjunctive (30c) is possible in colloquial speech. When the complement clause includes multiple items besides the verb, as in (30c), HD feels that using a subjunctive sounds more natural than using an infinitive.

(30) SWA

a. g-uz-e-n indz-i afxat-tsan-e-l
   inf-want-th-3pl I-DAT work-caus-th-inf
   ‘They want to make me work.’ (HD)

b. g-uz-e-n vor indz-i afxat-tiln-e-n
   inf-want-th-3pl that I-DAT work-caus-th-3pl
   ‘They want to make me work.’ (HD)

c. g-uz-e-n indz-i afxat-tiln-e-n
   inf-want-th-3pl I-DAT work-caus-th-3pl
   ‘They want to make me work.’ (HD)
7.3 Subjunctive marking in complement clauses

In contrast in IA, the use of a finite subjunctive verb is more common (31c). NK personally felt that using an infinitive was odd or ungrammatical (31a).

(31) SEA
   a. ʔuz-um e-n indz-i goɻts-i kʰŋf-e-l
       want-IMPF.CVB is-3PL I-DAT work-DAT drive-TH-INF
       ‘They want to make me work.’
       (?NK)
   b. uz-um e-n vor indz-i goɻts-i kʰŋf-e-n
       want-IMPF.CVB is-3PL that I-DAT work-DAT drive-TH-3PL
       ‘They want to make me work.’
       (NK)
   c. uz-um e-n indz-i goɻts-i kʰŋf-e-n
       want-IMPF.CVB is-3PL I-DAT work-DAT drive-TH-3PL
       ‘They want to make me work.’
       (KM, NK)

AS reports more examples of embedded verbs where SEA would prefer an infinitive form, while IA prefers a subjunctive form.

(32) a. IA
   i. ʃʰ-e-m kɔɻ-oʁ as-e-m
       NEG-is-1SG can-SPTCP say-TH-1SG
       ‘I cannot say.’
       (AS)
   ii. uz-um Ø-i-m øn-Ø-i-m
       want-IMPF.CVB is-PST-1SG do-TH-PST-1SG
       ‘I wanted to do (it).’
       (AS)
   iii. inf h-Ø-i-ɻ uz-um øn-Ø-i-ɻ
       what is-PST-2SG want-IMPF.CVB say-TH-PST-2SG
       ‘What did you want to say?’
       (AS)

b. SEA
   i. ʃʰ-e-m kar-oʁ as-e-l
       NEG-is-1SG can-SPTCP say-TH-INF
       ‘I cannot say.’
       (AS)
In Iran, the Salmast dialect of Armenian likewise prefers using subjunctive forms \(\text{Vaux in review}: \S 4.5\).

The preference for subjunctive forms is likely due to language-internal development that got encouraged by language contact with Persian. In Persian, verbs like ‘want’ select subjunctive verbs \(\text{Mahootian 2002: 29}\).

\begin{align*}
(33) & \quad \text{Persian} \\
\text{a.} & & \text{mi-tun-æm be-ɾ-æm} \\
& & \text{PROG-can-1SG SBJV-go-1SG} \\
& & \text{‘I can go.’} \\
& & \text{(NS)} \\
\text{b.} & & \text{ne-mi-tun-æm be-g-æm} \\
& & \text{NEG-PROG-can-1SG SBJV-say-1SG} \\
& & \text{‘I cannot say.’} \\
& & \text{(NS)} \\
\text{c.} & & \text{mi-x-ænd mæn be-ɾ-æm} \\
& & \text{PROG-want-3PL I SBJV-go-1SG} \\
& & \text{‘They want me to go.’} \\
& & \text{(NS)}
\end{align*}

7.4 Agreement-marking in nominalized relative clauses or participial clauses

A small area of microvariation concerns agreement marking on nominalized relative clauses. For a sentence like (34a), the relative clause is expressed as a post-nominal relative clause with a finite verb. In contrast, this sentence can be paraphrased as in (34b), but where the relative clause is now pre-nominal, and the finite verb is replaced by a participle.
7.4 Agreement-marking in nominalized relative clauses or participial clauses

(34) SEA

a. ɡiɾkʰ-ǝ vor ɨŋkʰ-ǝ kartʰ-ɑ-ʈʂʰ-∅-∅ book-def that he-def read-TH-AOR-PST-3SG

‘the book that he read.’ (VP)

b. (iɾ) kartʰ-ɑ-ʈʂʰ-ats ɡiɾkʰ-ǝ (he.gen) read-TH-AOR-RPTCP book-def

‘the book that he read.’ (VP)

A special subcategory of such relative clause constructions is when the subject or ‘doer’ of the verb is either the first or second person singular (35a). We focus on the first person for illustration. When such a relative clause is converted to a participle clause (35b), the subject is expressed by the first person possessive suffix -(ə)s.

(35) SEA

a. ɡiɾkʰ-ǝ vor kartʰ-ɑ-ʈʂʰ-i-∅ book-def that read-TH-AOR-PST-1SG

‘the book that I read.’ (MA, VK, VP)


‘the book that I read.’ (MA, VK, VP)


‘the book that I read.’ (*MA, ?VK, *VP)

Our SEA consultants all all felt that using an overt genitive pronoun alongside the possessive suffix on the participle (35c) was odd or ungrammatical. However, it is reported that some speakers accept the use of both elements (Hodgson 2019b: 195).

For these participle clauses, there is dialectal variation in how the subject or doer of the action is marked for the first/second person singular. In SEA, the norm is i) to not use an overt genitive pronoun, ii) to place a subject-marking
In contrast in Standard Western Armenian (36a), the norm is to ii’) make the participle unmarked, while iii’) the noun gets the possessive suffix. The pronoun is optional (i’). For more data, see Ackerman & Nikolaeva (1997), Ackerman (1998), Ackema & Neeleman (2004), and Ackerman & Nikolaeva (2013: 284ff). For SEA, such SWA constructions are deemed ‘okay but not default’ for VK and ‘not preferable’ for VP (36b). Neither consultant approved of adding the pronoun.

(36) a. SWA
   (im) gartʰ-a-t̚sʰ-aɗz  girkʰ-əs
   I.GEN read-TH-AOR-RPTCP book-POSS.1SG
   ‘the book that I read.’ (HD)
   (hû) նամակած գիրք կարդացած գիրք

   b. SEA
   (*im) kartʰ-a-t̚sʰ-ɑt̚  girkʰ-əs
   I.GEN read-TH-AOR-RPTCP book-POSS.1SG
   ‘the book that I read.’ (VK, ?VP)
   (hû) նամակած գիրք կարդացած գիրք

Note that some speakers like MA feel that having the possessive on the noun (36b) was grammatical but had a distinct meaning of ‘I own the book and I read it’. In contrast, when the possessive suffix is on the participle (35b), there is no information concerning who the owner of the book is.

In contrast in Iranian Armenian, it seems that there is optionality across these parameters. We can either follow SEA and place the possessive on the participle (37b), or we can follow SWA and place the possessive on the noun (37d). An intermediate option is to not use a possessive suffix at all (37c).

(37) IA
   a. giɻkʰ-ə  vɔɾ kɒɻtʰ-d-ʈŞʰ-i-m
      book-DEF that read-TH-AOR-PST-1SG
      ‘the book that I read.’ (NK)
      փետր նա կարդացած գիրք

   b. (im) kɒɻtʰ-d-ʈŞʰ-dtŞ-əs  giɻkʰ-ə
      (I.GEN) read-TH-AOR-RPTCP-POSS.1SG book-DEF
      փետր նա կարդացած գիրք (KM, ?NK)
7.4 Agreement-marking in nominalized relative clauses or participial clauses

c. \text{im} \quad \text{kəɾtʰ-d-tʃʰ-dts} \quad \text{giɾkʰ-ə}  \\
\text{I.GEN read-TH-AOR-RPTCP} \quad \text{book-DEF}  \\
\text{իմ կարդացած գիրքը} \quad \text{(KM, NK)}

d. (\text{im}) \quad \text{kəɾtʰ-d-tʃʰ-dts} \quad \text{giɾkʰ-əs}  \\
(\text{I.GEN}) \quad \text{read-TH-AOR-RPTCP} \quad \text{book-POS.1SG}  \\
\text{‘the book that I read’} \quad \text{(KM, NK)}

For a bi-dialectal speaker like KM, all of the options were acceptable. For a mono-lectal speaker like NK, the intermediate option (37c) was judged as the best option, the SEA-style sentences were judged as odd (37b), while the SWA-sentences (37d) were judged as better than the SEA-style ones, but not as good as the intermediate.

This intermediate option (37c) was likewise accepted for SEA by our consultants; VK and MA went as far to say this intermediate option is as good as the norm (35b). Katherine Hodgson informs us that all this variation is likewise attested in Colloquial Eastern Armenian.

(38) \text{SEA}  \\
\text{im} \quad \text{kəɾtʰ-a-tʃʰ-ats} \quad \text{giɾkʰ-ə}  \\
\text{I.GEN read-TH-AOR-RPTCP} \quad \text{book-DEF}  \\
\text{‘the book that I read.’} \quad \text{(MA, VK, VP)}

Among these various options, KM reports that the intermediate option is relatively more preferred (37c). The SWA-style option is attested but rather stigmatized (37d). The SEA-style option is prescriptively the rule but rather uncommon (37b). It seems that at some point, SEA developed this intermediate option as an acceptable colloquial alternative. IA then grammaticalized this intermediate option as the norm.
8 Text

Iranian Armenian is a spoken vernacular. Thus, it’s difficult to find any written records of the language. What makes it more difficult is that, as AS informs us, Iranian Armenian is so stigmatized that he has not found any common Iranian Armenian songs or folk tales in his decade-long interaction with the community.

In recent years however, there have been Iranian Armenians who have posted online comedic sketches. These are posted on various social media platforms like Twitter, Instagram, and Facebook. We examined and transcribed one such sketch which is a 9-minute-long scripted dialogue between six Iranian Armenian comedians (May 2021). The original video with subtitles is available on Instagram as a publicly-accessible video with subtitles. Ethically, although the video is public, we wanted to obtain the consent of the comedians so that they know we were using their sketch for our academic purposes. We managed to track down and get the consent of four out of the six participants. We didn’t hear back from the other two despite multiple attempts at contacting them.

The sketch is rather long with around 9 minutes of speech, and over 650 words. We transcribed the entire video using our IPA and glossing system with Praat Boersma 2001. We demarcated borrowed words with <>. The Armenian orthography line uses romanization for Persian-based loanwords. Our English translation differs slightly from the subtitles. The entire transcript can be found in our online archive as a Praat TextGrid. Because the video is long, we present only one dialog between Vahik and Anjel, both acted out by the same male speaker (Ryan Ebrahianian).

(1) Vahik
   a. պնձել ես-էլ էհ էս <վեքսին>-է վոք ձագ ա  Anjel  hear-perf.cvb is-2sg this vaccine-def that out is

1https://www.instagram.com/tv/COWt2vUn4KA/
2We generally did not gloss zero morphs. We used zero morphs ∅ only for the past auxiliary like [∅-i-m] ‘is-pst-1sg’ meaning ‘I was’.
3https://github.com/jhdeov/iranian_armenian
8 Text

9-d-l-is
come-TH-INF-IMPF.CVB

‘Anjel, have you heard of this vaccine that’s coming out?’

boxem, na’ in tu <vaccine>-< noun noun - w qaphu:

b. meet noš-ən ə
INDF.CLF new-DEF is

‘It’s a new one.’

bə havən ho:u:

b. <Johnson and Johnson>-n do jkʰ-hum
Johnson Johnson-DEF is make-IMPF.CVB

‘Johnson and Johnson is making it.’

<Johnson and Johnson>-i u uphaŋw:

d. me əŋkʰ-om piti ɔpʰ-e-s tʰ-ev-i-t
INDF time should shoot-TH-2SG arm-DAT-POSS.2SG

‘You only take it once. (Lit: You should shoot it at your arm once)’

bə havən əpən əpən əpən əpən:

e. himə əm əŋkʰ-əl-ne-l-i-s ʊŋŋ-e-l-uw e-m
now all friend-PL-DAT-POSS.1SG ring-TH-INF-FUT.CVB is-1SG
meet meet k-d̪u-e-m
INDF.CLF one one COND-SAY-TH-1SG

‘I’m gonna call all my friends to tell them one-by-one. (Lit: Now I will
call all my friends, tell each one-by-one)’

bə havən əməŋ əŋkʰənəŋə needles

Draft of May 31, 2022, 08:00
c. ov voxel uz-um o idd tev-ə χαρ-ə intəh-i het who that want-IMPF.CVB is he.GEN arm-DEF shoot-TH what-GEN with uz-um o χαρ-ə kə-χαρ-ə want-IMPF.CVB is shoot-TH COND-shoot-TH 'Whoever wants to stick themselves can stick themselves with whatever they’d like.' ով որ ուզում ա իրա թեւը խփի, ինչի հետ ուզում ա խփի կը խփի:

d. kez intəh
you.SG.DAT what
'What’s it to you?’
քե՞զ ինչ:

(3) Vahik

a. <jæni> intəh indz intəh
meaning what I.DAT what
'What do you mean, “what’s it to me”?'
<br><Yani> ի՞նչ «ինձ ինչ»
Borrowed from Persian یعنی 'meaning’

b. jetbe me դերքահոգ piti et-ə-n χαր-ə-n ինդնչ-ə
if INDF time should go-TH-3PL strike-TH-3PL they.GEN
təev-ə arm-PL-DEF
'If they only need to stick themselves once,'
եթէ մի անգամ պիտի էրթան խփեն իրանց թեւերը,

(c. heto ordeh ɪdəh-i piti kəʃ-ə-n voxel benzin et-e-n
after before NEG-is should drive-TH-3PL that gasoline burn-TH-3PL
pər iṣdxs-e-n money spend-TH-3PL
'then they don’t have to drive back and forth to burn gas, spend
money.

d. <nothing iz fì> es omerikd-ji metfə ndəzəl ձոն
nothing is free this America-GEN in Anjel dearness near
'Nothing is free in America, Anjel, dear.'
<br><Nothing is free> էս Ամերիկայի մէջ, Անջել ջան:
8 Text

e. լուս մե բուն էլ չգում էմ տն-էմ
good INDF thing also/even want-IMPF.CVB is-2SG do-TH-1SG
թառ-IMPF.CVB is-2SG head-DAT-POSS.1SG
‘Even when I want do something good, you’re still on top of me. (Lit: you throw at/on my head)’

f. բոբո ձեր ըբ-ի կինձ-ն-իսʰ
dude hand pull-IMP.2SG me-NX-ABL
‘Dude, leave me alone! (Lit: pull away your hand from)’

Since writing this grammar, we discovered that the UCLA Phonetics Lab archive had recordings of Tehrani Armenians in Los Angeles (The UCLA Phonetics Lab Archive 2007). We are currently in the process of transcribing their material, with the goal of archiving more material.

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6 http://archive.phonetics.ucla.edu/Language/HYE/hye.html
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