

Chapter 1

Introduction to the translation

Hossep Dolatian

Stony Brook University

1 Introduction

Armenian is an Indo-European language. Its oldest attested form is Classical Armenian (CA). The modern language is conventionally described as having two standardized variants: Standard Western Armenian (SWA or WA) and Standard Eastern Armenian (SEA or EA). Alongside these two varieties, there are countless non-standard dialects, many of which were made extinct because of the Armenian Genocide.

This book is an English translation of a monograph originally written in Armenian by Hratchia Adjarian (Աճառեան 1911): Հայ Բարբառագիտութիւն or *Armenian dialectology*. The original monograph consisted of descriptions of 31 non-standard Armenian varieties. Some descriptions are rather lengthy, while some are short. Of course, more non-standard varieties exist that were not described in this monograph (Greppin & Khachaturian 1986, Martirosyan 2018, 2019, Dolatian et al. 2023).

This translation includes a translation of Adjarian (1899) by George Balabanian (§2), and a retrospective piece by Bert Vaux on the history and development of Armenian dialectology (§3).

The present book is both a translation and commentary on this monograph. In the course of translating the original 300-page book into English, I had to unpack a lot of implicit knowledge that Adjarian was using in order to describe the varieties. For example, Adjarian did not use morpheme boundaries, glosses, or IPA symbols. He would often just provide data points from a dialect, with a brief



description and with cognates from Classical Armenian. That brief description relied on the reader's knowledge of Standard Armenian (and sometimes Classical Armenian) in order to deduce the linguistic structure of the non-standard dialect. In order to unpack this implicit information, the end result was a 700-page translation with glossing, translation, and morpheme segmentation. To maximize the recoverability of information during the translation, I provide the page numbers from Adjarian's original monograph.

This translation is written with three audiences in mind. One audience is a reader who does not know Armenian, and who does not work on Armenian, but seeks access to linguistically annotated data on the language, with ample prose to explain the data. Such readers would benefit from the prose, morpheme segmentations, and IPA. The second audience is a reader who works on Armenian in a traditional dialectological setting. Such readers are trained in Armenia, can read Armenian, but would not be used to seeing how modern linguistic methodology can be applied to dialects, such as the use of IPA or glossing. Such readers would utilize the same information as the first audience, but would also be able to use the original Armenian renderings of examples and texts to work further on the language. The third audience is a reader like myself who is a linguist of Armenian that was trained outside of Armenia in a generative setting. In my experience, it is hard to understand or appreciate most dialectological work because of the lack of annotation and connection to modern terminology. Such readers benefit from all of my annotation as well.

The current introduction is written by myself, the translator. The rest of this book is my translation of Adjarian's writing. At times, I provide commentary and interrupt Adjarian's prose. To prevent ambiguity, I wrote my interruptions in the following format:

[[This is an interruption by the translator, Hossep Dolatian.]]

This translation is a commentary because I often have to disrupt Adjarian's prose to clarify or contradict various implicit or explicit points that he makes. I suspect that if my comments were removed, than the text would be shorter but significantly less accessible and potentially impenetrable to a non-Armenian audience.

The rest of this chapter provides basic information on Armenian (§2), my transcription system (§3), and my translation conventions (§4).

2 **Armenian linguistics and dialectology**

This section provides basic information on the Armenian language. This section is geared towards summarizing basic diachronic and synchronic facets of the Armenian language in terms of how we categorize different Armenian varieties. I first discuss the ambiguity in the use of the terms ‘Armenian’ or ‘dialect’ (§2.1). I then explain the history of the language (§2.2). I focus on the nature of the two standardized modern varieties (§2.2), the non-standardized varieties (§2.4), and the classification or genetic relationship across varieties (§2.5). Adjarian’s dialectological maps are provided (§2.6).

2.1 **Ambiguities in the label of “Armenian”**

This introduction chapter has two goals: to explain the process of my translation, and to make the information present in the translation accessible. For the latter goal, I thought it wise to clarify some inconsistencies that I have come across (in my experience) when Armenian is discussed among Armenian-speaking non-linguists, Armenian-speaking linguists or dialectologists from Armenia, non-Armenian linguists who work on Armenian, and linguists who do not work on Armenian. What follows is my own impressionistic experience of this situation, as an Armenian-speaking linguist who works on Armenian.

As an umbrella term, the phrase “Armenian language” conventionally denotes the set of two standard varieties (Standard Western and Eastern Armenian) and multiple non-standard varieties (like Karabakh, Agulis, etc.). But among Armenian non-linguists, the term “Armenian dialect” is generally used to mean “non-standard varieties”. Thus, SWA and SEA are not treated as “dialects” but as some purified form of the language. Such attitudes are common among speakers of other languages as well. To quote Chambers & Trudgill (1998: 3):

In common usage, of course, a dialect is a substandard, low-status, often rustic form of language, generally associated with the peasantry, the working class, or other groups lacking in prestige. Dialect is also a term which is often applied to forms of language, particularly those spoken in more isolated parts of the world, which have no written form. And dialects are also often regarded as some kind of (often erroneous) deviation from a norm – as aberrations of a correct or standard form of language.

For example, when I was growing up, I was never told that I spoke a “dialect” of Armenian, but that I spoke simply “Armenian” (= SWA). In contrast, the label

of “dialect” was given to the unintelligible non-standard variety of Armenian spoken by people in Kessab or Anjar, which speak an offshoot of Cilician Armenian (§24).

Alongside this terminological division between standard and non-standard varieties, dialectologists of Armenian generally discuss or analyze non-standard varieties in a vacuum from standard varieties. For example, in the original monograph, Adjarian lists and analyzes 31 varieties of Armenian as “dialects”, but he does not include the standard varieties (SWA and SEA) in his list of dialects. Similarly, Martirosyan (2018, 2019) provides the most up-to-date classification of known Armenian dialects, but his classification does not include SWA and SEA. The end result is that a non-specialist in Armenian has a vague idea of the exact genetic connections between the standard and non-standard varieties.

Another consequence is that it can create the false impression that the Armenian-speaking world displays a type of diglossia (like the Arab World) whereby an Armenian-speaking child would acquire one of Adjarian’s 31 non-standard varieties at home, and then learn a standard variety at school. For example, in my past collaborations with non-Armenian linguists, some have gotten confused when how I say that I am a native speaker of SWA and not a speaker of a non-standard variety. This confusion is compounded by the use of the term “standard” in the name for SWA and SEA, which incorrectly implies that SWA/SEA is restricted in usage to books and formal speech.

Similarly, I have come across linguists of Armenian who felt surprised that there is subdialectal variation in the use of SWA. For example, for stops, SEA uses a three-way laryngeal contrast [D, T, T^h]. For SWA, there is only a two-way contrast of phonologically voiced vs. voiceless. But this contrast is phonetically manifested in different ways based on region and language contact. For example, SWA speakers in Turkey have the distinction [D, T^h] (Toparlak, personal communication), speakers in Lebanon have [D, T], and speakers in the US have [T, T^h] (Kelly & Keshishian 2021). Based on this sociophonetic distinction, SWA is not a fossilized literary language but has its own subdialects that are natively acquired by SWA speakers.

Because of the above problems, this translation is also a commentary on Adjarian’s prose. In various places, I have felt the need to clarify what he means for a non-Armenian reader who would not know of the above biases and preconceptions. In a sense, this translation is a critical reading of Adjarian. If my commentary notes were removed, then I doubt that this work would be accessible to future linguists.

Having discussed these problems, the following subsections clarify the boundaries of what counts as Standard Armenian or as a dialect.

2.2 What is Armenian?

As stated, Classical Armenian is the oldest attested Armenian variety (circa the 5th century CE).¹ In contrast, Modern Armenian is conventionally described as having two standardized variants: Standard Western Armenian (SWA or WA) and Standard Eastern Armenian (SEA or EA). These two variants are often also called simply Western Armenian and Eastern Armenian.

Between the ancient centuries of Classical Armenian and the modern centuries of Standard Western/Eastern Armenian, there are many holes. We know that there was a stage of Middle Armenian during the medieval period, within the Cilicia region. However, Middle Armenian is less described or studied than either the Classical or Modern forms (Karst 1901).

In the 18th century, ethnic Armenians spoke a variety of languages. As Ad-jarian describes in §6, some groups of Armenians spoke only non-Armenian languages like Turkish. Other groups had developed their own individual Armenian varieties. Thus, the Armenians of Smyrna (in modern Turkey) spoke Smyrna Armenian, while the Armenians of Julfa (in modern Iran) spoke Julfa Armenian, and so on. These different language varieties had enough structural differences to treat them as different linguistic objects.

Just as there are two geographically defined modern standard forms (Western Armenian and Eastern Armenian), these region-specific dialects are conventionally divided into two branches. Some dialects like Smyrna belong to the Western branch (and are more similar to Western Armenian than to Eastern Armenian). While some dialects like Karabakh/Artsakh belong to the Eastern branch.

Alongside these region-specific varieties of Armenian, the early modern period (17/18th centuries) saw the rise of an Armenian lingua franca among Armenians (Parnassian 1985, Donabédian 2018). This lingua franca or koine was Common Armenian or Civil Armenian (Ashkharhabar or Աշխարհաբար [aʃxarabar, aʃxarap^har]), also called Modern Armenian. It is often seen as some sort of amalgamation of various linguistic features from different regions. This lingua franca developed in two sets of cultural centers: Istanbul in the West, and Yerevan and Tbilisi (Tiflis) in the East.

The outcome of Civil Armenian was establishing two separate standardized Armenian varieties: Standard Western Armenian (SWA) and Standard Eastern Armenian (SEA). The two dialects are often treated as developed from Istanbul

¹To clarify, CA was first attested in the 5th century in written forms such as Bible translation, inscriptions, and palimpsests. Before this initial attestation, we do not know the exact linguistic situation for Armenians. It is often assumed that there was a stage of Proto-Armenian between Proto-Indo-European and Classical Armenian.

Armenian and Yerevan Armenian via a process of standardizing the lexicon, removing recent Turkic borrowings, and incorporating common dialectal features. For example, Manoukian (2022, 2023) tracks the development of SWA within publishing houses in the Ottoman Empire in the 19th century. She describes how the translators developed a “purified vernacular” language that removed Turkish words and replaced them with Classical Armenian words or calques.

However, there are non-trivial structural differences between the non-standard sources and the standardized derivatives (Sayeed & Vaux 2017). These differences make it difficult to be sure of the exact genetic relation between Istanbul Armenian and SWA, and between Yerevan Armenian and SEA. For example, there are structural differences between SWA and the Istanbul Armenian of 1911 (§32), and these differences make it unclear whether SWA is a simplified descendant of Istanbul Armenian or if it a sister dialect (Sayeed & Vaux 2017: 1148). I talk about some of these differences in the next section. Adjarian himself suggests that SWA may have developed by combining grammatical aspects of Istanbul Armenian with some phonological aspects of other dialects such as Rodosto Armenian (§33.2.1.1.1). This suggests that SWA developed as a form of dialect leveling across multiple dialects, and not as a simple descendant from only one dialect. However, the bulk of SWA’s features came from Istanbul Armenian, based on what is reported from the 19th century scholars who were involved in developing SWA as a lingua franca (Manoukian 2023).

Moving onto the early 20th century, we know a great deal about the linguistic situation of Armenians in that time thanks to Hratchia Adjarian, who was a pioneering researcher in Armenian linguistics. His Armenian name is Հրաչեայ Աճառեան in traditional orthography, or Հրաչյա Աճառյան in reformed spelling. His surname has been romanized as “Adjarian” or “Acharian”. His first name is variably romanized as “Hrachia” or “Hratchia”. Adjarian himself used the name “Hratchia” in (Adjarian 1899), so we use that romanization here. He was born in Istanbul in 1876, and undertook an education in linguistics in France. In French, his two most groundbreaking works were Adjarian (1899), where he developed an experimental procedure for Armenian consonant acoustics, and discovering an early form of voice onset time (Braun 2013). This manuscript is translated in §2. His second major contribution was Adjarian (1909) *Classification des dialectes arméniens* (English translation is *Classification of Armenian dialects*) where he catalogued, described, and classified a set of Armenian varieties. This French monograph was then the basis for a larger work written in Armenian (Աճառեան 1911): Հայ Բարբառագիտութիւն or *Armenian dialectology*. These books provide some of the few detailed insights into the linguistic reality of early modern Armenians.

Thus, by the time of Adjarian's monograph in 1911, there were a large number of living forms of Armenian: SEA, SWA, Istanbul Armenian, Yerevan Armenian, and a host of other area-specific Armenian varieties. Unfortunately, since 1911, the linguistic landscape of Armenian populations has significantly changed. The vast majority of non-standard dialects are now extinct or moribund. Some dialects were made extinct because of the Armenian Genocide (Կասովայան 2015); Smyrna is a potential example (Vaux 2012). Some of these dialects survived the Genocide, but their speakers underwent a language shift to one of the standard varieties. For example, the Shamakhi dialect was spoken in Shamakhi in modern-day Azerbaijan. But because of Azerbaijani persecution, the Armenian populace of Shamakhi has been migrating to Armenia, and the community has been undergoing language shift to SEA (Vasyan 2019). A reviewer notes that some Shamakhi communities have migrated to Southern Russia and seem to have maintained their dialect.

Thus, it is rare to find modern Armenian communities that still speak a non-standardized dialect. But there are still pockets of Armenian communities that speak and transmit a non-standard dialect. Because of the various wars in the 19th and 20th centuries and because of the Armenian Genocide, various dialect communities have settled in the modern Republic of Armenia and Georgia (Hodgson 2019: §2.2.2). These communities are under continuous pressure from SEA, and only some of them are currently viable (Hodgson, personal communication). In Georgia and Abkhazia, there are large communities of Karin/Erzurum and Hamshen speakers, and their language maintenance also seems viable (Bezrukov 2022). A very viable community is the Armenian community in Tehran, Iran, who have developed and maintained their own dialect of Tehrani Iranian Armenian (Dolatian et al. 2023), which is surprisingly absent from Adjarian's work. One could argue that some of the traditional dialects of Cilicia (§24) and Syria (§25) are still spoken in a handful of villages in the Middle East (Kessab, Anjar, Vaqif). But the communities are small and caught in dangerous circumstances (such as the Syrian war); thus, they may be considered endangered.

The present monograph is an attempt to preserve information on many of these lost languages. The above is a basic conventional summary of how Armenian varieties work. But there are some points of nuance that I should clarify. The next sections discuss these points.

2.3 What is Standard Armenian?

The term "standard" in the name "Standard Western Armenian" does not denote a literary variety that is limited to books and formal speech. For the majority of

Western Armenians who speak some Armenian variety, that variety is Standard Western Armenian. Similarly, Standard Eastern Armenian is the native language of the majority of Eastern Armenians. The confusing use of the term “standard” is caused by patterns of language shift and dialect leveling among Armenians.

For example, in 1911, the year that Adjarian’s monograph was published, the Armenians of Istanbul spoke a specific variety of Armenian called Istanbul Armenian. This variety is documented in this book in chapter §32 and also later by Adjarian in a separate book (Աճարյան 1941). The variety of Istanbul Armenian in 1911 (and its 1941 followup) is not identical to SWA. The following are some subtle differences that I have noticed.

(1) Differences between SWA and Istanbul Armenian

- a. The word for ‘father’ is [hɑjɾ] <հայր> in SWA; but Adjarian describes the Istanbul form as [hɑɾ] <հար> (§32.2.2.2).
- b. The reflex of the Classical Armenian sound /d͡z/ <ծ> in Istanbul is /d͡z/ <ծ>, while its reflex in SWA is /tsʰ/ <ց> (§32.2.2.3.1). For example, the word ‘snow’ <ծիւն> is /d͡ziʊn/ in CA, /d͡zun/ in Istanbul, but /tsʰyn/ in SWA (Table 4). Adjarian himself notes this contrast in §32.2.1.1.
- c. The reflex of the Classical Armenian nominalizer <ութիւն> /-utʰiʊn/ ‘-ation’ is /-utʰyn/ in SWA, but /-utʰin/ in Istanbul Armenian (§32.3.1).
- d. The causative suffix is /-tsʰənel/ <ցնել> in SWA but /-tsʰunel/ in Istanbul Armenian. For example, ‘to make live’ is /ɑbre-tsʰənel/ in SWA (ապրեցնել) but /ɑbre-tsʰunel/ in Istanbul (ապրեցնւել) (Աճարյան 1941: 140).

A major phonological difference concerns the laryngeal features of stops and affricates (§32.2.2.3.1). Classical voiceless aspirated stops stay voiceless aspirated in both SWA and Istanbul Armenian. Classical unaspirated stops become voiced in both SWA and Istanbul Armenian. But classical voiced stops remain voiced in Istanbul Armenian, while they become voiceless aspirated in SWA. Table 1 illustrates this with labial stops. Note the difference between SWA and Istanbul for Classical /b/ <բ>.

Based on the above difference between SWA and Istanbul Armenian, Adjarian later argues that SWA was developed by merging the morphosyntax of Istanbul Armenian with the consonant phonology of Rodosto Armenian. See §33.2.1.1.1 for discussion.

Although Adjarian does not discuss the sociolinguistic situation of this community in depth, I suspect that the Old Istanbul variety was acquired by Armenian children at home. At school, they would learn Standard Western Armenian

Table 1: Laryngeal changes from Classical Armenian to Istanbul Armenian and Standard Armenian

	CA	Istanbul	SWA	SEA
բ	b	b	p ^h	b
պ	p	b	b	p
փ	p ^h	p ^h	p ^h	p ^h

as a lingua franca, so that they could read, write, and engage with other Armenian communities. Adjarian himself reports a scenario that is suggestive of such diglossia in Istanbul in §33.2.1.1.1.

Since 1911, however, the Istanbul community has shifted from using the Istanbul dialect to using SWA. As a member of the Istanbul Armenian community, Tabita Toparlak (personal communication) reports that the dialect described by Adjarian has died out. Instead, Armenian-speaking families have shifted to using SWA at home.

A similar situation is described for SEA and Yerevan. In the time of Adjarian 1911, the dialect of Yerevan had a distinctive feature of penultimate stress (§8.2.3). In contrast, SEA has final stress. But in the decades since, the community in Yerevan has shifted towards using SEA instead of the old Yerevan dialect. A native of this city (Vahagn Petrosyan) reports the following:

[The] “Yerevan dialect” is a historical label. Currently, Yerevan speaks a colloquial version of Standard Eastern Armenian.

I have heard the features described for this dialect in the speech of some Yerevan residents. For me the speech is associated with the [lower classes]. I do not know if these people are recent migrants from villages of the Ararat dialect areas or if they are the remnants of the original Yerevan dialect speakers. In any case, an average person certainly does not grow up speaking like that. I am from Yerevan and I speak [like that].

Thus, the majority of the dialects in Adjarian 1911 are likely extinct because of either genocide or language shift. For the standard varieties (SWA and SEA), these are not fossilized variants restricted to books. They are the native language of most Armenian-speaking children and adults. They are not simplified forms or daughters of past Armenian varieties (Istanbul or Yerevan), but they are their

own distinct Armenian varieties that are natively acquired and used.²

Of course, like any spoken language, SWA has both informal and formal registers. The informal register is acquired at home, while the formal register is taught at schools or acquired via formal interactions. The two registers have minor differences. Some traits of the informal register of SWA are found in various non-standard dialects. For example, informal spoken SWA uses a progressive marker [gor], while formal written SWA bans this marker (Donabédian 2001). The use of [gor] is likewise found across various non-standard Western dialects such as Istanbul. Similarly, SEA has both formal and informal registers. The 3sg auxiliary ‘is’ is pronounced [e] in formal SEA, but pronounced [ɑ] in informal SEA. The use of an auxiliary [ɑ] is again found in non-standard Eastern dialects like Yerevan (§8.3.3.3.1). For a sample of other informal vs. formal register differences, see elsewhere (Ղարազդուկյան 1981, Չաքարյան 1981, Աղայան 1981, Kavassian 1983, Dum-Tragut 2009, Karapetian 2014: ch3).

Thus, the presence of the word “standard” in the names “Standard Eastern Armenian” or “Standard Western Armenian” does not indicate prescriptivism, but is due to the history of the emergence of these standardized varieties. Because of this history, names like “Standard Western Armenian” and “Western Armenian” are interchangeable. In my experience, in Armenian linguistics, it is common to add the word “standard” in order to disambiguate terms like “Western Armenian” which could designate either a single variety (Standard Western Armenian) or an entire branch of dialects (Western dialects).

In contrast, the term “Standard Western Armenian” can mean either “the formal register of Western Armenian” or “either the formal or informal register of Western Armenian”. In my case, I grew up in an Armenian-speaking household in Lebanon. I acquired the informal register of (“Standard”) Western Armenian. My idiolect does not correspond to any of the non-standard varieties like Smyrna, Trabzon, or Crimea. I then learned the formal register of “Standard” Western Armenian at school.

2.4 What is a dialect?

The original Armenian monograph from 1911 was called *Armenian dialectology*, based on an expansion of a French monograph from 1909 called *Classification of Armenian dialects*. This section clarifies the term “dialect”.

²This situation is similar to the development of Italian. The language developed from Tuscan, and was standardized. The language then became a state language, and spread throughout Italy. As another helpful analog, the situation with SWA/SEA is not like Arabic diglossia. For Arabic, the standard written form (Modern Standard Arabic) is not the home language of any Arabic-speaking household; the home language is instead one of many Arabic dialects like Levantine or Egyptian.

In linguistics, a common though imperfect criterion for labeling a language variety as a dialect is mutual intelligibility (Chambers & Trudgill 1998: 3). Given two language varieties A and B, if a speaker of A can easily understand a speaker of B, then the two varieties are dialects of the same language. Based on this criterion, American English and British English are dialects of English.

For Armenian however, the various varieties are conventionally called “dialects”, but they are not all mutually intelligible. For example, as a speaker of SWA, I have difficulty fully understanding a spoken SEA sentence due to my limited exposure to spoken SEA. Written SEA is however quite intelligible to me (cf. intelligibility asymmetries discussed by Dum-Tragut 2012: 197). Thus, I often hear among lay speakers of Armenian that the two dialects are mutually intelligible after significant exposure.

For the non-standard dialects, mutual intelligibility is much weaker. For example, this monograph has text samples for each of the 31 non-standard dialects. I could not translate most of them because I could not understand them. The best I could understand were the Istanbul texts, but I was not confident enough to provide an actual translation, morphological segmentation, or glossing.

Thus based on the criterion of mutual intelligibility, Standard Armenian (SEA and SWA) and the various non-standard varieties (Julfa, Tigranakert, and so on) are mutually unintelligible and not dialects of the same language. Because of mutual unintelligibility, some linguists go so far as to use the term “Armenoid” to describe the different Armenian varieties, e.g., that Agulis is an Armenoid language (Vaux 2008) and not an Armenian dialect because it is unintelligible to an SEA ear (§14).

In Armenian studies, however, all these language varieties are just called “dialects”. The term is used in a non-theoretical way. I suspect that because all these Armenian varieties are spoken by ethnic Armenians, then the term “dialect” is used to indicate ethnic solidarity. To reduce confusion, I will also use the term “dialect” in this translation, simply because Adjarian himself was using the Armenian word for dialect: [barbar, p^harp^har] <բարբառ>. In my own commentaries, I will often use the terms “dialect” and “variety” interchangeably.

2.5 What are the dialects?

In Armenian dialectology, dialects are commonly divided into two branches: Western and Eastern. I discuss some controversial choices that Adjarian made in his classification.

As said before, Classical Armenian is the oldest attested Armenian variety. Modern Armenian varieties are conventionally divided into two groups: Western

dialects and Eastern dialects. In general, the division between dialects is based on geographic origin. The division (imperfectly) corresponds to the modern Turkey-Armenia border. Armenian varieties that developed west of this border (in the Ottoman Empire) belong to the Western branch, while varieties that developed to the east of this order (in the Russian/Persian empires) belong to the Eastern branch.

For example, SWA developed in Istanbul, while SEA developed in Tbilisi and Yerevan. SWA and SEA are conventionally treated as standardized offshoots of Istanbul and Yerevan. This basic classification is summarized in Figure 1.³

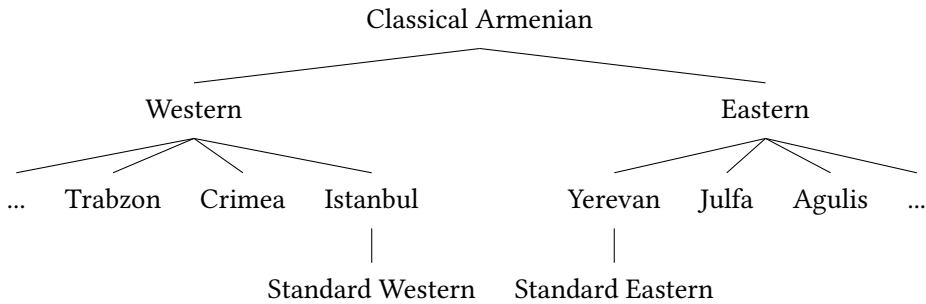


Figure 1: Conventional and simplified family tree of Armenian

The above simplified classification correlates with an important isogloss in Armenian dialectology: the morphemes used to form the indicative present (2) (Vaux 1995). In Classical Armenian, the indicative present was formed by adding agreement suffixes directly onto the verbal stem. The verb stem consists minimally of a root and a theme vowel slot. But in modern SEA and SWA, this simple synthetic construction is instead used for the subjunctive present. To form the indicative present, SWA adds a prefix /gə/ <ղը> before the synthetic form. In contrast, SEA uses a periphrastic or analytic construction. The verb is a non-finite form called the imperfective converb. The verb takes the non-inflecting suffix /-um/, while agreement is on an auxiliary.

³For easier illustration, I do not include Middle Armenian here. And as mentioned before, we do not know with complete certainty whether SWA (SEA) is a descendant of Istanbul (Yerevan) vs. a separate development from multiple dialects or from Civil Armenian. For easier illustration, the figures in this section treat the standard dialects as descendants.

- (2) Morphemes used for the indicative present in CA, SWA, and SEA for the phrase ‘I like’
- a. Classical Armenian
 - sir-e-m
 - like-TH-1SG
 - սիրեմ
 - b. Standard Western Armenian
 - gə-sir-e-m
 - IND-like-TH-1SG
 - կը սիրեմ
 - c. Standard Eastern Armenian
 - sir-um e-m
 - like-IMPF.CVB AUX-1SG
 - սիրում եմ

The above parameters (geographical and morphological) are foundational to Armenian dialectology. Other major and theoretically interesting parameters of variation are also attested, such as voice onset time or voicing differences (Vaux 1998: §1.1.1; Baronian 2017), vowel harmony (Vaux 1998), stress (DeLisi 2018), mobile affixes or ambifixes (Bezrukov & Dolatian 2020, Bezrukov 2022), auxiliary movement (Comrie 1984, Kahnemuyipour & Megerdooimian 2011, 2017), auxiliary-induced phonosyntactic processes (Dolatian et al. 2023: §3.3), relative clause formation (Hodgson 2019), and so on.

However, the main two parameters (morphological and geographical) have some problems.

For the geographical parameter, the terms “Western” vs. “Eastern” refer to the ultimate geographic origin of some Armenian variety. But as Adjarian describes in §7.1, this geographic parameter can be confusing when we take into account migration patterns. For example, the dialect of Karin (§15) is a Western dialect that historically developed in what is now modern Erzurum (in modern eastern Turkey). But during the 19th century and after the Armenian Genocide, the Armenian community of Erzurum had migrated to what is now modern Armenia and Georgia. That is, this Western community moved from west of the Turkey-Armenia border to the east of this border. For Karin, it is thus somewhat confusing to call this dialect a Western dialect, even though it is geographically spoken on the east of the relevant geographic border.

Because of the above geographical problems, Adjarian argued that descriptions like “Western” vs. “Eastern” branches should be replaced with terms based

on isoglosses. The most obvious isogloss for Adjarian was the morphology of the indicative present. He specifically argued that “Western” dialects (like SWA) belong to the /kə/ <կը> branch, while “Eastern” dialects (like SEA) belong to the /um/ <նւմ> branch.⁴

In addition to replacing geographic descriptions with morphological ones, Adjarian also argued that some dialects belong to a third separate branch. This branch is called the /el/ <էլ> branch and includes dialects like Maragha (§36). For such dialects (§36.3.2.1), the indicative present is formed by adding an auxiliary after the infinitive. The construction is periphrastic, and the surface [el] sequence is actually the theme vowel /-e-/ plus the infinitive suffix /-l/ (3).

- (3) Maragha (taken from chapter §36, example 1a-ii)

yz-e-l-i-m

want-TH-INF-AUX-1SG

‘I want.’

hɪlqɛlhɪ

To summarize, Adjarian argues for a more detailed classification, as in Figure 2.

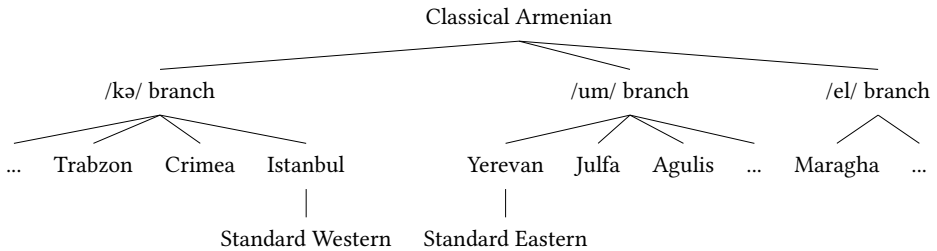


Figure 2: Expanded family tree of Armenian based on Adjarian’s classification

In contrast, in a simpler two-branch classification, the dialects of the /el/ branch would be considered Eastern dialects. First, dialects like Maragha were formed in modern-day Iran and Russia; thus, they are geographically east of Turkey. Second, both /um/ branch and /el/ branch dialects utilize morphological periphrasis in forming the indicative present. Thus, varieties like SEA and Maragha share a more abstract isogloss. Figure 3 shows a possible family tree by combining both geography and Adjarian’s three branches.

⁴Note that Adjarian used the term /kə/ branch instead of /gə/ branch. Although the indicative prefix is /gə/ in SWA, this prefix is spelled <կը>. The ancestor of this prefix is pronounced as /kə/, such as in SEA where this prefix is used to mark the future.

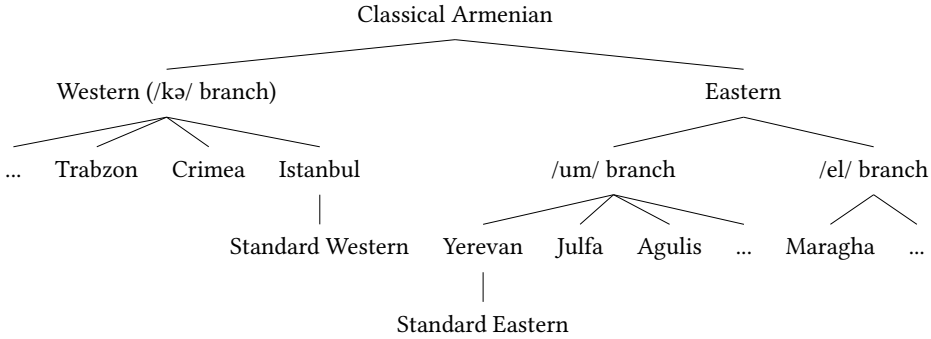


Figure 3: Family tree of Armenian based on geographic terms and Adjarian's /el/ branch

Other family trees have been proposed. Using phylogenetic software, DeLisi (2018) develops a tree for 23 Armenian variants. Balabanian (2024a) provides a tree for over six dozen Western dialects.

This book maintains Adjarian's original three-way classification system. I do this so that the translation is faithful to Adjarian's original intentions. However, since 1911, it seems that most dialectological work in the West has not replaced geographic terms with isogloss-based terms.⁵ As for Soviet Armenia and the modern Republic, it seems that further dialectological work uncovered more and more sub-branches and groups, that are easier to summarize geographically (Martirosyan 2018: §4 based on Չահնկյան 1972). For an overview of Soviet dialectological work, see Djahukian (1986) and Weitenberg (2017).

For the morphological isogloss, Adjarian provided only three categories based on indicative. That is, he describes dialects as using either the morphemes /um/, /kə/, or /el/. Since then, more categories have been discovered (Vaux 1995). Balabanian (2024a) provides the most up-to-date morphological and cladistic study on the interrelationships of at least the Western dialects based on their verbal morphology.

The next subsection provides Adjarian's dialectological maps.

⁵Consider the following counter-argument to Adjarian's position. Although it is true that some Western dialects like Karin are now spoken east of the Turkey-Armenia border, they still historically developed west of this border. What matters is a dialect's genetic relationships with other dialects, and geography is a major correlate of such genetic connections.

2.6 Dialectological maps

In the 1911 monograph, Adjarian provided a map of some of the dialects and locales he documented. This map is part of the public domain and available on Wikimedia.⁶ It is displayed in Figure 5. The names are all in Armenian.

In the original 1909 French monograph, Adjarian provided a similar map. It is displayed in Figure 6. The names are all romanized.

The older maps are hard to read in print, but they are easier to read on a computer screen. It is unclear if there are any differences between the two maps.

A more useful map is found on Wikimedia. There is a modified form of the 1909 map that includes colorcoding.⁷ It is displayed in Figure 4. The colorcoding shows the distribution of the different dialects from Adjarian's monograph. The names are all in a romanized form; they do not match the names that I used in the translation.

As of 2024, the largest known dialect map to my knowledge is Balabanian (2024b). The map is actively maintained by Balabanian and publicly accessible. As of March 2024, the map contains at least 100 dialects in their original (pre-genocide) location.

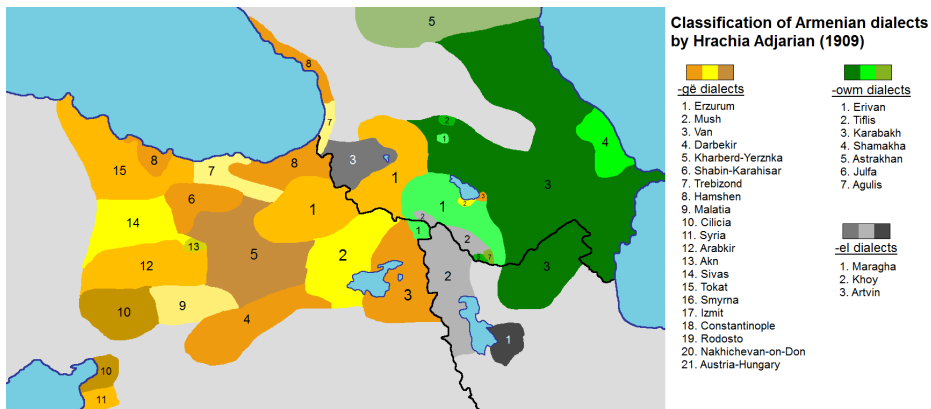


Figure 4: Adapted map from Adjarian 1909 (from Wikimedia)

⁶https://commons.wikimedia.org/wiki/File:Acharian_dialects_map.png

⁷https://commons.wikimedia.org/wiki/File:Armenian_dialects,_Adjarian_1909.png

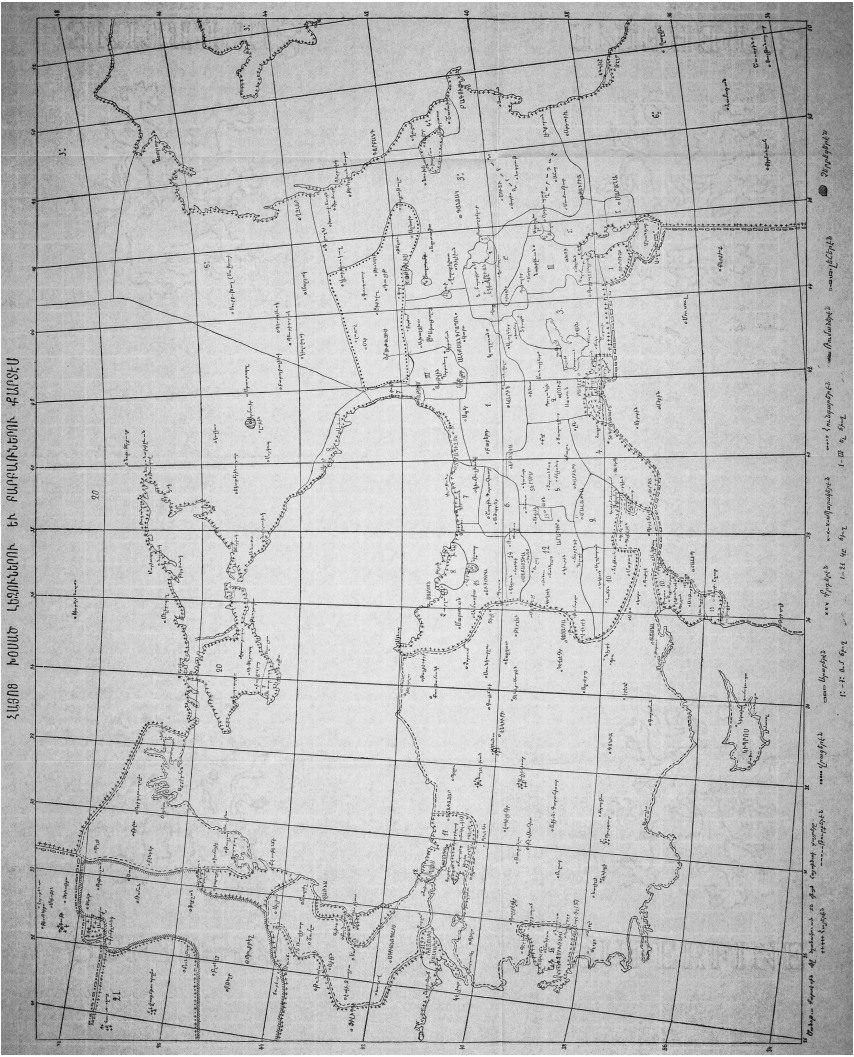


Figure 5: Map from Adjarian 1911

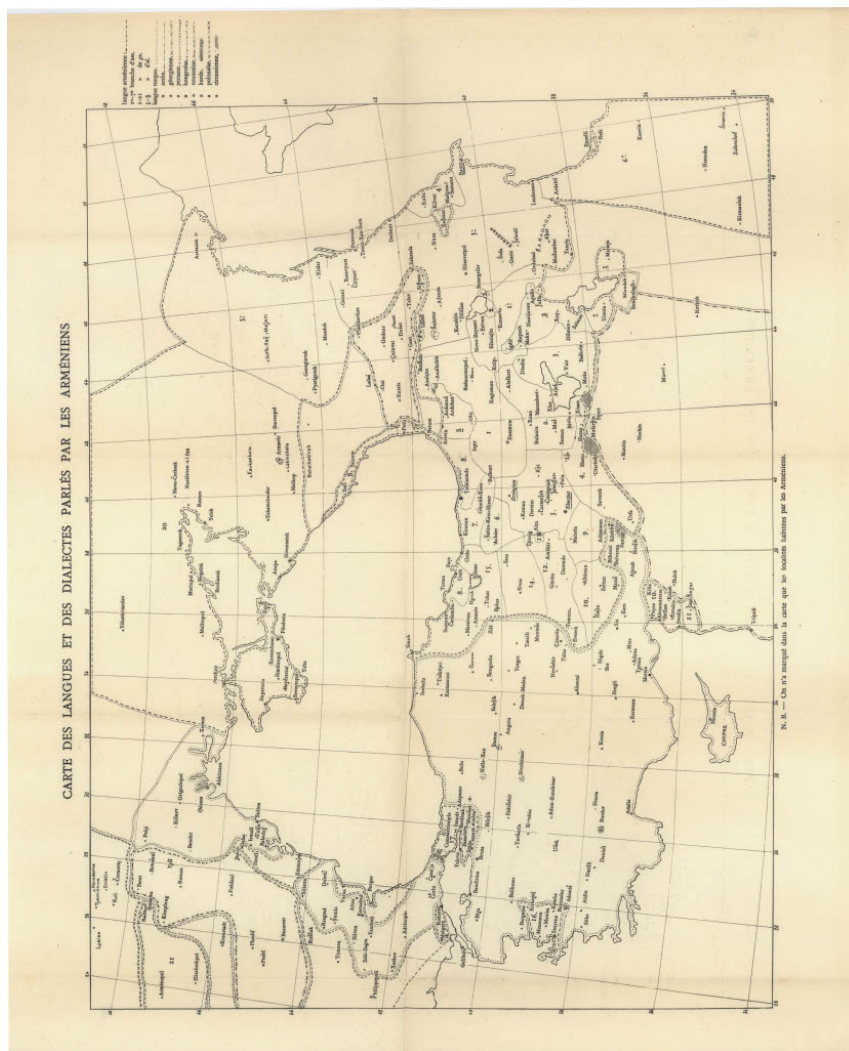


Figure 6: Map from Adjarian 1909

3 Phonology of Armenian and our phonological transcription

This section explains the phonological transcriptions that I used in the translation. I explain my transcription system used for the modern standard varieties (§3.1), Classical Armenian (§3.2), and non-standard dialects (§3.3). In brief, I transcribe words in IPA based on their attested pronunciation (SEA/SWA) or their most likely pronunciation (CA). For the non-standard dialects, Adjarian developed his own dialectological notation, for which I provide IPA approximations.

3.1 Phonology of Modern Standard Armenian

Modern SEA and SWA are relatively well-studied in terms of their basic phonemic inventory and phonological transcriptions. I discuss nuances of transcribing SEA/SWA consonants (§3.1.1), vowels (§3.1.2), and stress (§3.1.3).

3.1.1 Consonant inventory

Table 2 provides the consonant inventories for SEA and SWA. Parentheses mark consonantal phonemes that are present in SEA but not SWA.

Table 2: Consonant inventory of SEA and SWA

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Palatal	Velar	Uvular	Glottal
Stop	(p) p ^h b		(t) t ^h d				(k) k ^h g		
Affricate			(ts) ts ^h dz		(tʃ) tʃ ^h dʒ				
Nasal	m			n					
Trill				(r)					
Tap				r					
Fricative		f v		s z	ʃ ʒ			χ ʁ	h
Approximant						j			

Phonologically, SEA has a three-way laryngeal contrast or voicing contrast among stops and affricates: voiced, voiceless unaspirated, and voiceless aspirated. Classical Armenian (CA) is argued to have had a similar three-way contrast as well. In contrast, SWA has a simpler two-way contrast: phonologically voiced and phonologically voiceless (Table 3). Conventionally, the SWA stops and affricates are treated as being voiced vs. voiceless aspirated.

However, the phonetic manifestation of the SWA voicing contrast is subject to geographical variation due to language contact (Kelly & Keshishian 2021, Tahtad-jian 2021). For example, the SWA-speaking community in Turkey has a voiced

Table 3: Three-way laryngeal contrast in SEA but not SWA

	CA	SEA		SWA			
/p/	par	par	‘dance’	պար			
/p ^h /	p^hak	p^hak	‘closed’	փակ	p^hak	‘closed’	փակ
/b/	bad	bad	‘duck’	բադ	bar	‘dance’	պար

vs. voiceless aspirated distinction for stops and affricates: D vs. T^h, and DZ̄ vs. TS̄^h. In contrast, the SWA-speaking community in Lebanon instead has a voiced vs. voiceless unaspirated distinction for stops and affricates: D vs. T, and DZ̄ vs. TS̄. For this monograph, because Adjarian’s socio-geographic subdialect of SWA had a traditional D-T^h distinction, I transcribe the SWA forms with a traditional D-T^h distinction.

The change from a three-way contrast in CA to a two-way contrast in SWA is a major topic in the diachronic phonology of Armenian. Throughout this translation, Adjarian spends time on describing the consonantal changes for the various non-standard dialects.

What follows are minor comments on the phonology or phonetics of the consonant inventory, based largely on recent survey-level phonetic work on SEA and SWA (Seyfarth et al. 2024).

(4) Minor comments on SEA and SWA consonant inventory

- The coronal stops usually have a dental articulation.
- The dorsal fricatives /χ, ʁ/ are typically described as uvular, but they can have a velar pronunciation.
- SEA has a phonemic trill and tap/flap distinction /r, ɾ/, while modern SWA only has a flap /ɾ/. However, more archaic registers have a phonemic trill that has been largely lost for most modern communities (Tahtadjian 2020). Adjarian 1911 however says that SWA still has a trill in his time (Table 2). Out of respect for Adjarian’s ideolect, I thus transcribe SWA forms in this translation with a trill.
- Both dialects have an allophonic sound [ŋ]. This velar nasal is used when a nasal /n/ precedes a velar stop, i.e., there is velar place assimilation. For SEA and SWA, I transcribe the velar stop. For example, the word /menk^h/ ‘we’ <մեկը> is pronounced [menk^h] in SEA/SWA.

3.1.2 Vowel inventory

Table 7 provides the vowel inventories of SWA and SEA. Parentheses mark vowels that are present in SWA but not SEA.

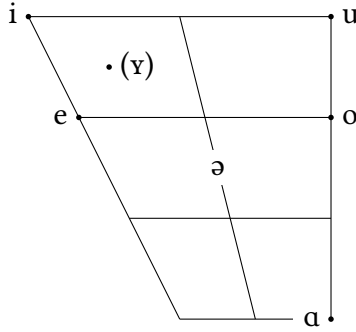


Figure 7: Vowel inventory of SEA and SWA

In general, the SWA sound /ɣ/ corresponds to an SEA /ju/ sequence. Some SWA loanwords have a vowel /œ/, but this vowel is quite marginal and found in only a handful of loanwords.

The midvowels are sometimes transcribed as lax /ɛ, ɔ/ in the phonological literature (Vaux 1998). But more recent phonetic work suggests that these vowels do not have an open-mid articulatory/acoustic target, but are instead close-mid /e, o/ (Toparlak 2019, Seyfarth et al. 2024).⁸

3.1.3 Stress

SWA and SEA generally have final stress. If the last syllable has a non-schwa vowel, that vowel has stress (5a). But if the last syllable has a schwa, while the penultimate syllable has a non-schwa, then the penultimate syllable gets stress (5b).

(5) SEA

- a. kapík
monkey
'monkey'
կապիկ

⁸For my own SWA ears, I cannot perceive the difference between [e, ɛ], suggesting that Armenian has a generic articulatory target for midvowels.

- b. kəpɪk-ə
monkey-DEF
'the monkey'
կապիկը

There are some morphological exceptions to final stress. In early SWA, the suffix sequence /-e-i/ (TH-PST) in the imperfective past gets regular final stress. But in most modern SWA communities, this suffix sequence gets penultimate stress (Dolatian 2023b). It seems that in Adjarian's time, this change had not taken place yet because Adjarian does not mention this irregularity. So I transcribe this SWA suffix sequence with final stress in this monograph.

3.2 Classical Armenian pronunciations and phonology

Classical Armenian or CA is the oldest attested variety of Armenian. The earliest written records are from the fifth century. It is an ancient language, so we do not know its exact pronunciation, but we do have suggestive evidence (§3.2.1). I set up my IPA transcription for Classical Armenian for its monophthongal vowels (§3.2.2), diphthongal vowels (§3.2.3), consonants (§3.2.4), epenthetic schwas in consonant clusters (§3.2.5), and stress (§3.2.6).

3.2.1 Approximating the phonology of Classical Armenian

Because Classical Armenian is an ancient language, we do not have access to speakers, recordings, or phonetic analyses of CA. Thus, we cannot know exactly what CA sounded like. Instead, we can approximate a probable CA phonology using the following pieces of information:

1. orthography and transliteration conventions
2. traditional pronunciation
3. post-Classical phonological changes

To clarify the above points, Classical Armenian is written using the Armenian script. The script was invented in order to write Classical Armenian. It is thus likely that the orthography is close to the pronunciation of Classical Armenian. The orthography is traditionally transliterated using the Hübschmann-Meillet-Benveniste transliteration system (HMB). Transliteration schemes can be found online, such as on Wiktionary.⁹ The transliteration is neither a phonological nor

⁹https://en.wiktionary.org/wiki/Wiktionary:Armenian_transliteration

phonetic transcription, but it does help us determine approximate IPA symbols for CA.

As for pronunciation, although CA is a dead language, there is a conventional system for how to read CA texts. This system is called “traditional pronunciation”. It was formulated sometime after the first written record of CA. An approximate date for this formulation is between the 8th and 12th centuries (Godel 1975: 24; Macak 2017: 1039). The formulated conventions indicate a mix of phonological patterns that were attested in CA or that developed later in the post-Classical period.

For this book, I transcribe all CA forms using IPA. I do not use transliteration. The rationale is that transliteration systems by themselves do not unambiguously reflect the most likely phonological form of CA words. In order to understand the various sound changes from CA to the modern dialects, it is more practical to transcribe both CA and modern Armenian in their phonological form, i.e. by using IPA symbols.¹⁰

3.2.2 Monophthong vowel inventory

Classical Armenian has seven basic monophthong vowels. These vowels are listed in Table 4. I provide the native orthographic form, the HMB transliteration, and an approximate IPA symbol.

Table 4: Monophthong vowels of Classical Armenian

Orthography	ա	ե	է	ը	ի	ո	ու
HMB transliteration	a	e	ē	ə	i	o	u
IPA transcription	ɑ	e	ē	ə	i	o	u

For the IPA transcription of Classical Armenian vowels, I adapt conventional transcriptions from the traditional pronunciation and from the modern standard dialects in the following way.

¹⁰This concern is especially important for cases where the transliteration is utterly confusing from a phonological point of view. For example, the affricate series <ծ, ծ, ց, ջ, ճ, չ> is conventionally transliterated as <j, c, c', j, č, č'> but its most likely pronunciation is /d͡ʒ, t͡s, t͡sʰ, d͡ʒ, t͡ʃ, t͡ʃʰ/. The CA low vowel <ա> was likely a low back /ɑ/, and developed to SEA /ɑ/, and to dialectal /ɑ, æ/. The CA transliteration is <a>, and such a symbol is a front vowel /a/ in the IPA. The rhotic series <ր, ռ> developed to SEA /r, r/, and were likely /r, r/ in CA. But the transliteration as <r, ř> would confuse the non-trill and trilled symbols.

For the grapheme <ւ>, the modern standard dialects use a low back unrounded vowel /ɑ/. We do not know the phonetic features of the low vowel in Classical Armenian. For simplicity and illustration, I assume the Classical low vowel was likewise back. This seems to be an implicit assumption by Adjarian as well, because he later uses a different symbol <ւü> to mark the low front vowel /æ/.

For the front midvowel pair <ե, է>, we do not know the exact phonetic difference in Classical Armenian. The two graphemes are often transliterated as <e> vs. <ē>, and they are argued to have a phonological contrast in terms of tenseness (Thomson 1989: 14) or length (Godel 1975: 6). Some possible transcriptions are /ɛ/ vs. /e/, or /e/ vs. /eː/.

Within the IPA, the macron ˉ indicates tone but philology often uses a macron to indicate long vowels and heavy syllables. This philological tradition is likely the reason why the HMB transliteration uses /ē/. For this translation, I transcribe the two vowels as /e/ vs. /ē/. The reason is because we ultimately do not know the actual phonological or phonetic difference between the two vowels. All we need to know is that one vowel (the tense or long Է) is considered the “marked” form.

For the midvowels <ե, ո>, the modern standard dialects can range between low-mid /ɛ, ɔ/ and high-mid /e, o/. Such variation is actually free variation in my experience. For simplicity, I transcribe them as high-mid /e, o/ instead of low-mid /ɛ, ɔ/, contra Macak (2017: 1039).

The segments <ը, ի, ու> are transliterated and traditionally pronounced as /ə, i, u/.

3.2.3 Diphthong vowel inventory

In addition to monophthongal vowels, Classical Armenian had nine diphthongs (Table 5).

Table 5: Diphthong vowels of Classical Armenian

Orthography	ւյ	ւլ	եւ	ել	եայ	եալ	իլ	ոյ	ուլ
HMB transliteration	ay	aw	ea	ew	eay	eaw	iw	oy	ua
IPA transcription	ɑj̯	ɑw̯	ɛɑ	ɛw̯	ɛɑj̯	ɛɑw̯	iw̯	oɟ̯	uɑ

Orthographically, Classical Armenian diphthongs are made up of a) a vowel plus a glide symbol like <ւյ> <ay>, b) two vowels like <եւ> <ea>, or c) a combination of vowels and glides like <եալ> <eaw>.

These orthographic sequences like <ւյ> <ay> were pronounced and phonologically treated as diphthongs like [ɑj̯] and not as vowel-glide sequences like [ɑj]. The evidence is the following. Philological and dialectological work uses the term “diphthong” (Armenian: [jerkbarbar] <Երկբարբար>, literally ‘two-sounds’ in Classical Armenian). In the modern Standard Armenian, orthographic vowel-glide sequences like <ay> are pronounced as vowel-glides sequences like /ɑj/, and philologists like Adjarian explicitly state that the standard dialects lack diphthongs (§4.7.1.2.3).

As for their IPA values, it is difficult to give a meaningful transcription for Classical diphthongs. I follow Macak (2017) in placing an inverted breve under the less prominent member of the diphthong, which is typically a high vowel. I note the following minor notational differences between my transcription and Macak.

- For <եւ> <ea>, Macak (2017: 1041,1043) suggests /j̯ɑ/ but I opted for /ɛɑ/ because it is more faithful to the orthography.
- For <իւ> <iw>, Macak (2017: 1041,1043) notes that this cluster can be pronounced as either /i̯u/ or /j̯u/ depending on phonological position. I opt for a uniform /i̯u/ because Adjarian does not indicate such differences.
- For <ոյ>, the traditional pronunciation is /u̯j̯/ (Macak 2017: 1039). But, the orthography suggests that this digraph was pronounced as /o̯j̯/.

For <եւյ>, I could not find a pre-established convention, so I use /ɛɑj̯/.

There is some ambiguity when an orthographic diphthong is pre-vocalic like <ւյւ> or <ւււ>. The HMB transliteration is just <aya, awa>. Phonologically, I suspect the offglide would have acted as a consonantal onset /ɑja, awa/ and not as a sequence of vowels /ɑja, awa/. I thus transcribe such pre-vocalic diphthongs as vowel-glide sequences. However, note that Adjarian seems to phonologically treat these pre-vocalic forms as diphthongs instead of vowel-glide sequences (64).

There are other attested orthographic vowel-vowel sequences such as <ուէ> in <ւղղուէ> ‘fox’ and <ուի> <ui> in <թուիլ> ‘to appear’. For these, the HMB transliteration would be <ɑuēs> and <t̪u̯il>. Their modern SEA pronunciations would use a /v/ in place of the <ու>: /ɑʋes, t̪ʰəvil/. It is unclear if historically such orthographic sequences were some type of diphthong too: /ɑuēs, t̪ʰu̯il/. But it seems that the convention is to treat the digraph <ու> as a non-alternating /u/ (Thomson 1989: 15), and allow it to be part of vowel hiatus (Thomson 1989: 17). To be safe, I treat such sequences then as vowel hiatus as well: /ɑu.es, t̪ʰu.il/.¹¹

¹¹It has been suggested that the initial /u/ in vowel hiatus is rendered as [əw] (Kim 2021: 13). Thus CA /ɑuēs/ ‘fox’ could have been pronounced as [ɑəwes].

Note that Classical grapheme sequence <ւլ> /ɑ̌/ became SEA /o/, and this change encouraged the use of a new letter <օ> in its place. Adjarian often uses the letter <օ> to refer to the ancient diphthong. When he uses the letter <օ> in these contexts (such as <մօր> ‘mother.GEN’), I use the transliteration <ō> and the Classical pronunciation /ɑ̌/: <մօր>, /mɑ̌r/. I usually opt to use an alternative CA spelling with <ւլ>: <մււր> <mawr> /mɑ̌r/. I do this so that it is clearer what were the actual sound changes from Classical Armenian to the modern dialects.

3.2.4 Consonant inventory

Classical Armenian had 30 consonants (Table 6).

Table 6: Consonants of Classical Armenian

Orthography	բ	պ	փ	դ	տ	թ	գ	կ	ք
HMB transliteration	b	p	p ^c	d	t	t ^c	g	k	k ^c
IPA transcription	b	p	p ^h	d	t	t ^h	g	k	k ^h
Orthography	ծ	ծ	ց	ջ	ճ	չ			
HMB transliteration	j	c	c ^c	ǰ	č	č ^c			
IPA transcription	dz	ts	ts ^h	dʒ	tʃ	tʃ ^h			
Orthography	վ	ւ	զ	շ	ժ	խ	հ		
HMB transliteration	v	s	z	š	ž	x	h		
IPA transcription	v	s	z	ʃ	ʒ	χ	h		
Orthography	մ	ն	ր	ռ	լ	ղ	ւ	յ	
HMB transliteration	m	n	r	ṛ	l	ł	w	y	
IPA transcription	m	n	r	r	l	ɭ	w	j	

For stops and affricates, Classical Armenian had a three-way laryngeal contrast. This contrast is conventionally treated as between voiced, voiceless unaspirated, and voiceless aspirated /b, p, p^h/.

The fricatives are generally uncontroversial. For the back fricative <խ>, the modern standard dialects show free variation between a velar /x/ vs. uvular /χ/ articulation. The uvular transcription is however more typical. I use the uvular form as the default transcription for Classical Armenian.

For the nasals, the modern standard dialects have an allophonic velar nasal [ŋ] that is used when a coronal nasal /n/ precedes a velar stop. The Armenian

orthography does not mark this in any variety, including Classical Armenian. It is unknown if Classical Armenian likewise had nasal place assimilation before velar stops, but it is likely. To be safe, I do not use a velar nasal [ŋ] for Classical Armenian.

For the rhotics <ր, ռ> or <ր, ռ>, they are pronounced as a flap vs. trill in modern SEA /r, r/. It is unclear if the <ր> was a flap /ɾ/ or an approximant /ɹ/ in the Classical language (Macak 2017: 1040). I opt for a flap /ɾ/. Adjarian himself does not comment on the pronunciation of this rhotic.

For the liquids, the symbol <լ> <լ> is pronounced as a simple lateral /l/ in the traditional pronunciation and the modern standard dialects. The symbol <ղ> <ղ> is pronounced as a voiced uvular fricative /ʁ/ in the modern standard dialects, while it is generally treated as a dark or velar lateral /ɭ/ in Classical Armenian (§4.7.1.2.6, Macak 2016: ch2).

For the sonorants <յ, վ>, these are traditionally transliterated as <y, w>. These sounds are the glides /j, w/. However, it is difficult to know when such a letter was pronounced as a glide vs. part of a diphthong (§3.2.3).

3.2.5 Schwa epenthesis

Classical Armenian has a schwa symbol <ը> /ə/. This vowel is written in some words like /əst/ <ըստ> <əst> ‘for’. However, it is likely that the sound /ə/ was pronounced in many words but was unwritten in the orthography.

In the modern standard dialects, the orthography has long clusters of consonants (Table 7). These clusters are broken up by schwas in pronunciation. A conventional analysis is to treat these schwas as epenthetic (Vaux 1998). The patterns for epenthesis are complicated but rule-governed (cf. Dolatian 2023a). It is likely that these epenthetic schwas were present likewise in Classical Armenian.

Table 7: Schwa epenthesis in Classical Armenian and the standard dialects with example word ‘fire’

	CA	SEA	SWA	
<krak>	kəɾak	kəɾak	gəɾag	կրակ

There are various reasons to assume that Classical Armenian had the same unwritten schwa epenthesis rules as the modern standard dialects. In the traditional pronunciation, the convention is to pronounce unwritten schwas in almost exactly the same places as their modern forms (Godel 1975: 16; Thomson 1989: 116;

Macak 2017: 1043). Diachronically, some of these unwritten schwas are reflexes of Proto-Indo-European full vowels, that got reduced in Proto-Armenian (Vaux 1998: 26). There is no synchronic evidence of an unreduced vowel in the underlying form for these unwritten epenthetic schwas.

There have been a few attempts at formalizing the rules for pronouncing these unwritten schwas for Classical Armenian (Hammalian 1984, Schwink 1994, Pierce 2007). Pierce (2007) has noted that as a spelling-pronunciation rule, essentially the same schwa epenthesis rules are active for Classical Armenian and for Modern Armenian.

Because of the above facts, I transcribe Classical Armenian with essentially the same epenthetic schwas that the modern standard dialects use. There are some situations where the traditional pronunciation of Classical Armenian uses an epenthetic schwa while the standard dialects do not. Two such situations are the suffix /-k^h/ and the prefix /z-/.

The suffix /-k^h/ <ք> is a nominalizer in SEA and SWA. In the modern language, it does not use schwa epenthesis after stops or two consonants: [part-k^h] ‘debt’ <պարտք>. But there are ambiguous and contradictory reports that the CA ancestor form (the plural suffix -k^h) does use schwa epenthesis in more contexts than SEA/SWA. For example, the prose in Godel (1975: 18-19) suggests schwa epenthesis applies after a CC cluster [part-ək^h] or after a stop/affricate. In contrast, the prose in Thomson (1989: 120) suggests no schwa epenthesis after a CC cluster [part-k^h]. Thomson suggests that schwa epenthesis applies only if the /-k^h/ follows a velar stop. For these limited cases where schwa epenthesis is unclear, I transcribe the CA forms with a question mark: [part-(ə?)k^h].

The prefix /z-/ was an accusative prefix in Classical Armenian. When this prefix is before a consonant, a schwa is added before the prefix: /z-CV/ → [əz-CV] (Thomson 1989: 116). This prefix is found in some archaic accusative pronouns in SWA [əz-mez] <զմեզ> ‘me.ACC’, but it is not used as an inflectional prefix on nouns in SWA or SEA.

3.2.6 Stress

In terms of stress, we do not have direct evidence from Classical sources. However, it is a convention to treat Classical Armenian as having the same basic stress patterns as the modern standard dialects (SEA and SWA), described in §3.1.3.

Briefly, stress is on the final non-schwa vowel of the word. in SEA and SWA. For Classical Armenian, the same stress rules are assumed to apply (Thomson

1989: 15; Macak 2017: 1043-4). Evidence for the existence of final stress in pre-modern Armenian is discussed in DeLisi (2018).

3.3 Adjarian’s dialectological notation

In the original monograph, Adjarian set up his own notation to capture the pronunciation of words from non-standard dialects. He called his system a “scientific alphabet” (§4.4), and he adapted it from the Armenian script. I converted his notation to IPA, as explained in §3.3.1. When re-transcribing his notation, I had to make decisions on matters that Adjarian kept implicit (§3.3.2). I sometimes had to diverge from Adjarian’s notation because of typographic problems (§3.3.3). I discovered that Adjarian had unfortunate inconsistencies in representing diphthongs (§3.3.4).

3.3.1 IPA approximations

In the original monograph, Adjarian transcribed what he perceived was the pronunciation of the non-standard dialects. He devised his own notation system based on the Armenian alphabet, by adding additional diacritics or modifying the direction of letters. I call this his dialectological notation. Adjarian used this notation to transcribe dialectal speech.

In this translation, I retained Adjarian’s original dialectological transcriptions and supplied an IPA approximation. Table 8 lists all the dialectological symbols that he used, along with my IPA approximation and my description. The PDF (and source LaTeX) of the translation can be searched for the occurrences of these symbols. Adjarian’s description was helpful in determining their phonetic values.

For consonants, I found little difficulty in rendering them into IPA. For vowels, most cases were simple to do. But some were hard to render:

- <ըէ> /ə/, see §10.2.1.1.
- <too> /œo/, see §11.2.3.1.6.
- <oo> /oo/, see §11.2.3.1.6.

Table 8: Adjarian's dialectological notation and my IPA approximations

Adjarian's notation	IPA approx.	Description
Consonants		
բ	b	voiced bilabial stop
բ ^Է	b ^h	voiced aspirated bilabial stop
դ	d	voiced coronal (dental) stop
դ ^Է	d ^h	voiced aspirated coronal (dental) stop
ծ	dz	voiced coronal (dental) affricate
ծ ^Է	dz ^h	voiced aspirated coronal (dental) affricate
ջ	dʒ	voiced postalveolar affricate
ջ ^Է	dʒ ^h	voiced aspirated postalveolar affricate
ֆ	f	voiceless labiodental fricative
գ	g	voiced velar stop
գ ^Է	g ^h	voiced aspirated velar stop
գյ	g ^j	palatalized voiced velar stop
հ ^Է	ħ	voiceless pharyngeal fricative
հ	h	voiceless glottal fricative
հյ	ç	voiceless palatal fricative
՛, յ, չ	ɦ	voiced glottal fricative
յ	j	voiced palatal glide
կ	k	voiceless unaspirated velar stop
ք	k ^h	voiceless aspirated velar stop
քյ	k ^{hj}	palatalized voiceless aspirated velar stop
կյ	k ^j	palatalized voiceless unaspirated velar stop
լ	l	voiced lateral approximant
լ ^Է	l ^j	palatalized voiced lateral approximant
մ	m	voiced bilabial nasal
ն	n	voiced coronal (dental) nasal
պ	p	voiceless unaspirated bilabial stop
պ ^Է	p ^h	voiceless aspirated bilabial stop
դ ^Է	q	voiceless uvular stop
ռ	r	voiced alveolar trill
ր	r	voiced alveolar flap
ղ	ʁ	voiced uvular fricative
ս	s	voiceless alveolar fricative

Adjarian's notation	IPA approx.	Description
ʒ	ʃ	voiceless postalveolar fricative
un	t	voiceless unaspirated coronal (dental) stop
ɸ	t ^h	voiceless aspirated coronal (dental) stop
ð	(ts)	voiceless unaspirated coronal (dental) affricate
g	(ts) ^h	voiceless aspirated coronal (dental) affricate
ɔ	(tʃ)	voiceless unaspirated postalveolar affricate
ʒ	(tʃ) ^h	voiceless aspirated postalveolar affricate
ɸ	v	voiced labiodental fricative
ɮ	w	voiced labial-velar glide
q	z	voiced alveolar fricative
ɟ	ʒ	voiced postalveolar fricative
ʕ	ʕ	voiced pharyngeal fricative
ħ	χ	voiceless uvular fricative
Vowels		
m, ü	æ	low front unrounded vowel
ū	ã	nasalized /a/
u	ɑ	low back unrounded vowel
uɹ	ɑə	diphthong of /ɑ/ and (offglide) /ə/
u ^j , u ^l	ai̯	diphthong of /a/ and (offglide) /i/
uɮ	au̯	diphthong of /ɑ/ and (offglide) /u/
È or È ^ˈ	ɛ̞	lowered /e/
ɛ	e	mid front unrounded vowel
ɛj	ei̯	diphthong of /e/ and (offglide) /i/
ɛ ^j , ɛ ^l	ɛ̞i̯	shortened diphthong of /e/ and (offglide) /i/
ɛj	ej, ei̯	inconsistent between diphthong or vowel-glide
ɛɮ	eɯ̯	diphthong of /e/ and (offglide) /u/
ɹɛ	ə̞	fronted schwa
ɹ ^o	ə̞	lowered schwa
ɹ	ə	schwa (mid central vowel)
ɹ ⁱ , ɹ ^h	əi̯	diphthong of /ə/ and (offglide) /i/
ɪ	i	high front unrounded vowel
ɛ	ie̯	diphthong of (offglide) /i/ and /e/
ɛɮ	ieɯ̯	triphthong of (offglide) /i/, /e/, and (offglide) /u/
ɪ ^j , ɪ ^l	ii̯	diphthong of /i/ and (offglide) /i/
î	i	high central unrounded vowel

Adjarian's		
notation	IPA approx.	Description
o	o	mid back rounded vowel
ɛo	œ	front mid rounded vowel
ɛò	œ̞	diphthong of /œ/ and (offglide) /ə/
ɛoo	œo	perhaps a diphthong of /œ/ and /o/
ɛoL	œɯ	diphthong of /œ/ and (offglide) /u/
oɽ	o̞	diphthong of /o/ and (offglide) /ə/
oo	oo	perhaps a long vowel /o/
oL	ou	diphthong of /o/ and (offglide) /u/
nL	u	high back rounded vowel
nLw, Lw	uɑ	diphthong of (offglide) /u/ and /ɑ/
nLɛ	ue	diphthong of (offglide) /u/ and /e/
nL ⁱ , nL ^h	ui	diphthong of /u/ and (offglide) /i/
n	uo	diphthong of (offglide) /u/ and /o/
ô	uœ	diphthong of (offglide) /u/ and /œ/
ɣL	ɣ	high front rounded vowel

3.3.2 Implicit information on assumed phonetic values

During the course of translating Adjarian and re-transcribing his data, I had to make decisions on the exact phonetic value of Adjarian's notation. I noticed that Adjarian would omit some types of information about Armenian phonology and phonetics, whether intentionally (because he implied the information) or because of ignorance (which we can never determine). I discuss my decisions here.

3.3.2.1 Front round vowels

For the front round vowels <ɣL, ɛo>, I transcribe them as /ɣ, œ/. These are common realizations for the SWA form of these vowels. Though it is possible that some of the non-standard dialects use /y/ or /ø/.

3.3.2.2 Glide epenthesis in vowel hiatus repair

In SEA and SWA, the vowel hiatus between the vowels /e/ and /i/ is repaired by either a transitional or full glide /j/ (6). I include this glide in my transcriptions for SWA and SEA.

- (6) SWA
 /jerk^h-e-i-n/ → [jerk^hejin]
 sing-TH-PST-3PL
 ‘(If) they sing.’
 երգէին

The Armenian orthography does not mark glide insertion in this context. Adjarian likewise generally does not include this glide either in his dialectological notation. Thus, we will come across many dialectal words that are transcribed with vowel hiatus. But I think it is likely that there was a glide in these contexts. For example, we see instances of such apparent vowel hiatus contexts in §9.3.3.1.3. The dialectal form is transcribed with a vowel hiatus sequence [e-i] while the SEA cognate has a glide [ej-i].

3.3.2.3 Level of abstraction: Schwas and voicing assimilation

In general, Adjarian’s dialectological notation seemed reliably close to a possible surface pronunciation for words. However, I suspect that Adjarian was at times transcribing in a more abstract or broad “phonemic form” instead of a narrow phonetic form.

Evidence comes from how Adjarian transcribed obstruent clusters. In SWA, there is a productive constraint against having obstruent clusters that have heterogeneous voicing. For example, for the root /ok^hud/ ‘utility’ <օգուտ>, the derivative ‘helpful’ is pronounced [okt^h-aɣɑr] <օգտակար>. Adding a suffix causes the root vowel to disappear, and the newly created obstruent cluster assimilates to a voiceless cluster.

In contrast, Adjarian often has clusters with heterogeneous voicing. For example in (13c), Adjarian cites a Hamshen word /kof-di/ <կոշդի> that is borrowed from Ottoman Turkish, written in Armeno-Turkish letters. The suffix that he spelled as /di/ <դի> is a Turkish suffix. The modern Turkish form of this word, however, is <koş-tu> where the suffix is devoiced because of voicing assimilation, and this is marked in the orthography. In contrast, Adjarian transcribes this suffix in its phonemic form, without voicing assimilation.

For Adjarian’s data, it is unknown if words that are transcribed with heterogeneous voicing like /kofdi/ were truly pronounced with such clusters [kofdi], or if they were pronounced with assimilation [kofti]. We cannot know for certain how narrow or broad Adjarian’s transcriptions were, but my suspicion is that they were rather broad (phonemic).

Another tendency for Adjarian was that he often omitted epenthetic schwas. On page 9 from the original translation, Adjarian transcribed the word <փրայ> ‘on’ as [vra]. But, the typical transcription is [vəra] with an epenthetic schwa. Throughout the translation, I often found Adjarian transcribing words with large consonant clusters, that would otherwise require schwa epenthesis in CA and SEA/SWA. I doubt that the relevant dialects lacked schwa epenthesis. It is possible that Adjarian omitted some of these schwas because he either a) perceived them to be too acoustically weak or short to transcribe (= a more narrow transcription), or b) he felt the schwas were too predictable to require insertion (= a more broad transcription).

3.3.2.4 Low vowel <ւ> /ɑ/

For the letter <ւ>, most traditional transliteration systems use a simpler transcription as <a>. But phonetically, this letter represents a low back unrounded vowel /ɑ/ in modern Standard Western Armenian and Standard Eastern Armenian. Although we do not have access to articulatory or acoustic data on the Armenian dialects, I suspect that Adjarian is using <ւ> to denote a back unrounded vowel for the following reasons.

First, dialectological work often distinguishes a typical vowel <ւ> from an atypical fronted form like <ւ̈> /æ/. This suggests that even in 1911, Adjarian perceived <ւ> as contrasting with a front <ւ̈> /æ/ by being back.

Second, in the IPA, the letter <a> represents a front vowel too. Thus, if I use both <a, æ>, then it can create a false impression that there is a phonemic contrast between two front vowels <a, æ>, instead of between a front and back vowel <æ, ɑ>.

Third, Adjarian was often sensitive in his perception of subtle acoustic differences. For example, in some dialects, he gives subtle judgments by saying that the low vowel <ւ> was pronounced with a more closed mouth in the dialect of Van (§17.2.2.1.1). This suggests that he himself felt that <ւ> represented a back *unrounded* vowel.

However, in my own fieldwork, the dialect of Tehrani Iranian Armenian has a rounded back vowel /ɒ/ due to Persian contact (Dolatian et al. 2023: §2.1.4). Perceiving this rounding is quite subtle. So it is possible that some of the dialects from Iran that Adjarian studied did in fact use a back rounded form /ɒ/ instead of a back unrounded form /ɑ/. However, it is impossible to know what was the case 100 years ago.

3.3.2.5 Patalal vs. palatalized consonants

Adjarian uses the digraphs <qj, lj, pj, hj> to write consonants that combine a back consonant (velar stop /g, k, k^h/ or glottal fricative /h/) with a glide /j/. He does not discuss the nature of such sounds. In the original Armenian, he uses the phrase <քմականները> ‘the palatals’ (original page 10). The typography suggests these consonants are palatalized velar/glottal consonants /q^j, k^j, k^{hj}, h^j/. But Adjarian’s wording in Armenian suggests that these consonants are phonetically palatal consonants /ʃ, ʧ, ʧ^h, ʧ̥/.

I discussed the matter with other linguists of Armenian (Nikita Bezrukov, Afsheen Sharifzadeh, Bert Vaux). For the stops, our impression is that these symbols are generally used to mean palatalized consonants, not palatal consonants. Furthermore, in Adjarian’s earlier grammar of Karabakh Armenian (Աճառեան 1901: 18), he describes the digraph <qj> as a palatalized consonant (a yodicized /g/). The grammar was written in Armenian, and the following is my translation:

Այս ձեւը կ’արտասանուի ճիշտ գրուածին պէս [...] որ եւրոպական բառով
կը կոչուի g yodisé, այսինքն j կիսածայնն ստացած գ

This form is pronounced just the way it is written [...] it is called a “g yodisé” in the European terms, meaning the /g/ has received the semivowel /j/.

For the fricative <hj>, the typography suggests /h^j/. But in an earlier grammar on Karabakh, Adjarian calls this sound a “soft <ch>” <թեթել ch> (Աճառեան 1901: 24). He reports that this sound is pronounced in the same way that the digraph <ch> is pronounced in the German word <ich>. Wiktionary lists the IPA pronunciation /ɨç/ for this German word (and further corroborated by Sabine Laszakovits). I thereby conclude that Adjarian means that the sound <hj> is a palatal fricative /ç/.

3.3.2.6 Rhotics

For the rhotic letters <ռ, ր>, the modern Standard Eastern pronunciation is a trill-flap distinction /r-ɾ/. Modern dialects differ in whether the transcribed <ռ> letter is truly a flap /ɾ/ vs. an approximant /ɹ, ɻ/. For example, Standard Western and Eastern Armenian use a flap /ɾ/, while Tehrani Iranian Armenian uses an approximant /ɹ/. Hamshen is also reported to have an /ɹ/ (Vaux 2007). Dialectologists do not distinguish these types of /ɾ/. But to reduce confusion with the trill, I transcribe the trill as /r/, and the non-trill rhotic as /ɾ/.

3.3.2.7 Stress

In this translation, I generally do not provide stress markings for CA nor for SWA/SEA. I provide stress markings only in the following situation. Sometimes, Adjarian documents dialectal words and he includes a stress symbol <´>. He does this for words or dialects that have unexpected penultimate stress. For such situations, I also provide the stress marking for the CA and SEA/SWA cognates, to emphasize the contrast.

3.3.2.8 Uvular fricatives

For the letters <խ, դ>, modern SWA and SEA use uvular /χ, ʁ/. Though in my experience, velar pronunciations are possible as free variation. Dialectological work does not distinguish velar vs. uvular pronunciations. So, although I transcribe these letters consistently as uvular across the dialects, it is possible that they may be more velar in some dialects than others.

3.3.2.9 Nasal place assimilation

Nasal place assimilation occurs when a nasal phoneme assimilates the place features of another consonant in its environment. SEA and SWA have productive nasal place assimilation before velar stops: /n/ → [ŋ] before /k^h, k, g/ (§3.1.1). I transcribe these allophonic velar nasals for the SEA and SWA forms.

It is unknown if CA had an allophonic velar nasal [ŋ]. Adjarian does not acknowledge the existence of velar nasals in CA, SEA/SWA, nor the non-standard dialects. We cannot know for sure if CA and the non-standard dialects had nasal place assimilation, but it is likely. To maintain a faithful translation, I do not transcribe possible velar nasals in the dialects, simply because we do not know for sure if these dialects had allophonic velar nasals.

3.3.3 Typographical problems

While translating the book, I came across Armenian symbols that Adjarian used which I unfortunately could not faithfully represent in my text rendering. These were symbols that were either absent from Unicode, or which required specialized fonts for me to use. I had to replace these symbols with approximate symbols.

- (7) Armenian symbols that I could not represent easily
- For the low front vowel /æ/, Adjarian used the special symbol <m>. I used the Armenian letter <ւ>. This alternative symbol is also more common in post-Adjarian dialectological work.
 - Some diphthongs were written with a superscript form of the letter <j>: <է^j, ի^j, ա^j>. I used a superscript <j>: <է^j, ի^j, ա^j>.
 - Some diphthongs were written with a superscript form of the letter <h>: <ն^h, ը^h>. I used a superscript <i>: <նⁱ, ըⁱ>.
 - For a lowered schwa, Adjarian used the upside-down version of the symbol <ը>. I could not reproduce this, so I used <ը°>.

To explain why I replaced these letters, consider the sound /ɛ̞j/. The original Armenian rendering is է^j with a superscript <j>. The PDF can show this substring correctly as է^j with a superscript. But if the reader tries to copy this string, the result is a non-superscripted form էj. The superscript form with է^j is not recoverable because ^j is not a predefined Unicode symbol. But, if the reader tries to copy էj, then the superscript <j> is rendered.

3.3.4 Diphthong inconsistencies

During the course of the translation, I came across inconsistencies in Adjarian's dialectological notation.

For all dialect chapters before Crimea (§34), Adjarian treated the symbols <իւ, իւ, իը> as /y, i̞e̞, iə/. But then for Crimea (§35.2.1.2), he states these symbols should be read as single diphthongs: /i̞y, i̞e̞, iə/. This creates a contradiction with his previous use of these symbols. For <իւ>, the contradiction is that <իւ> already signifies /i̞e̞/.

The symbol sequence <էj> is likewise ambiguous. For some dialects, Adjarian uses this symbol to denote a diphthong /ej/, and he explicitly says the sound is a diphthong (Karabakh: §10.2.1.2, Cilicia: §24.3.1.3). But then for some dialects like Agulis (§14.2.1) and Van (§17.2.1), he states the vowels of these dialects, and does not mention a diphthong /ej/, yet he still provides words with the symbol sequence <էj>. One can therefore assume that Adjarian intends for this sequence to be read as /ej/ for these dialects.

I suspect part of this inconsistency for <էj> is due to typographical errors. For the dialect of Van, Adjarian states the Vozim dialect has a diphthong <է^j> or <է^j> /ej̞/. This diphthong is written with a superscript glide. He provides Vozim words that have both the superscript glide and the non-superscript glide: /χej̞l̞j̞/

<խտլլէ^j> ‘mirror’ (Table 43). For the Vozim past perfective (§17.4.3.3.2), he sometimes transcribes a past suffix as /ëj/ <է^j> but other times as /ej/ <էj>. Thus, I suspect that the ambiguities in Adjarian’s use of <էj> could all be typos for <է^j>.

4 Translation conventions

While translating the monograph, I had to make decisions on how to convey all the implicit and explicit information in Adjarian’s prose. Such information ranged from organization of the text (§4.1), Adjarian’s diachronic treatment of synchronic phonology (§4.2), morphological segmentation (§4.3), my naming conventions for the morphology (§4.4), his personal writing style and romanizations (§4.5), his use of data from multiple non-Armenian languages (§4.6), and my own limitations (§4.7).

4.1 Structuring and explanation

For most of this translation, I tried to maintain Adjarian’s original order and way of presenting information. However, there were two issues that I had to solve: section divisions and specifying diachronic changes.

First, Adjarian usually did not use section divisions in his chapters. For example, a dialect chapter would be a single long sequence of pages without any breaks. To make his content easier to read, organize, and access, I tried to provide extensive subsection divisions.

Second, oftentimes, Adjarian did not use any special notation to differentiate the Classical pronunciation vs. the modern pronunciations. Within a single sentence, he uses the same letters to denote both Classical and Modern pronunciations without using any special terms. He essentially uses one system of letter-sound correspondences for Classical Armenian, and another system for the modern dialects. For example, he would say “The sound X is Y”, and then expect his Armenian-literate readers to infer that X is Classical while Y is modern. He thus leaves it up to the (Armenian-speaking and literate) reader to deduce whenever some letter is designating the ancestor of a sound vs. the actual current pronounced form. For easier reading, I use the abbreviations like CA or MA, and terms like “Classical” and “reflex, modern” to disambiguate the text.

For example, in section §4.7.1.2.1, Adjarian talks about how the Classical Armenian sound /ë/ became modern /e/. But he uses the same letter <է> for both pronunciations. Similarly in §4.7.1.2.4, the Classical Armenian sound /o/ became a diphthong /uo/ in some dialects, but both sounds are written with <ո>. The

reader is expected to know that the letter <n> stands for /o/ when used to transcribe a Classical Armenian word, while the same letter stands for /uο/ when used to transcribe a dialectal word.

4.2 Phonological terms, changes, and alternations

As discussed in §3.3.2.3, Adjarian was at times inconsistent in his phonological level of abstraction. When translating the monograph, I had to make decisions on how to represent his phonological transcriptions. I likewise came across problems in his phonological terminology and treatment.

For phonological transcriptions in this book, I generally use slashes // to encode Adjarian's transcriptions, and also for my own SWA and SEA transcriptions. This is because Adjarian's notation is ambiguously narrow or broad. I often use <> to mark orthographic transcriptions, especially in the Armenian script or in Adjarian's dialectological notation.

In very few cases, I use brackets [] when I want to distinguish between a more abstract phonological form in slashes // vs. a more narrow phonetic form in brackets [], such as in the case of allophonic nasal place assimilation. But in general, my use of slashes // does not encode an abstract lexical representation. For example, I show epenthetic schwas in slashes //.

Besides notation, Adjarian's treatment of Armenian phonology reflected his training in the late 19th century by Antoine Meillet. His training is substantially different from how a 21st century phonologist would do phonology. Adjarian was trained within the framework of comparative linguistics, before the rise of Saussurean or structural linguistics (structuralism).

Because of his training in pre-structuralism, Adjarian does not utilize phonological concepts from structuralism such as phonemes and allophones. For example, in the Karabakh chapter, Adjarian provides a list of sounds present in the dialect (§10.2.1). But he does not specify if all these sounds can appear freely in a word (as a phoneme), or whether certain sounds are restricted to specific contexts (as an allophone).

For sounds that are borrowed from another language, he sometimes specifies that such sounds exist only in borrowed words. For example, in the Tigranakert dialect, the sound /q/ is present only in Arabic words. This sound is thus a marginal phoneme in that dialect. Yet he does not use a theoretical term like "marginal phoneme".

Because Adjarian was trained before the rise of structuralist or generative linguistics, he likewise did not look at phonology as a synchronic system of alternations. For example, in the Cilicia dialect, Adjarian talks about how vowels in a

word tend to assimilate (§24.3.2.3). When translating his prose, I called this process “vowel harmony” because that is how a linguist in the 21st century would understand this process, even though Adjarian did not use such a term.

For synchronic processes like vowel harmony, Adjarian sometimes would say what relevant for the process (§11.2.3.1.5). But for diachronic changes, he often would not give any explanation. For example in the Agulis chapter, Adjarian lists how various vowels changed from Classical Armenian to Agulis Armenian (§14.2.2.1). But such changes seem to be haphazard. For example, the Classical Armenian vowel /ɑ/ has many reflexes in Agulis: /ɑ, æ, o, e, œ, jœ, qj, u, ɣ/. Adjarian does not describe under what phonotactic or morphological conditions these different reflexes arose. And it is beyond the scope of this translation to explain these changes.

4.3 Glossing and morpheme segmentation

Adjarian generally did not morphologically segment his dialectal data, nor would he state the meaning of some word or affix. All glossing and segmentation was my own. Adjarian would usually present his data in one of the following three formats.

The first format is listing a dialectal word and then some related non-dialectal word. The non-dialectal word would be from CA, SEA, or SWA, but he usually does not state which variety. In this situation, I would transcribe the dialectal word, find and transcribe the CA and SWA/SEA cognates, and place them all together. The CA form serves to show a likely ancestor for the dialectal word, while the SEA/SWA form gives a sense of the divergence of the dialect’s development. To illustrate this, see Table 5 in the Yerevan chapter.

In a lot of these situations, the non-dialectal form would have been identically written in either CA or SEA/SWA. In a few cases, the forms would be different, such as for ‘lentil’ in Table 5; Adjarian has provided the SEA form <nuuq> for this word, but not the CA word. Unless Adjarian stated otherwise, I assumed that the dialectal form had the same meaning as the CA and SEA/SWA forms.

In some cases, Adjarian would provide a non-dialectal word in its inflected form that would have only been found in SEA/SWA, not CA. For those situations, I could only provide a partial picture of what the dialectal forms were. See for example Table 46 in the Yerevan chapter. Adjarian provided the dialectal form for ‘gathered’, but this word did not have an obvious reflex in CA.

Adjarian sometimes would use the asterisk * to say that a Classical Armenian word or ancestor word is reconstructed. I kept his notation.

In very few situations, Adjarian provided a non-dialectal form that was not present in either CA or modern SEA/SWA. In those situations, I simply used the cognates that were attested. See for example the word for ‘cress’ in the Karabakh chapter in Table 20.

The second format was sentences. Here, Adjarian would provide a dialectal sentence, and a SEA/SWA translation. He would not morphologically segment his sentences. However, the Armenian reader could look at the Armenian translation and figure out the closest morphological connections and segmentations. I glossed and segmented all the sentences to the best of my abilities, by deducing from the SEA/SWA translations and cognates.

The third format was morphological paradigms. Adjarian would usually at most just list a paradigm as a set of cells and some label like “indicative present”. He usually did not describe how such words were morphologically constructed. The Armenian reader would then have to deduce the morphological segmentation, by again contrasting against how either SWA or SEA would construct the indicative present. For such paradigms, I would segment the dialectal forms and provide SEA/SWA forms for easier contrast. I would explain how the SEA/SWA morphology works, and then use that information to deduce how the dialectal morphology works. For example, see §8.3.3.1 for the Yerevan verbal paradigms.

I generally tried to morphologically segment as many words as possible, with the exception is pronouns. I try to minimize my segmentation and glossing of pronouns because pronouns tend to contain a lot of opaque morphology. See §13.3.2.

4.4 Grammatical terminology for morphological paradigms

When translating the book, I had to make decisions on how to call the different morphological items and tenses that Adjarian described. I tried to find a balance between staying faithful to Adjarian’s original terminology while using the modern names for some categories.

For example, Adjarian was often agnostic as to whether a certain morpheme was a prefix, suffix, or clitic. He often used the word <մասնիկ> which can be translated as “particle” or “formative”. I used the word “formative” in the translation as a way to maintain Adjarian’s agnosticism.

In his morphological paradigms, Adjarian used traditional Armenian names for the various tenses and non-finite verb forms. I go through some of the more controversial items below.

In modern Standard Armenian, verbs can surface in a small set of non-finite verbs. The names for these non-finite forms vary across Armenian grammar

books. For example, in Standard Eastern Armenian, the suffix *-um* is used to mark a non-finite form that is called the “present participle” (Dum-Tragut 2009: 212) or the “imperfective converb” (Dolatian et al. 2023: 109). The word “converb” in this context refers to a non-finite form that can only be used in periphrastic constructions. Adjarian seems to not use any special Armenian term for this non-finite form, and tends to just say something along the lines of “with formative */-um/*”. Similarly, Standard Eastern Armenian uses the suffix */-el/* to create a non-finite form that has been called the “perfect participle” (Dum-Tragut 2009: 213), the “perfective converb” (Dolatian et al. 2023: 111), or the “past participle” (սևցալ դերբայ) by Adjarian (§11.3.3.1.2).

When translating the book, I stay faithful to Adjarian’s terminology. For example, in §11.3.3.1.2, Adjarian explicitly uses the term “past participle” (սևցալ դերբայ) to describe a non-finite form in Yerevan, and I translate his wording as such. But, in the glossing and when discussing the SEA forms (§8.3.3.1.2), I use more modern terminology from Dolatian et al. (2023). The terms used in Dolatian et al. (2023) typically match the terms used in the Eastern Armenian National Corpus, with few deviations.

There are other points of Armenian grammar that are controversial in their terminology. In Eastern dialects, the formative */k-, kə-/* is called a “future prefix” or “future formative” by Adjarian. In contrast, some modern grammars of Eastern Armenian call this a conditional future marker (Dum-Tragut 2009: 253ff). I try to maintain Adjarian’s terms when translating him.

Another area worth mentioning concerns perfectivity and imperfectivity. Here, Adjarian uses traditional terms in Armenian philology which sometimes conflict with more recent terminology in Armenian linguistics. Consider the following four sentences from Standard Eastern Armenian listed in Table 9.

A simple present tense sentence such as ‘they like’ is called “the present” by Adjarian, while it is called “the indicative present” in more recent work. For marking the past tense, SEA utilizes two basic types of past constructions. One renders the incomplete past meaning of the English ‘they were liking’, while the other renders the completed past meaning of ‘they liked’. The former construction is called the “imperfective” by Adjarian, and “indicative past imperfective” by Dolatian et al. (2023: §6.3.1). The latter construction is called the “(past) perfective”. More complex tenses like the present perfect are used for sentences such as ‘they have liked’.

When translating this book, I kept Adjarian’s original term. I then used the modern grammatical term in my personal section division titles and in the labels for paradigm tables.

Table 9: Perfectivity and imperfectivity in Standard Eastern Armenian

Term from Adjarian 1911	Term from Dolatian et al. (2023)	Example
Present <ներկայ>	Indicative present	sir-um e-n like-IMPF.CVB AUX-3PL 'they like, they are liking' սիրում են
Imperfective <անկատար>	Indicative past imperfective	sir-um ej-i-n like-IMPF.CVB AUX-PST-3PL 'they were liking' սիրում էին
Perfective <կատարեալ>	Past perfective	sir-e-ts ^h -i-n like-TH-AOR-PST-3PL 'they liked' սիրեցին
Present perfect <յարակատար>	Present perfect	sir-el e-n like-PERF.CVB AUX-3PL 'they have liked' սիրել են

When translating paradigms from Western Armenian dialects, I encountered the problem of capturing the progressive tense (Table 10). In formal written SWA, the synthetic forms used in the indicative present and the indicative past imperfective can denote either a progressive or non-progressive reading. But in spoken SWA, the particle /gor/ is mandatory for denoting a progressive meaning.¹²

Outside of an artificial literary context, a SWA speaker cannot naturally perceive a progressive reading for these synthetic forms without /gor/. When translating past imperfective sentences for the Western dialects, I used the non-progressive meaning as the default (following the spoken register of SWA). In some cases, Adjarian explicitly said a sentence had a progressive meaning; so I followed him in those contexts.

¹²In SEA, there is no dedicated progressive morpheme or construction. The indicative present can have a progressive or non-progressive meaning (Table 9). The indicative past imperfective has only a progressive meaning. The meaning of 'I would like' is expressed by using the prefix /k-/ with past tense agreement, as in [kə-sir-ej-i-n] (Dolatian et al. 2023: §6.5.3).

Table 10: Progressive meanings in Standard Western Armenian

Paradigm name	Example		Literary register	Spoken register
Indicative present	ցօ-չօմ-ե-ն		‘they drink’	‘they drink’
	IND-drink-TH-3PL		‘they are drinking’	
	ցօ-չօմ-ե-ն	gor	N/A	‘they are drinking’
	IND-drink-TH-3PL	PROG		
Indicative past imperfective	ցօ-չօմ-եյ-ի-ն		‘they would drink’	‘they would drink’
	IND-drink-TH-PST-3PL		‘they are drinking’	
	ցօ-չօմ-եյ-ի-ն	gor		‘they are drinking’
	IND-drink-TH-PST-3PL	PROG		

Past tense morphology presents another set of problems in Eastern Armenian. When the future prefix [k(ə)-] is added to the subjunctive present, it creates a simple future reading ‘I will like’. But when it is added to a subjunctive past form, it creates a conditional-like reading ‘I would like’ (Dolatian et al. 2023: §6.5.3). Adjarian calls the latter reading the future past though it is semantically inaccurate. See discussion in §14.3.3.3.4.

4.5 Cultural terminology and names used by Adjarian

There were minor cases where Adjarian would use an Armenian term that was difficult to translate accurately. One such word is the noun <գաղութ>. This word can be translated in various ways such as ‘colony’ or ‘settlement’. The derived word <գաղթական> can then also be translated as ‘colonizer, settler, migrant, emigre’ and so on.

In general, he would use these two words to describe communities of Armenians who were living in areas outside of Historic Armenia, or communities who migrated across different regions and cities. Throughout this book, I tended to translate these terms as either ‘settlements’ or ‘migrant communities’. I did this because the word ‘colony’ can incorrectly imply that these Armenian communities were part of some colonization effort, instead of just normal human migration.¹³

Adjarian likewise was sometimes flowery and ornate in his prose. He would often use the phrase <հիս հայերէն> ‘Old Armenian’ to denote Classical Armenian, instead of the conventional word <գրաբար>. He used the term <սոր հայերէն>

¹³In the French version, Adjarian (1909) used the French words *colonie* (page 13) and *émigration* (page 84). I thank Bert Vaux and Thomas Castaigna for finding this out for me.

‘New Armenian’ to denote the modern descendants (whether standard or non-standard dialects). The standard language was <գրական> ‘literary’. He likewise used the word ‘sea’ for lakes. He would often anthropomorphize dialects or regions, saying things like:

- ‘the other districts use the sound X’
- ‘few villages speak Armenian’
- ‘manuscripts with the X dialect’
- ‘the village migrated from...’

I did not alter Adjarian’s word choices, to maintain faithfulness to his personal style.

He often uses the word ‘ending’ (վերջաւորութիւն) in ambiguous ways. It could mean a word-final segment (§14.2.2.4.6), a suffix (§8.3.3.3.5), or a suffix sequence (§27.3.2.3).

A complicated area of translation involved the root <տաճիկ> pronounced /dadʒig/ in SWA, and /tatʃik/ in SEA. This root can mean a range of related meanings like ‘Turk’ or ‘Muslim’. It is used in phrases like <տաճկերէն> /dadʒgeren/ denoting the language of those people (Turkish), <տաճկաստան> /dadʒgastan/ denoting the country (Turkey), or <տաճկահայ> /dadʒgahaj/ denoting an Armenian person from that area. In Adjarian’s prose, he used this root and its derivatives to refer to the notions of Ottoman Turks, Ottoman Turkish, Ottoman Turkey, and Ottoman Armenians. I thus translated these words with the word ‘Ottoman’.¹⁴ Some related words are <թուրք> /tʰurkʰ/ and <թրքերէն> /tʰærkʰeren/ which mean Turk and Turkish.

In some case, Adjarian would use a linguistic term in somewhat vague ways. The term <պայթուցիկ> is supposed to denote a stop consonant (= a plosive). However, he sometimes would use the word “plosive” to denote either a stop or affricate. Thus throughout the translation, there are likely sentences where I used the word “plosive”, but the phrase “stop or affricate” may have captured his intent better. Unfortunately, using the phrase “stop or affricate” often make the text harder to read. When translating Adjarian (1899), Balabanian faced a similar issue (§2).

A difficult matter to translate was proper names. Adjarian usually wrote people’s name in the Armenian script. I would write the person’s name in the original script that Adjarian used, alongside a romanization. In some cases, the person

¹⁴Because of the genocide, I thought it would be insulting to translate the word <տաճկահայ> to ‘Turkish-Armenian’ instead of ‘Ottoman Armenian’.

had an existing or well-known romanized name. For example, the late Armenian philologist <Շահան Զրպետ> had a romanized name ‘Jacques Chahan de Cirbied’.

In other cases, I could not find a romanized version of the person’s name online. In such cases, I made up my own unofficial romanization based on a simplified HMB transliteration. I would provide the IPA pronunciation in SEA/SWA. To explain why I did this, my Armenian name is <Տօվլէթեան> and pronounced in SWA as [dovlet^hjan]. Its HMB form would be <Tēōvlēt‘ean>, but the romanized form that I had used within the Armenian community is <Deovletian>. The two romanizations are obviously different, and the HMB transliteration is not publicly used.

In order to show respect to the many deceased (and likely massacred) individuals who worked with Adjarian on his documentation efforts, I wanted to romanize their names in the way that I would expect to see such names in real life and in pronounced forms. For example, I romanized the surname suffix <եան> as <-ian>, because this is how people in real life romanize their names (outside of academic bibliographies), and not as the HMB form <-ean>. For affricates like <g>, I would not romanize them using HMB letters like <c’> because such symbols are not used by Armenians outside of academic publications. I instead used symbols like <ts>. Of course, these romanized forms are ambiguous. But, I provide the original Armenians form anyway, so there is no loss of information.

4.6 Translating language examples

In this book, Adjarian would provide linguistic examples from various languages and registers. These languages were the following.

- French
- Italian
- German
- English
- Russian
- Georgian
- Persian
- Arabic
- Ottoman Turkish
- Classical Armenian
- Standard Armenian, often ambiguously either SEA or SWA

I only speak SWA, English, and Arabic. So when translating these examples, I used the following procedure.

For Romance and Germanic languages, I largely relied on Wiktionary. Adjarian's examples were mostly just word lists so this was feasible. For French, I have some beginner level reading proficiency. For minor aspects of German phonology, I asked German-speaker Sabine Laszakovits.

For Russian, I cannot read the Cyrillic script. I relied on the help of a Russian speaker (Nikita Bezrukov) to help with the translation.

For Persian and Arabic, I knew the Arabic script so I could use Wiktionary (and my own knowledge of Arabic) to translate. Some Persian cases were difficult, for which I had the help of a speaker (Nazilia Shafiei).

For Georgian, I do not know the script so I relied on two linguists (David Erschler and Thomas Wier) who work on Georgian.

For Ottoman Turkish, Adjarian usually wrote these phrases in Armenian letters. I used a combination of Wiktionary and help from Turkish speakers (Tabita Toparlak, Nazila Shafiei, Jonathan North Washington) to translate the Ottoman forms to English and modern Turkish.

For Classical Armenian, I relied on the Calfa dictionary¹⁵ and English Wiktionary. In some cases, Adjarian used a word that he implied was a Classical Armenian word but I could not track it down. In those situations, he would use the Classical Armenian word as a gloss for a dialectal word. I instead used a cognate that was attested in the Classical Armenian dictionaries.

For SWA and SEA, I relied mainly on my own native speaker knowledge of SWA. For transcribing SEA forms, I relied on English Wiktionary. The Armenian entries on English Wiktionary are moderated by Vahagn Petrosyan. For SEA words, for which I could not find transcriptions, I instead asked Petrosyan for help.

4.7 Limitations of the translation

I have tried my best to ascertain the exact translation of as much of Adjarian's wording as possible for me. At times where I was unsure on how to translate a word or phrase, I reached out to others for help. But there are still small points where I could not decide on a proper translation. A lot of these errors can be found in my footnotes, which include the substring "(?)" which can be searched for.

Below, I go through the types of datapoints that I could not be fully confident in translating. My hope is that because this book is open-access, future readers can contribute to ongoing translation work by correcting my errors.

¹⁵<https://dictionary.calfa.fr/>

In some cases, I could not track down the exact bibliographic entry for an academic work that Adjarian cites. This is because he does not provide a complete bibliography but often just mentions the author's name and year of publication. For example, see the unclear citations for Davit-Bek (footnote 3). I include the symbol “(?)” for such footnotes.

In very rare cases, the original text was confusing and ambiguous. For example, see footnotes 8, 24, among others.

In some cases, Adjarian is too implicit and vague. For example, he sometimes does not state the dialectal or etymological origin of a word (footnote 15).

For the morphology, Adjarian does not segment, gloss, or explain his suffixes. There are some cases where I could not figure out what a suffix meant. For example, the reader can search for the substrings “-?”, “?-”, or “(?)” to find less than a hundred cases of untranslated morphemes. Some example sentences likewise lacked a translation and I could not figure out what they meant.

For placenames in the end matter, only a few places have unconventional romanizations because I could not track down the place. These unclear placenames have a question mark in Chapter 39.

For the sample texts for the 31 non-standard dialects, I did not translate, gloss, or re-transcribe them. Adjarian did not explain his texts, and he only sometimes rendered them into his dialectological notation. It would have been too cumbersome and error-ridden for me (and for any non-speaker of the relevant dialect) to translate such samples. I encourage future researchers who focus on those specific dialects to use the open-access sources in this translation.

This translation focuses on capturing the information that Adjarian presented in his 1911 book. Thus, I do not provide recent descriptions of those 31 dialects. But for each dialect, I provide a citation to a survey by Martirosyan (2019). The survey lists more recent grammars on a specific dialect.

Finally, this book is a translation of the 1911 Armenian edition which is almost 300 pages. The 1909 French version is smaller at almost 100 pages. Because I do not speak French, it is unclear to me if there is any information present in the French edition that is absent in the Armenian edition.

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