

## A GRAMMATICAL SKETCH OF CLASSICAL ARMENIAN

RANKO MATASOVIĆ



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## FOREWORD

This publication is intended primarily for students of the course “Comparative grammar of Indo-European languages”, which I have been teaching for more than a decade in the University of Zagreb. It hopes to offer a reasonably compact overview of the grammar of Classical Armenian and its position within the Indo-European family of languages. It is neither a textbook nor a comprehensive grammar of the language.

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Ranko Matasović

## INTRODUCTION

Armenian was considered to be an Iranian dialect until Heinrich Hübschmann proved it to be a separate branch of IE languages in 1877. It does contain a lot of Iranian loanwords, which help us reconstruct the prehistory of Armenian, since they shared many developments of native Armenian words.<sup>1</sup> The exact dialectal position of Armenian is disputed; in 1924 Holger Pedersen noted the extraordinary number of lexical correspondences that Armenian shares with Greek, and the thesis that Greek was the closest relative of Armenian is known as the Graeco-Armenian hypothesis.<sup>2</sup> However, a recent examination of this hypothesis by J. Clackson (1994) is sceptical.<sup>3</sup>

It is at present unclear how, when, and whence the Armenians entered their present-day habitat south of the Caucasus. The name *Armenia*, known to the Greeks and Romans, is of Iranian origin, and occurs on Dareios' stele at Behistun (Old Persian *Armina*). Herodot (VII, 73) says that Armenians are 'colonists of the Phrygians' (*Phrygôn ápoikoi*), but there is very little archeological or linguistic evidence to either confirm or refute this. Strabo, in the first century BC, claims that Armenians entered their country from two directions: one group came with the Phrygians from Asia Minor, while the other entered from Mesopotamia. The Armenian tradition regards the Armenian people as the descendants of Haik, who was, in turn, a descendant of Noah, who had allegedly settled in Armenia after the flood. In any case, there is no trace of Armenians in Eastern Anatolia during the Hittite period, so they must have entered their homeland after the collapse of the Hittite Empire (ca. 1150. BC). They may have been one of the peoples that wandered in the Eastern Mediterranean during that troublesome period. The name used by Armenians to refer to themselves, *Hay-k<sup>c</sup>* (pl.), is of unclear origin. Some say it is none other than the name of the Hittites, since Arm. *Hay-* can be regularly derived from a proto-form \*hattya-. A different etymology derives it from PIE \*poti- 'master' (G *pósis*, Skt. *pati-* etc.).

The area where Armenians settled had been previously inhabited by speakers of Urartean, a non-Indo-European language whose only relative is Hurrian, spoken in Northern Iraq from ca. 2200 until ca. 1200 BC. While Urartean is mostly known from short monumental public inscriptions, Hurrian is by far better attested because of the large number of cuneiform inscriptions found in Mari, Boghaz-Köy, etc. There are certainly some loanwords of Hurro-Urartean origin in Armenian,<sup>4</sup> and it has been

<sup>1</sup> Iranian loanwords in Armenian are mostly from Parthian, e.g. *anapat* "desert", *paštem* "I worship", *mah* "death", *xrat* "judgement", *k<sup>c</sup>en* "hatred", *tap* "heat", *hraman* "order" (Parth. *frm'n*), *ašxarh* "world, land" (Parth. *xšahr*), *hreštak* "angel, messenger" (Parth. *fyštg*), *ššnami* 'enemy' (cf. Av. *dušmainiiu*), *dew* 'demon' (Av. *daēva-*), etc. Iranian palatal \*z (> Avestan *z*) is preserved in Iranian loans in Armenian, while it gives *d* in Old Persian, cf. Arm. *yazem* "I worship" vs. OPers. *yad-* (Av. *yaz-*). On Armenian words of Iranian origin see Schmitt 1983, Job 1993.

<sup>2</sup> Note, e.g. the parallel word formation of Arm. *jiwn* "snow" and G *khīōn* (< \*g<sup>h</sup>yōm), or Arm. *kin*, Gen. *knoj* "woman" vs. G *gynē*, *gynaikós*, or the development of prothetic vowels from laryngeals, or the extension of the formant \*-sk<sup>2</sup>- in the past tenses (in Greek, this last development is dialectal). However, most of the Armenian-Greek correspondences in grammar are also shared by Indo-Iranian and (often) Phrygian, e.g. the presence of the augment in the formation of past tenses (Matzinger 2005).

<sup>3</sup> See also Solta 1960.

<sup>4</sup> E.g. Arm. *astem* "I marry" < Hurrian *ašte* "wife", Arm. *hnjor* "apple(-tree)" < Hurrian *hinzuri*, Arm. *cov* "sea" < Urartean *šua*, Arm. *ult* "camel" < Hurrian *ultu*. There are also many Akkadian words which were borrowed into Armenian through Hurro-Urartean, e.g. Arm. *knik<sup>c</sup>* "seal" < Hurrian < Akkadian *kanīku*. Finally, let us mention a few probably Armenian loanwords from Hittite, e.g. Arm. *išxan*

argued that a Hurro-Urartean substratum influenced the structure of Armenian to a large extent. For example, Hurrian and Urartean both had a rather complex system of consonants and consonant clusters, a clearly agglutinative structure, a rich case system and the lack of grammatical gender. On the other hand, Hurrian was an ergative language with some typological features not found in Armenian (e.g. the ‘Suffixaufnahme’ and the exclusively suffixing word structure). The influence of the substratum (or various substrata) on Armenian is undeniable, as a large portion of Armenian vocabulary is of unknown origin, cf. e.g. *hariwr* ‘hundred’, *zok<sup>c</sup>anc<sup>c</sup>* ‘wife’s mother’, *azg* ‘people’, etc.

Armenia was the first country in the world to adopt Christianity as the official religion (traditionally in 301, but perhaps a decade later). However, it wasn’t until 406 or 407 that the Armenian language was first written down. It was then that Mesrop (also known as Maštoc<sup>c</sup>, 361-440 A.D.) translated the Bible, starting with Solomon’s Proverbs. He also invented the Armenian alphabet. His model was certainly the Greek alphabet, and some Armenian letters bear a resemblance to Greek originals, but there are also letters invented by Mesrop. Most of the early literature in Armenian consists of translations from Greek. Very important are the works of P<sup>c</sup>awstos Biwzant (Faustus of Byzantium), the author of Armenian history, originally written in Greek and covering the history of Christian Armenia from 317 until 387. His work was continued by Lazarus of Pharpi, who wrote the history of Armenia until 458. Most translations from this period, however, are of religious books. Besides the 42 books of the Old Testament (with some Apocrypha) and the 26 books of the New Testament (without the Apocalypse, which was translated much later), the early translations into Armenian include such various works as the exegetical homilies by John Chrysostome, the speeches by Eusebius from Emesa, Apology of Christianity by Aristides of Athens, speeches by Zenobs of Amida, several Martyrologies, etc. Besides from Greek, there are several Classical Armenian translations from Syriac, e.g. the translations of the Hymns St. Ep<sup>c</sup>rem (who lived ca. 306-373).

The fifth century A.D. was the so-called ‘golden century’ (*oskedar*) of the Armenian literature. The following original works in Classical Armenian were composed during that period: Koriwn’s biography of Holy Mesrop (‘The Life or Mashtots’, 5<sup>th</sup> century), and ‘Against Heresies’ (*Elm alandoc<sup>c</sup>*) of Eznik Kołbac<sup>c</sup>i, composed between 441 and 448. In this treatise, preserved in a single manuscript from 1280, Eznik refutes different forms of non-orthodox beliefs, both Christian (especially the dualistic heresy of Marcionites) and non-Christian (Mazdaist beliefs and theories of Greek philosophers). The authorship of the Life of Gregory the Illuminator (who baptized the first Christian king of Armenia, Tiridates, in 314), also written in the 5<sup>th</sup> century, is disputed, but it was traditionally attributed to Agat<sup>c</sup>angelos, the secretary of the Armenian king Tiridates III. Mowsēs Xorenac<sup>c</sup>i’s ‘History of Armenia’ (*Patmut<sup>c</sup>iwn Hayoc<sup>c</sup>*) used to be dated to the 5<sup>th</sup> century, but may be several centuries younger. Mowsēs is considered to be the ‘father of history’ (*patmahayr*) by Armenians. In his work, Mowsēs preserved several original Armenian oral traditions, including an account of the birth of the god Vahagn, the romance between Artashes (*Artašēs*) and princess Satenik (*Sat<sup>c</sup>enik*), etc. Another important historian from the classical period was Elishe (*Elišē*), who wrote ‘History of Vardan and the Armenian War’ (about the

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“prince” < Hitt. *išha-* “lord”, Arm. *brut* “potter” < Hitt. *purut-* “clay”, Arm. *hskem* “watch, abstain from sleep” < Hitt. *hušk-* “tarry, wait”. See Diakonoff 1985, Greppin 2005.

war between the Christian Armenians against the Persians, who wanted to impose Mazdaism on them).

From the sixth century, only a few works from the Neo-Platonist philosopher Dawit Anhalt<sup>c</sup> ('David the Invincible') are preserved. These are actually Armenian translations of his works originally written in Greek. The number of writers from the seventh century is more abundant, e.g. the bishop-historian Sebeos, the poet Dawtak Kertol (the author of the first secular poem in Armenian, "The Elegy on the Death of the Great Prince Jevansher"), and the polymath Anania Shirakatsi (*Anania Širakac<sup>c</sup>i*), the author of the first geographical treatise in Classical Armenian (*Ašxarhac<sup>c</sup>oyc<sup>c</sup>*).

There are no original manuscripts from the earliest period of the Armenian language. The most ancient manuscript, the Moscow Gospel, was copied in 887, and many works written originally in the fifth century were subsequently interpolated and substantially changed by recopying. There are some early inscriptions from the 5th century, and the earliest ones seem to be the inscriptions from Nazareth, from the first half of the 5th century (see below).<sup>5</sup>



An early inscription from Musrara (near Jerusalem) from the 6<sup>th</sup> century runs as follows:

*Vasn yišataki ew p<sup>c</sup>rku<sup>c</sup>ean amenayn Hayoc<sup>c</sup> z-oroc<sup>c</sup> z-anuans Tēr gitē* "For the memory and salvation of all Armenians whose names the Lord knows".

There are also a few old inscriptions from Armenia proper, e.g. from the church of Tekor.

The language of the fifth century is the basis of Classical Armenian, or *Grabar* (lit. 'written' language). To all appearances, Classical Armenian had no dialects, and most Modern Armenian forms are easily derivable from it. It may have been some sort of

<sup>5</sup> See Stone et alii 1996-7.

*koiné* which, like its Greek counterpart, replaced all other early dialects.<sup>6</sup> Grabar slowly evolved towards Middle Armenian (from the 11th century) and Modern Armenian (from the 18th century), which exists in two variants, East Armenian (in Armenia proper) and West Armenian (now used mostly by Armenian diaspora). Cilician Armenian (11-14th centuries) was already characterized by many West Armenian features (e.g. the change of Old Armenian *tʰ > d* and *d > th*), but the Modern West Armenian language is chiefly based on the dialect of the Armenian community in Constantinople. The East Armenian standard is based on the dialect of Ararat. Both modern standard languages are heavily influenced by Classical Armenian.

There are two excellent introductions to Classical Armenian for Indo-Europeanists, Schmitt 1981 (in German) and Godel 1975 (in English). Meillet's brief comparative grammar (1937, in French) is still useful, as well as Jensen's descriptive grammar (1959). A more comprehensive grammar is Tumanjan's (1971). There are hardly any modern comprehensive dictionaries in Western European languages, but now there is the recently published etymological dictionary by Martirosyan (2009). R. Acharyan's 'Etymological Root Dictionary of Armenian' (in seven volumes, Erevan 1926-1935) is in Armenian, and is now hard to get and largely obsolete. Many useful etymological discussions can be found in Džaukjan's (1983) and Perixanian's (1999) monographs. Standard Indo-Europeanist treatments of Armenian morphology include Olsen 1999 (on nominal morphology) and Klingenschmitt 1982 (verbal morphology). An overview of the earlier 20th century literature on Armenian can be found in Schmitt 1974.

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<sup>6</sup> See Winter 1966. However, Martirosyan (2011: 689ff.) lists many words of dialectal origin that made their way into the "standard" language (although there are no dialectal texts from the ancient period). Moreover, some words preserved in contemporary Armenian dialects (and attested after the classical period) display very archaic features, e.g. \*kałc "milk" (reconstructed on the basis of the contemporary form in the Agulis dialect) preserves the liquid *l*, while Classical Armenian *katʰn* "milk" is further removed from PIE \*glk- "milk" (G *gála*, *gálaktos*, L *lac*, *lactis*).

## THE ALPHABET

This is the Classical Armenian alphabet invented by Maštoc<sup>c</sup>, early in the 5th century A. D. Its Armenian name is ‘*Erkatagir*’, or ‘Iron Alphabet’.

Այբ	Բբ	Գգ	Դդ	Եե	Զզ	Էէ	Ըը	Թթ	Ժժ	Իի	Լլ	Խխ
ayb	ben	gim	da	ech	za	eh	et	to	zhe	ini	liwn	xeh
a	b	g	d	e, y	z	ē	ě	tʻ	zh	i	l	kh
[a]	[b]	[g]	[d]	[jɛ-, -ɛ-]	[z]	[e]	[ə]	[tʰ]	[ʒ]	[i]	[l]	[x]
1	2	3	4	5	6	7	8	9	10	20	30	40
Ծծ	Կկ	Հհ	Ջճ	Ղղ	Ճճ	Մմ	Յյ	Նն	ՇՇ	Ոո	Չչ	Պպ
ca	ken	ho	ja	ghad	cheh	men	yi	now	sha	vo	cha	peh
ts	k	h	dz	gh	ch	m	y, h	n	sh	o	chʻ	p
[ts]	[k]	[h]	[dz]	[ɣ]	[tʃ]	[m]	[h-, -j-]	[n]	[ʃ]	[vo, -o-]	[tʰ]	[p]
50	60	70	80	90	100	200	300	400	500	600	700	800
Ջջ	Ռռ	Սս	Վվ	Տտ	Րր	Ցց	Իի	Փփ	Քք	Ռռ	Օօ	Ֆֆ
jehh	ra	seh	vew	tiwn	reh	co	yiwn	piwr	keh	u	oh	feh
j	r	s	v	t	r	tsʻ	w	pʻ	kʻ	u	ō	f
[dʒ]	[r]	[s]	[v]	[t]	[r]	[tsʰ]	[v, w]	[pʰ]	[kʰ]	[u]	[o]	[f]
900	1000	2000	3000	4000	5000	6000	7000	8000	9000			

Note that the vowel [u] is written with a digraph <ou>, which betrays the influence of the Greek orthography. Some linguists (e.g. Rüdiger Schmitt) transcribe this digraph with Latin *ow*, rather than with *u*, as here. The letter <f> does not occur in the texts from the classical period, and the letter <ō> is just an allograph of <o>, also a later addition to the original alphabet. In the post-classical period, it represents the reflex of classical *-aw-*. Initial *e-* is pronounced [ye-], but it is uncertain whether this pronunciation goes back to the classical period. The fact that the name Yerusalem is spelled <*Erosalēm*> shows that it probably does at least in some cases. The modern pronunciation [vo-] for initial *o-* is certainly not old.

There are a few special punctuation marks: <:> corresponds to a full stop and <,> is a comma, just as in our present orthography, while <:> is a colon. The exclamation mark <~> is usually written above the accented syllable of the stressed word in the sentence, and the question mark <^> is placed above the last syllable of the questioned word. There are also many abbreviations in the Medieval manuscripts, the most common of which are *ac* for *astuac* ‘god’, *sb* for *surb* ‘holy’, *am* for *amenayn* ‘whole, all’, *pt* for *patasxani* ‘answer’, etc.

Although the order of letters partly follows the Greek model, the numerical values are not the same as in Greek, since letters for phonemes without Greek counterparts (e.g. *ž*, *c*, *j*) were randomly inserted, and this disrupted the original system. Thus, u (ayb) is ‘1’, p (ben) is ‘2’, ժ (žē) is ‘10’, etc.

## PHONOLOGY

The Armenian phonological system is much more complex (in terms of the number of segments) than the phonological systems of most other early IE dialects. This may be due to prehistoric language contacts with the languages of the Caucasus, where phonological systems are notoriously complex. Of all the Caucasian language families, Armenian shows the most affinities with Kartvelian, notably with Old Georgian (Gippert 2005).

### A) Consonants

stops:

voiceless	aspirated	voiced
p	p <sup>c</sup>	b
t	t <sup>c</sup>	d
k	k <sup>c</sup>	g

affricates:

voiceless	aspirated	voiced
c	c <sup>c</sup>	j
č	č <sup>c</sup>	ǰ

fricatives:

voiceless	voiced
š	ž
s	z
h	
x	

resonants:

l    ł    m    n    r    ř    v (w before vowels)    y

Note that the consonant transliterated as *j* is actually the affricate [dz]; likewise, Arm. *ǰ* is [dž].

The original pronunciation of the Classical Armenian stops is unknown, and there is considerable diversity in their reflexes among the modern dialects. It seems probable that the phonemes transcribed here as voiceless stops were indeed voiceless, since they correspond to Greek voiceless stops in loanwords, e.g. Arm. *pořnik* ‘whore’ < G *pornē*, Arm. *kēt* ‘whale’ < G *kētos*. Voiced stops likewise correspond to Greek and Iranian voiced stops, and aspirated stops generally correspond to Greek voiceless aspirates (in loanwords), e.g. Arm. *dar* ‘slope’ < Mlr. *dar* ‘valley’, Arm. *črag* ‘lamp’ < Mlr. *čirāg*, Arm. *t<sup>c</sup>em* ‘diocese’ < G *thēma*. In Modern Western Armenian (in most dialects), voiced stops correspond to Classical Armenian (and Modern Eastern Armenian) voiceless stops, so Classical Armenian name *Petros* ‘Peter’ is pronounced

[Bedros]. On the other hand, Modern Western Armenian voiceless stops (in some dialects voiceless aspirated stops) correspond to Classical Armenian (and Modern Eastern Armenian) voiced stops, so *ban* ‘word’ is pronounced [pan] or [p<sup>h</sup>an]. Some Eastern Armenian dialects spoken in the north (e.g. in Georgia) have glottalic stops corresponding to Classical Armenian voiceless stops (so *Petros* is pronounced [P<sup>ʔ</sup>et’ros]), while the speakers of some central Modern Eastern Armenian dialects (in Armenia) pronounce the voiced stops (corresponding to Classical Armenian voiced stops) with “breathy voice”, i.e. as voiced aspirates (so they pronounce Classical Armenian *ban* ‘word’ as [b<sup>h</sup>an]).

Arm. *v* and *w* seem to be merely allographs in the classical period, although some scholars think that *v* was originally a labiodental fricative, and *w* a bilabial glide. In Middle Armenian both sounds merge as *v*. Arm. *l* is velar (‘dark’) *l* (as in Polish *ł*), and *ṛ* is an alveolar ‘strong’ *r* (as in Spanish, or perhaps a geminate). The vibrants *ṛ* and *r* are partially in complementary distribution. As a rule, *ṛ* occurs before *n*, while *r* is not permitted in this environment, hence the alternations of the type *learn* ‘mountain’, Gen. *lerin*. However, in some environments, the opposition between *r* and *ṛ* is phonemic, cf. the pairs *bark<sup>c</sup>* ‘characters’ vs. *barṅ<sup>c</sup>* ‘words’, or *k<sup>c</sup>ar* ‘stone’ vs. *-k<sup>c</sup>aṛ* ‘four’. In traditional pronunciation (established since the 11<sup>th</sup> century), *l* is the voiced counterpart of *x* (i.e., it is pronounced as [ɣ]), but there are indications that it was pronounced as a lateral resonant in the classical period (it is found in Greek loanwords with Greek *l*, e.g. *titlos* < G *títlos* ‘title’, *talant* ‘talent’ < G *tálanton*). In Classical Armenian [ɫ] and [l] were clearly different phonemes, but there are few minimal pairs, e.g. *gol* ‘to be’ vs. *goł* ‘thief’, or *tal* ‘give’ vs. *tał* ‘verse’. In some words, both *l* and *l* are attested, e.g. *gayl* and *gaył* ‘wolf’.

The pronunciation of *h* (a laryngeal fricative) was probably rather weak: it is lost after the prefix *z-* (cf. *harkanel* / *z-arkanel* ‘strike’), and some early Armenian loanwords in Georgian are attested without *h-* in that language, cf. Arm. *hamboyr* ‘kiss’ vs. Georgian *ambori*, Arm. *hum* ‘raw’ vs. Georgian *humi* and *umi*.

A word cannot begin with an \**r* in Classical Armenian, as in most Caucasian languages (and probably in PIE). A prothetic \**e-* is added in loanwords before *r-* and whenever word-initial \**r-* would be the outcome of the regular sound change, e.g. in Arm. *erkar* ‘quern’ < PIE \**g<sup>w</sup>reh<sub>2</sub>wōn* (Skt. *grávan-*, OCS *žrbny*, OIr. *bró*), cf. also the homonym *erkar* ‘long’ < PIE \**dweh<sub>2</sub>-ro-* (G *dērós* ‘long lasting’, L *dūro* ‘to last’, cf. also Arm. *erek* ‘evening’ < \**h<sub>1</sub>reg<sup>w</sup>o-* (G *érebos* ‘Erebus, dark underworld’, Skt. *rájas-* ‘dust, mist’).

Arm. *c<sup>c</sup>* is dissimilated to *s* before another *c<sup>c</sup>* in polysyllabic words, cf. Arm. *sireac<sup>c</sup>* ‘he loved’, *sirec<sup>c</sup>ic<sup>c</sup>* ‘I will love’ vs. *siresc<sup>c</sup>es* ‘you will love’ (< \**sirec<sup>c</sup>c<sup>c</sup>es*). It is possible that \**c<sup>c</sup>c<sup>c</sup>* is dissimilated as *sṛ* before \**i* in the 2. pl. ending of the weak aorist subjunctive *siresṛik<sup>c</sup>* ‘may you love’ < \**sirec<sup>c</sup>c<sup>c</sup>ik<sup>c</sup>*.

## B) Vowels:

i		u
	ē	ə
	e	o

a

There are no quantitative oppositions in the vowel system; the vowel  $\bar{e}$  is a closed [e], originally a diphthong \*ey. The vowel  $\bar{a}$  was probably non-phonemic. It is consistently written only word-initially before consonant clusters, except those involving *s, z, š, ž*, e.g. *əmpem* ‘I drink’, *əljam* ‘I demand’ (but cf. also the monosyllable *əst* ‘according to, until’); there are reasons to believe that  $\bar{a}$  was pronounced in cases where it was not written, usually in complex consonant clusters, e.g. *skzbnakan* ‘in the beginning’ was pronounced /əskəzbənanak/. It was never stressed. The pronunciation of /ə/ can be deduced from the aorist forms such as *mnac<sup>c</sup>* ‘he remained’ which do not begin with the ‘augment’ *e-*, characteristic of monosyllabic 3sg. aorist forms such as *e-ber* ‘he carried’. This means that the pronunciation of *mnac<sup>c</sup>* was bisyllabic, i.e. /mənac<sup>c</sup>/.

### VOWEL ALTERNATIONS

Armenian has an extensive system of vowel alternations, only in part inherited from PIE ablaut, but mostly innovative. The alternation was caused by strong dynamic stress on the final syllable (penultimate syllable before the apocope of the final vowels). Thus, in pretonic position *i* and *u* are lost, while  $\bar{e} > i$ , *oy* > *u*, *ea* > *e*; this resulted in the reduction of vowels in the first syllable of disyllabic and polysyllabic words, cp. Nom. *sirt* ‘heart’, Gen. *srti*, Nom. *hur* ‘fire’, Gen. *hroy*, Nom. *dustr* ‘daughter’, Gen. *dster*, Nom. *mēg* ‘fog’, Gen. *migi*, Nom. *loys* ‘light’, Gen. *lusi*, Nom. *leard* ‘liver’, Gen. *lerdi*, aorist 3sg. *t<sup>c</sup>agaworeac<sup>c</sup>* ‘he ruled’, but 1sg. *t<sup>c</sup>agaworec<sup>i</sup>*. The vowels *a, e, o* and the diphthongs *ay, aw, ew* and *iw* were not affected by vowel reduction, cf. *azg* ‘people’, Gen. *azgi*, *xot* ‘grass’, Gen. *xotoy*, etc.

The vowel *i* is preserved when initial before a single consonant, e.g. *iž* ‘snake’, Gen. *iži*, and when final before a single consonant, e.g. *ji* ‘horse’, Gen. *ji<sup>oy</sup>*; initial *u-* is preserved in monosyllables, e.g. *us* ‘shoulder’, Gen. *usoy*.

It is likely that the reduction of pretonic vowels is a late change in Armenian; it affected most Iranian and Syriac loans and it occurred after many words were borrowed from Armenian into Old Georgian, cf. Syriac *ihūdāyā* ‘Jew’ >> Pre-Arm. \*Hureay >> Old Georgian *Huriay* (but Arm. *Hreyay*, with the reduction of *-u-*).

The loss of the vowels \**i* and \**u* in initial syllables created several difficult consonant clusters which have been compared typologically to Georgian.<sup>7</sup>

### VOWEL CONTRACTIONS

After the regular loss of certain word-medial consonants, such as \*-s-, the vowels contracted according to these rules:

\**o+o* > *o* (\**b<sup>h</sup>oso-g<sup>w</sup>h<sub>2</sub>o-* > Arm. *bok* ‘barefoot’)

\**e+e* > *e* (\**treyes* > Arm. *erek<sup>c</sup>* ‘three’)

<sup>7</sup> Cf. Solta 1963.

\*i+i > *i* (\*ni-sisdoh<sub>2</sub> > Arm. \*ni-ist- > *nstim* ‘sit’)  
 \*e+o > *o* (\*swesores > Arm. \*k<sup>c</sup>eork<sup>c</sup> > *k<sup>c</sup>ork<sup>c</sup>* ‘sisters’)  
 \*e+a > *a* (\*wesr-on- > Arm. *garun* ‘spring’)

## STRESS

The stress in Classical Armenian is always on the final syllable, as in French, e.g. *ʳagawór* ‘king’, *erék<sup>c</sup>* ‘three’. There are a few exceptions to this rule, chiefly in interjections (e.g. *aháwasik* ‘see here!’) and deictic adverbs, e.g. *áyspēs* ‘this way, thus’. In prehistoric Armenian the stress was presumably on the penultimate syllable, but the final syllables were lost due to a general apocope, cf., e.g. PIE \*mrtos ‘mortal’ (G *brotós*) > Arm. *mard*, PIE \*penk<sup>w</sup>e ‘five’ (G *pénte*) > Arm. *hing*.

## THE ORIGIN OF ARMENIAN VOCALISM

The following major phonological developments affected the Armenian vocalism:

PIE short vowels are preserved, as a rule:

**PIE \*e > Arm. *e***, cf. PIE \*b<sup>h</sup>eroh<sub>2</sub> ‘I carry’ (L *fero*, G *phérō*) > Arm. *berem*, PIE \*g<sup>ʷ</sup>erh<sub>2</sub>- ‘old man’ (G *gérōn*, Ossetic *zarond*) > Arm. *cer*.

**PIE \*o > Arm. *o***, cf. PIE \*pod- ‘foot’ (G Acc. *póda*) > Arm. *otn*, PIE \*lowh<sub>3</sub>oh<sub>2</sub> ‘I bathe’ (L *lavo*, G *louómai*, OIr. *lóathar* ‘basin’) > Arm. *loganam*.

**PIE \*a, \*h<sub>2</sub>e > Arm. *a***, cf. PIE \*h<sub>2</sub>eg- ‘drive’ (L *ago*, Skt. *ájāmi*) > Arm. *acem*, PIE \*dapno- ‘sacrificial feast’ (L *daps*, G *dapánē*, ON *tafn* ‘victim’) > Arm. *tawn* ‘feast’.

Before nasals, mid-vowels are raised, i.e. \*e > *i* and \*o > *u*, cp. PIE \*penk<sup>w</sup>e ‘five’ (G *pénte*) > Arm. *hing*, PIE \*seno- ‘old’ (G *hénos*, OIr. *sen*) > Arm. *sin*, PIE \*ponth<sub>1</sub>- ‘path, bridge (through swamp)’ (OCS *paťb* ‘path’, L *pōns* ‘bridge’, G *póntos* ‘sea’, *pátos* ‘path’) > Arm. *hun* ‘ford’, PIE \*g<sup>ʷ</sup>onu ‘knee’ (G *góny*, Skt. *jānu-*) > Arm. *cunr*.

Apparently, \*e was also raised to *i* before the palatals *š* and *ž*, cf. Arm. *iž* ‘viper’ < PIE \*h<sub>1</sub>eg<sup>h</sup>i- (G *ékhis*, Skt. *áhi-*), Arm. *gišer* ‘night’ < PIE \*we(s)k<sup>w</sup>per- (L *vesper*, OCS *večerъ*).

In some ill-understood cases, Arm. has *a* where other IE languages have *e* or *o*: Arm. *tasn* ‘ten’ < \*dek<sup>ʷ</sup>m (L *decem*), Arm. *garun* ‘spring’ < PIE \*wesr, \*wesnos (G *éar*, Russ. *vesná*), Arm. *akn* ‘eye’ < \*h<sub>3</sub>ek<sup>w</sup>- (OCS *oko*, L *oculus*), Arm. *ateam* ‘I hate’ < \*h<sub>3</sub>ed- (L *odium* ‘hate’, OE *atol* ‘ugly’). Theoretically, it would be possible to derive the word-initial *a-* from PIE \*h<sub>3</sub>- before consonants (see below), e.g. Arm. *akn* from PIE \*h<sub>3</sub>k<sup>w</sup>-n-, but there is otherwise little justification in positing the zero-grade of the root in such cases. In *tasn* ‘ten’ *-a-* can be explained by analogy with the teens, e.g. *metasan* ‘11’, where *-tasan* developed from \*-dk<sup>ʷ</sup>mt-om.

**PIE \*i and \*u are preserved**, cf. PIE \*mus- ‘fly’ (L *musca*, OCS *мъšica*) > Arm. *mun* (< \*mus-no-), PIE \*k<sup>ʷ</sup>ub<sup>h</sup>ro- ‘brilliant’ (Skt. *śubhrá-*) > Arm. *surb* ‘holy’, PIE

\*diwoh<sub>1</sub> ‘during the day’ (Skt. *divā*, L *diū*) > Arm. *tiv* ‘day’, perhaps PIE \*k’tin- ‘bird of prey’ (G *iktinos* ‘a kite’) > Arm. *c<sup>c</sup>in* ‘bird of prey’ (this word is probably a borrowing from some unknown source in Greek and Armenian).

PIE long vowels are generally shortened in Armenian:

**PIE \*ō, \*eh<sub>3</sub> > Arm. u:** PIE \*deh<sub>3</sub>rom ‘gift’ (OCS *darъ*) > Arm. *tur*, PIE \*HoHmo- ‘raw’ (Skt. *āmās*, G *ōmós*, OIr. *om*) > Arm. *hum*, PIE \*peh<sub>3</sub>lo- ‘foal’ (G *pōlos* ‘foal’, Eng. *foal*) > Arm. *ul* ‘kid’. PIE \*dōm- ‘house’ (L *domus*, OCS *domъ*) > Arm. *tun* (the development of word-final \*-m > \*-n shows that Armenian preserves the trace of the PIE root-noun rather than the thematized \*domo-).

**PIE \*ē, \*eh<sub>1</sub> > Arm. i:** PIE \*meh<sub>1</sub> ‘not’ (prohibitive particle, G *mē*) > Arm. *mi*, PIE \*pleh<sub>1</sub>yo- ‘full’ (L *plēnus*) > Arm. *li*, PIE \*wēsno- ‘price’ (L *vēnum*) > Arm. *gin*.

**PIE \*eh<sub>2</sub> > Arm. a:** PIE \*b<sup>h</sup>eh<sub>2</sub>mi ‘I say’ (G *phēmī*) > Arm. *bam*, PIE \*meh<sub>2</sub>tēr ‘mother’ (L *māter*, OCS *mati*) > Arm. *mayr*.

**PIE \*uH (> \*ū) is likewise shortened, as well as PIE \*iH (> \*ī)**, cf. PIE \*muHs- ‘mouse’ (L *mūs*, OE *mūs*, OCS *myšъ*) > Arm. *mukn* (with the same Arm. suffix as in *jukn* ‘fish’ < \*d<sup>h</sup>g<sup>h</sup>uH-, see below), PIE \*puh<sub>2</sub>r- ‘fire’ (Hitt. *pahhur*, G *pŷr*) > Arm. *hur*, PIE \*g<sup>wh</sup>iHslo- ‘thread’ (L *flum*, Lith. *gýsla*, OCS *žila* ‘vein’) > Arm. *žil*.

As can be gathered from above, the PIE opposition of long and short vowels disappeared in Armenian.

## SYLLABIC RESONANTS AND LARYNGEALS

Syllabic \*m, \*n, \*r, \*l become *am*, *an*, *ar*, *al*, cp. PIE \*mrto- ‘mortal’ (L *mortuus* ‘dead’) > Arm. *mard* ‘man’, PIE \*g<sup>w</sup>lh<sub>2</sub>n- ‘acorn’ (G *bálanos*, L *glāns*, Lith. *gilė*) > Arm. *kalni* ‘oak’, PIE \*wiH-k<sup>mti</sup>- ‘twenty’ (L *vigintī*) > Arm. *k<sup>c</sup>san*.

It appears that laryngeals before consonants developed as prothetic vowels word-initially, similarly as in Greek, cp. PIE \*h<sub>1</sub>newn ‘nine’ (G *ennéa*, Skt. *náva*) > Arm. *inn*, PIE \*h<sub>1</sub>reg<sup>wos</sup> ‘evening, darkness’ (G *érebos*, Skt. *rájas-* ‘mist, cloud’) > Arm. *erek* ‘evening’, PIE \*h<sub>3</sub>neyd- ‘curse’ (G *óneidos* ‘shame’) > Arm. *anicanem* ‘I curse’, PIE \*h<sub>2</sub>ster- ‘star’ (G *astér*, L *stēlla*, Germ. *Stern*) > Arm. *astł*, PIE \*h<sub>2</sub>rewi- ‘sun, sunshine’ (Skt. *ravi-* ‘sun, sun-god’, Hitt. *harwanai-* ‘to become bright’) > Arm. *arew* ‘sun’, PIE \*h<sub>3</sub>nomn ‘name’ (G *ónoma*, Skt. *nāma*) > Arm. *anun*, PIE \*h<sub>3</sub>ner-yo- ‘dream’ (G *óneiros*) > Arm. *anurj*. It seems from the reliable examples (as the ones above) that both \*h<sub>2</sub> and \*h<sub>3</sub> fell together as Arm. *a-*. This development of laryngeals is similar to the one in Greek, but there we find different reflexes of \*h<sub>2</sub> and \*h<sub>3</sub>. The initial vocalism of *orcam* ‘I vomit’ < PIE \*h<sub>1</sub>rewg- (G *ereúgō*, Croat. *rĭgati*) is irregular (we would expect \*ercam). Likewise, instead of *atamn* ‘tooth’ < PIE \*h<sub>1</sub>dōn (from the root \*h<sub>1</sub>ed- ‘to eat’, cf. L *edo*, Skt. *ádmi*, etc.) we would expect \*etamn, but initial *a-* in this word may be the result of vowel assimilation, as in G *odoús* ‘tooth’ instead of \*edoús. Finally, the development seen in Arm. Gen. sg. of the 1<sup>st</sup> person singular personal pronoun *im* and G Acc. sg. *emé* might point to a PIE oblique stem \*h<sub>1</sub>me (with regular \*e > Arm. *i* before nasals), but it is also possible that initial \*e- in

both Greek and Armenian is due to the analogy with the initial \*e- in the nominative (Arm. *es*, G *egō̄* < PIE \*h<sub>1</sub>eg'oh<sub>2</sub>); note the absence of initial e- in the G clitic Dat. sg. *moi* (vs. the stressed *emoī*) and Acc. *me* (vs. the stressed *emé*).

The development of laryngeals before syllabic resonants word-initially is unclear;<sup>8</sup> we find \*HrC > arC in Arm. *arcat*<sup>c</sup> 'silver'<sup>9</sup> < \*h<sub>2</sub>rg'nto- (L *argentum*, G *árgyros*) and in *ařnum* 'I take' < \*h<sub>2</sub>r-new- (G *árnymai*) 'gain, earn', PIE \*h<sub>2</sub>rtk'o- 'bear' (Hitt. *hartagga-*, L *ursus*, G *árktos*) > Arm. *arj*, but the regular development of syllabic resonants without the preceding laryngeal would also have yielded ar-. Although Arm. *orjik*<sup>c</sup> 'testicles' is usually derived from \*h<sub>3</sub>rg<sup>h</sup>- (Alb. *herdhe*, OIr. *uirge*, G *órkhis*), Hitt. *arki-* shows that the correct reconstruction is probably \*h<sub>1</sub>org<sup>h</sup>i-.

PIE \*H > Arm. *a* in the syllabic position, cp. PIE \*h<sub>2</sub>erh<sub>3</sub>tróm 'plow' (G *árottron*, Skt. *áritra-*) > Arm. *arawr*, PIE \*b<sup>h</sup>h<sub>2</sub>ti- > Arm. *bay* 'word' (cf. G *phēmī* 'I say', verbal adjective *phatós*), PIE \*ph<sub>2</sub>tēr 'father' (L *pater*, Skt. *pitā*) > Arm. *hayr*.

Thus, the most probable developments of laryngeals in the syllabic position are:

- \*h<sub>1</sub>C- > eC-
- \*h<sub>2</sub>C- > aC-
- \*h<sub>3</sub>C- > aC-
- \*CHC- > CaC-
- \*HRC- > aRC-

## THE DEVELOPMENT OF PIE DIPHTHONGS

Most PIE diphthongs are preserved in Armenian. The Armenian diphthong *aw* develops into *o* in the post-classical period.

- PIE \*ay, \*h<sub>2</sub>ey > Arm. *ay*: \*h<sub>2</sub>eyg<sup>l</sup>- 'goat' (G *aíks*, *aigós*) > Arm. *ayc*
- PIE \*ey, \*h<sub>1</sub>ey > Arm. *ē*: PIE \*(e-)d<sup>h</sup>eyg<sup>h</sup>- (Skt. *dehī-* 'wall') > Arm. *e-dēz* 'he built'
- PIE \*oy, \*h<sub>3</sub>ey > Arm. *ē*: PIE \*d<sup>h</sup>oyg<sup>h</sup>os 'wall' (G *toíkhos*) > Arm. *dēz* 'wall'
- PIE \*ew, \*h<sub>1</sub>ew > Arm. *oy*: PIE \*lew<sup>k</sup>- 'light' (G *leukós* 'white') > Arm. *loys* 'light',
- PIE \*(s)kow- 'look' (OHG *scouwōn*, G *koéō*) > Arm. aorist *e-c<sup>c</sup>oyc<sup>c</sup>* 'showed'
- PIE \*ow, \*h<sub>3</sub>ew > Arm. *oy*: PIE \*b<sup>h</sup>owgo- 'food' (Skt. *bhógas*) > Arm. *boyc*
- PIE \*h<sub>2</sub>ew is perhaps reflected as *aw* in Arm. *awt<sup>c</sup>* 'bed', if it is related to G *aûlis* 'tent (for passing the night in)', Russ. *ulíca* 'street'.

The development in Arm. *ayt* 'cheek', *aytumn* 'tumor' is unclear, if these words are derived from PIE \*h<sub>3</sub>eyd- 'swell' (G *oidáō*, OHG *eitar* 'poison'); we would expect PIE \*h<sub>3</sub> > Arm. *h-* (see below), so perhaps the correct PIE reconstruction is \*h<sub>1</sub>oyd-, and the development of PIE \*oy to Arm. *ē* is limited to the position after consonants.

## TABLE 1: PIE VOWELS IN ARMENIAN

<sup>8</sup> See Olsen 1985, Greppin 1988.

<sup>9</sup> According to some linguists, this word is a loanword from Iranian, but in that case -c- is unexpected.

PIE	ARM	special developments	problems
*a	a		
*h <sub>2</sub> e	a, ha-		
*e, *h <sub>1</sub> e	e	➤ i before nasals	tasn ‘ten’
*o, *h <sub>3</sub> e	o, ho-	➤ u before nasals	akn ‘eye’
*u	u	alternating with zero	
*i	i	alternating with zero	
*H	a		
*eh <sub>2</sub>	a		
*ē, *eh <sub>1</sub>	i		
*ō, *eh <sub>3</sub>	u		
*iH	i		
*uH	u		
*r	ar		
*l	al		
*m	am		
*n	an		
*ay, *h <sub>2</sub> ey	ay		
*ey	ē	alternating with i	
*oy, *h <sub>3</sub> ey	ē	alternating with i	
*aw, *h <sub>2</sub> ew	aw (?)		
*ew, *h <sub>1</sub> ew	oy	alternating with u	
*ow, *h <sub>3</sub> ew	oy	alternating with u	

## THE ORIGIN OF ARMENIAN CONSONANTS

**Voiceless stops** develop into aspirated stops, but \*p develops to *h* or drops, i.e. PIE \*p > Arm. *h*, *θ*, PIE \*t > Arm. *tʰ*, PIE \*k and \*k<sup>w</sup> > Arm. *kʰ* (and PIE \*k' > Arm. *s*, on which see below).

Arm. *hun* ‘ford, channel’ < \*ponth<sub>2</sub> - (L *pōns* ‘bridge’), PIE \*podm ‘foot’ (Acc. sg., G *póda*) > Arm. *otn*, PIE \*prk<sup>l</sup>-n- > Arm. *harsn* ‘bride’ (L *posco* ‘ask’, OCS *prošiti*), PIE \*ters- ‘dry’ > Arm. *tʰaršamim* ‘I wither’ (L *torreo* ‘dry, roast’, OHG *darra* ‘stake for drying fruit’), PIE \*ptero- (G *pterón* ‘feather, wing’) > Arm. *tʰer* ‘side’, PIE \*leyk<sup>w</sup>- ‘leave’ > Arm. *lkʰanem* (G *leípō*, L *linquo*).

After a vowel, PIE \*p > *w*, cf. PIE \*h<sub>1</sub>epi (G *epí* ‘at’) > Arm. *ew* ‘and’, PIE \*swopno- ‘sleep’ (G *hýpnos*) > Arm. *kʰun*. PIE \*p is lost before \*s in Arm. *sut* ‘false, lie’ < \*psewd- (G *pseûdos*), PIE \*septm ‘seven’ (Skt. *saptá*, G *heptá*) > Arm. *ewtʰn*. PIE \*t drops word-initially before \*r (and then a prothetic *e-* develops, see below): PIE \*treys > Arm. *erekʰ* ‘three’ (Skt. *tráyas*, G *treîs*).

Armenian *x* develops from PIE \*k+H, cp. Arm. *c<sup>c</sup>ax* ‘branch’ < PIE \*k<sup>c</sup>okHo- (OCS *soxa*, OHG *hōha* ‘plow’), perhaps also *xacanem* ‘I bite’ < PIE \*kh<sub>2</sub>ed- (with *c* < \*-dy-), cf. Skt. *khādati* ‘chew, devour’. It is probable that *x* also develops from \*g<sup>h</sup> after \*s, at least word-initially, cf. Arm. *sxalem* ‘stumble, fail’ < \*sg<sup>wh</sup>al- or \*sg<sup>wh</sup>h<sub>2</sub>el- (G *sphállō* ‘bring down’, L *fallo* ‘deceive’, Skt. *skhālati* ‘stumbles’. Possibly *t<sup>c</sup>* develops from \*tH, if *yalt<sup>c</sup>* ‘large’ is from \*plth<sub>2</sub>u- ‘broad’ (cf. G *platýs*, Skt. *prthú-*); *y-* may be a petrified prefix.

Between vowels (including \*a < H), PIE \*t > *y*, cf. PIE \*ph<sub>2</sub>tēr ‘father’ (L *pater*, G *patér*) > Arm. *hayr*, PIE \*plth<sub>2</sub>-ni- ‘broad’ (G *plátanos*) > Arm. *layn* ‘broad’. Before word-medial \*r, \*t > *w*, cf. Arm. *arawr* ‘plow’ < PIE \*h<sub>2</sub>erh<sub>3</sub>tro- (G *árottron*, OIr. *arathar*). For the different outcomes of PIE \*t cf. the opposition between Nom. *hayr* < \*ph<sub>2</sub>tēr and Gen. *hawr* < \*ph<sub>2</sub>tr-os.

Voiceless stops are voiced after \*r, \*n, cf. PIE \*mrto- ‘mortal’ (G *ám-brotos* ‘immortal’) > Arm. *mard* ‘man’, PIE \*h<sub>2</sub>r<sub>ti</sub> ‘now’ (G *árti*) > Arm. *ard*, PIE \*durh<sub>2</sub>enHt- ‘door-post’ (Skt. *ātā*, L *antae* ‘square pilasters’) > Arm. *dr-and* ‘doorpost’, PIE \*h<sub>2</sub>erk-el- (G *arkéō* ‘I defend’, L *arceo* ‘I cover’) > Arm. *argel* ‘barrier’, PIE \*penk<sup>w</sup>e ‘five’ (G *pénte*, Skt. *pāñca*) > Arm. *hing*, PIE \*h<sub>1</sub>erk- ‘sing’ (Skt. *arká-* ‘light, magic song’, ToChB *yarke* ‘worship’, Hitt. *arku-* ‘chant’) > Arm. *erg* ‘song’.

**Voiced stops** are devoiced, i.e. PIE \*b > Arm. *p*, PIE \*d > Arm. *t*, PIE \*g > Arm. *k*:

Arm. *hot* ‘smell’ = L *odor* (< PIE \*h<sub>3</sub>ed-), Arm. *sirt* ‘heart’ = L *cor, cordis*, G *kardía, kradía* (< PIE \*k<sup>c</sup>erd-), Arm. *tam* ‘I give’ = OCS *damь*, L *do, dare* (< PIE \*deh<sub>3</sub>-), Arm. *stipem* ‘I urge, compel’ = G *steibō* ‘I tread, stamp on’ (PIE \*steyb- or \*steyph<sup>H</sup>-), cf. G *stibarós* ‘fastened, strong’), Arm. *tesanem* ‘see’ = L *deceat* ‘it is proper’ (< PIE \*dek<sup>c</sup>-), Arm. *kin* ‘woman’ = G *gyné*, OCS *žena* (< PIE \*g<sup>w</sup>en(e)h<sub>2</sub>).

**Aspirated stops** develop into voiced stops or affricates, i.e. PIE \*b<sup>h</sup> > Arm. *b*, PIE \*d<sup>h</sup> > Arm. *d*, PIE \*g<sup>h</sup>, \*g<sup>wh</sup> > Arm. *g*, PIE \*g<sup>h</sup> > Arm. *j*:

Arm. *berem* ‘I bring’ < PIE \*b<sup>h</sup>er- (L *fero*, G *phérō*, OCS *berq*), Arm. *dalar* ‘green’ < PIE \*d<sup>h</sup>h<sub>2</sub>l- (G *thalerós* ‘flowery’, W *dalen* ‘leaf’), Arm. *di-k<sup>c</sup>* ‘gods’ < \*d<sup>h</sup>eh<sub>1</sub>s-es (G *theós*, L *fasti* ‘calender’), PIE \*d<sup>h</sup>reg<sup>h</sup>- ‘turn’ (G *trokhós* ‘wheel’, OIr. *droch* ‘wheel’) > Arm. *durn* ‘wheel’ (probably from the lengthened grade \*d<sup>h</sup>rōg<sup>h</sup>- > Arm. \*drug- and metathesis), Arm. *jejn* ‘hand’ < PIE \*g<sup>h</sup>esr (G *kheír*), Arm. *jukn* ‘fish’ < PIE \*d<sup>h</sup>g<sup>h</sup>uH- (G *ikhthýs*, Lith. *žuvìs*).

Between vowels, PIE \*b<sup>h</sup> > *w*, cf. the instr. ending *-w* < -V-b<sup>h</sup>i (G Hom. *-phi*), PIE \*h<sub>3</sub>b<sup>h</sup>el- ‘increase’ > Arm. *awelum*, G *ophéllō*. Likewise, PIE \*d<sup>h</sup>y > Arm. *ǰ*, cf. Arm. *měj* (Gen. *mijoy*) ‘middle’ < \*med<sup>h</sup>yo- (Skt. *mādhyā-*, G *méssos*); the vocalism in *měj* is unexplained (we would expect Arm. *-e-*).

**PIE labiovelars** are delabialized, i.e. PIE \*k<sup>w</sup> > Arm. *k<sup>c</sup>*, PIE \*g<sup>w</sup> > Arm. *k*, PIE \*g<sup>wh</sup> > Arm. *g*:

PIE \*lik<sup>w</sup>et ‘he left’ (aorist, G *élipe*) > Arm. *elik<sup>c</sup>*, PIE \*g<sup>w</sup>enh<sub>2</sub> ‘woman’ (OCS *žena*, G *gyné*) > Arm. *kin*, PIE \*g<sup>w</sup>ōw- ‘cow’ (G *boús*, OIr. *bó*) > Arm. *kov*, PIE \*g<sup>wh</sup>en-

‘strike’ (G *theínō*, Skt. *hánti*) > Arm. *gan* ‘a strike’. Before front vowels, PIE \*g<sup>wh</sup> > Arm. *ǰ*, cf. Arm. *ǰerm* ‘warm’ < PIE \*g<sup>wh</sup>ermo- (G *thermós*), see below.

**PIE velars** are preserved as velars *k<sup>c</sup>*, *k*, *g*:

PIE \*ker- ‘scrap, cut’ (G *keírō*, Alb. *qeth*) > Arm. *k<sup>c</sup>erem* ‘scrap’, *k<sup>c</sup>ert<sup>c</sup>em* ‘cut’, PIE \*gerh<sub>2</sub>no- ‘crane’ (G *géranos*, W *garan*) > Arm. *k<sup>r</sup>unk*, PIE \*greh<sub>3</sub>d- ‘hail’ (OCS *gradъ*, Lith. *grúodas*, L *grando*) > Arm. *karkut*, PIE \*h<sub>3</sub>moyg<sup>h</sup>os ‘fog, cloud’ (Skt. *meghá-*, OCS *mъgla*) > Arm. *mēg* (the absence of word-initial *a-* < \*h<sub>3</sub> is unexpected, cf. G *omíkhlē*).

Armenian *k<sup>c</sup>*, *g* are palatalized before front vowels and \*y, so that PIE \*k > Arm. \*k<sup>c</sup> > *č<sup>c</sup>*, PIE \*g<sup>h</sup>, \*g<sup>wh</sup> > Arm. \*g > *ǰ*:

PIE \*g<sup>wh</sup>ermos ‘warm’ (G *thermós*) > \*germ- > Arm. *ǰerm*, PIE \*k<sup>w</sup>etwores ‘four’ > \*keyor- > Arm. *č<sup>c</sup>ork<sup>c</sup>*, PIE \*kyew- (Skt. *cyávate* ‘moves’) > Arm. *č<sup>c</sup>ogay* ‘I went’. Note that *k* < PIE \*g<sup>w</sup> is not palatalized (cf., e.g., Arm. *kin* ‘woman’ < \*g<sup>w</sup>eneh<sub>2</sub>, OCS *žena*). It appears that PIE \*g, \*g<sup>w</sup> > Arm. \*k > *c* after *u*, cf. Arm. *boyc* ‘food’ < \*b<sup>h</sup>owgo- (Skt. *bhóga-* ‘pleasure’), *luc* ‘yoke’ < \*(H)yugo- (G *zygón*, OCS *igo*).

**PIE palatalized velars** occur as fricatives or aspirates: PIE \*k<sup>l</sup> > *s*, \*g<sup>l</sup> > *c*, \*g<sup>h</sup> > *j*:

Arm. *siwn* ‘pillar’ < PIE \*k<sup>l</sup>iHwon- (G *kiōn*), PIE \*h<sub>2</sub>ek<sup>l</sup>- ‘sharp’ (L *acus* ‘needle’) > Arm. *asełn* ‘needle’, Arm. *cunr* ‘knee’ < PIE \*g<sup>l</sup>onu (G *góny*, L *genu*), Arm. *canawt<sup>c</sup>* ‘known person, relative’ < \*g<sup>l</sup>enh<sub>3</sub>- ‘know’ (G *gignóskō*, L *cognōsco*), PIE \*g<sup>h</sup>eyōm ‘winter’ (L *hiems*, G *khiōn*) > Arm. *jiwn*, PIE \*h<sub>2</sub>eng<sup>h</sup>u- ‘narrow’ (L *angustus*, Goth. *aggwus*) > Arm. *anjuk*, perhaps PIE \*g<sup>h</sup>o(H)l- ‘stick, pole’ (Skt. *hala-* ‘plough’, Lith. *žúolis* ‘thick piece of wood’ > Arm. *jol* ‘log, bar, pole’. This word may also be related with Arm. *jalk* ‘twig, branch’, with a velar suffix, cf. Lith. *žalgà* ‘long, thin stake’, OHG *galgo* ‘stake’ < PIE \*g<sup>h</sup>ol-g<sup>h</sup>- (perhaps formed by reduplication and depalatalization of the second velar?).

PIE \*k<sup>l</sup> is lost before \*l, cf. Arm. *lu* ‘famous’ < PIE \*k<sup>l</sup>luto- (G *klytós*, L *in-clutus*, Skt. *śrutá-*). In Arm. *šun* ‘dog’ (Gen. *šan*) < PIE \*k<sup>l</sup>wōn (G *kyōn*, Skt. *śvā*, Lith. *šuō*) there must be some special development (\*k<sup>l</sup>w > *š*?). The same development may be attested in Arm. *nšoyl* ‘light’ if it is from \*k<sup>l</sup>woyt-l-, cf. OCS *světlo* ‘light’, but this etymology is disputed<sup>10</sup>. Likewise, Arm. *ēš* (Gen. *išoy*) ‘donkey’ can be from PIE \*h<sub>1</sub>ek<sup>l</sup>wo- ‘horse’ (L *equus* etc.), but the meanings do not match completely, and the vocalism *ē-* is odd (it may be due to the lowering before the palatal *š*, but then *i* would be expected).

Between vowels \*g<sup>h</sup> > *z* (Arm. *lizanem* ‘I lick’ < \*leyg<sup>h</sup>-, L *lingo*, OCS *ližq*), PIE \*h<sub>3</sub>meyg<sup>h</sup>- ‘urinate’ (G *omeíkhō*, L *mingo*, Skt. *méhati*) > Arm. *mizem*, PIE \*h<sub>1</sub>eg<sup>h</sup>i-n- ‘hedgohog’ > Arm. *ozni* (< \*ozini), cf. G *ekhînos*, OCS *ježv*.

**Armenian aspirates *c<sup>c</sup>*, *p<sup>c</sup>* and *č<sup>c</sup>*** mostly develop from clusters:

<sup>10</sup> For a fuller treatment of the development of PIE gutturals in Armenian see Stempel 1994.

PIE \*sk' > Arm. *c*<sup>c</sup>, cf. PIE \*prk'-sk'-e-ti 'asks' (Skt. *prcchāti*, L *poscit*) > Arm. *e-harc*<sup>c</sup> 'asked', PIE \*sk'el(H)- 'break' (Lith. *skélti*, OIc. *skilia*) > Arm. *c<sup>c</sup>elaw* (aorist).

PIE \*sp > Arm. *p*<sup>c</sup>, cf. PIE \*spowd- 'haste, zeal' (G *spoudé*) > Arm. *p<sup>c</sup>oyt<sup>c</sup>* 'id.' (probably from a participial pre-form \*spowd-to-), PIE \*spek'- 'watch' (G *sképtomai*, L *specio*) > Arm. *p<sup>c</sup>esay* 'bridegroom' (< 'the watcher, inspector (of the bride)').

PIE \*ks > Arm. *č*<sup>c</sup>, cf. PIE \*kseh<sub>1</sub>ro- 'dry' (G *ksērós*) > Arm. *č<sup>c</sup>ir* 'dried fruit'.

**The remaining Arm. fricatives** are difficult to account for. The origin of the fricative *ž* is largely obscure; it occurs in some nouns with non-transparent etymology, e.g. *žit* 'curious, impetuous' (sometimes compared with Lith. *geidžiù*, *geĩsti* 'want', OCS *žbdq* 'wait' < PIE \*g<sup>h</sup>eyd<sup>h</sup>-, which is hardly persuasive) and *žmit*, *žmbit* 'smile' (compared to OIc. *gaman* 'joy', which is not much to start with). Some words with *ž* are Iranian loanwords, e.g. *žamanak* 'time' from Parth. *žamān* 'time'. Words with the affricate *č* also have few reliable PIE etymologies. In *čanač<sup>c</sup>em* 'know' the initial *č*- is assimilated from *c*- (the root is *can*- 'know' < PIE \*g<sup>h</sup>nh<sub>3</sub>- (Skt. *jñāna*- 'knowledge', etc.). Arm. *čmlem* 'I press' has been connected with OCS *žbmq* 'press, squeeze', OIc. *kumla* 'wound' < PIE \*gem-, but this would require a special phonetic development, as the expected outcome of PIE \*g- is Arm. *k*.

PIE \*s

PIE \*s is reflected as *h* in Anlaut, cp. Arm. *hin* 'old' < PIE \*senos (OIr. *sen*); as with the reflexes of \*p, it seems that Arm. *h*- was very unstable, so it is lacking in some cases, cf. PIE \*sh<sub>2</sub>l- 'salt' (G *háls*, OCS *solb*) > Arm. *ał*, PIE \*slh<sub>2</sub>-sk'- 'pray' (G *hiláskomai* 'I appease') > Arm. *alač<sup>c</sup>em* 'I pray'. Some of these examples can be explained by dialect borrowing, while other cases of the loss of *h*- may be generalized forms of the roots occurring after prefixes, when *-h-* is regularly lost, cf. Arm. *lezuat* 'with tongue cut off' < \*lezu-hat, *yet* 'after' < \*i-het (cf. *het* 'trace').

PIE \*s is lost between vowels: PIE \*swesōr 'sister' (Skt. *svásar*-, L *sōror*, OCS *sestra*) > Arm. *k<sup>c</sup>oyr*; note the development of \*sw- > *k<sup>c</sup>*, but cf. also Arm. *skesur* 'mother in law' < \*swek'uro- (G *hekyrá*, L *socera*, OCS *svekry*). It is preserved before stops, cf. Arm. *z-gest* 'clothes' < \*westu- (L *vestis*, Goth. *wasti*), Arm. *nist* 'seat' < \*(h<sub>2</sub>)nisdo- (OHG *nest*, L *nīdus* 'nest').

The clusters \*rs and \*sr both yield Arm. *r*, cf. PIE \*g<sup>h</sup>esr 'hand' (G *kheír*, Hitt. *keššar*) > Arm. *jeřn*, PIE \*h<sub>1</sub>orso- 'arse' (Hitt. *ārra*-, OE *ears*) > Arm. *oř*. In a few instances we find Arm. *rš* from PIE \*rs, which might imply that some sort of RUKI-rule applied in Armenian as well as in Indo-Iranian and Balto-Slavic, cf. PIE \*trs- 'be thirsty, be dry' (L *torreo*, G *térsomai* 'I become dry') > Arm. *t<sup>c</sup>aramim* besides *t<sup>c</sup>aršamim* 'I wither'<sup>11</sup>, cf. also Arm. *moši* 'bramble, blackberry bush' ? < \*mors- (G *móron* 'blackberry', L *mōrus*). In *veštasan* 'sixteen' < \*swek's-dek'm- (L *sēdecim*) RUKI rule apparently operated after \*k'.

<sup>11</sup> The different forms *t<sup>c</sup>aramim* and *t<sup>c</sup>aršamim* are sometimes attributed to different dialects of Classical Armenian (it would be a rare trace of dialectal diversity in that language).

PIE \*s is lost before \*n and \*l, cf. PIE \*snewr ‘sinew, nerve’ (Skt. *snāvan-*, L *nervus*) > Arm. *neard*, PIE \*wesno-, \*wēsno- ‘price’ (L *vēnum*, Skt. *vasna-*, OCS *věno*) > Arm. *gin* (Gen. *gnoy*), PIE \*g<sup>wh</sup>iHslo- ‘thread’ (L *fīlum*, Lith. *gýsla*, OCS *žila* ‘vein’) > Arm. *žil*. It appears that the loss of \*s before \*n is posterior to the raising of \*e to \*i before \*n, cf. *z-genum* ‘put clothes on’ (rather than \*\*zginum) < \*wes-n- (Skt. *váste* ‘is dressed’, L *vestis* ‘clothes’).

It is unclear whether word-final \*-s yields *-k<sup>c</sup>* (in the plural marker, see below), and the correspondence of Arm. *bok* ‘barefoot’ and OCS *bośb*, Lith. *bāšas*, OHG *bar* is likewise uncertain (the Arm. word may be from a compound PIE \*b<sup>h</sup>oso-g<sup>w</sup>h<sub>2</sub>o- ‘walking barefoot’).

## CONSONANTAL LARYNGEALS

Many linguists believe that PIE \*h<sub>2</sub> and \*h<sub>3</sub> are preserved as Armenian *h-* word-initially, at least before \*e, cf. Arm. *haw* ‘grandfather’ < \*h<sub>2</sub>ewH- (L *avus*, Hitt. *huhhaš*), Arm. *han* ‘grandmother’ < PIE \*h<sub>2</sub>en(H)- (L *anus*, Hitt. *anna*), Arm. *hac<sup>i</sup>* ‘ash tree’ > \*h<sub>3</sub>esk- (Oic. *askr*, L *ornus*), Arm. *hat* ‘grain’ < \*h<sub>2</sub>ed- (L *ador* ‘spelt, barley’, Hitt. *hat-* ‘become dry’), Arm. *hot* ‘odour’ < PIE \*h<sub>3</sub>ed- (L *odor*, G *ózō* ‘smell’), Arm. *hoviw* ‘shepherd’ < \*h<sub>3</sub>ewi-peh<sub>2</sub>- ‘sheep-grazer’ (L *ovis* ‘sheep’, OCS *ovъca*), Arm. *hum* ‘raw’ < \*HoHmo- (G *ōmós*). The lack of word-initial *h* in *orb* ‘orphan’ (cognate with L *orbus* ‘childless, orphaned’, OCS *rabъ* ‘slave’ and G *orphanós* ‘orphan’) may be explained by positing PIE \*h<sub>1</sub>orb<sup>h</sup>o- (a reconstruction supported by OIr. *erbaid* ‘entrusts’)<sup>12</sup>. A similar explanation might hold for Arm. *ost* ‘branch’ (Gen. *ostoy*) vs. G *ózos*, Goth. *asts* if these words come from \*h<sub>1</sub>osdo-, but it has also been suggested that both \*h<sub>2</sub> and \*h<sub>3</sub> are lost before PIE \*o (while they merge as *h* before \*e).<sup>13</sup> I doubt that Arm. *oror* ‘gull’ is at all related to G *órnis* ‘bird’ and Russ. *orël* ‘eagle’, which come from PIE \*h<sub>3</sub>er-.<sup>14</sup>

In any case, even the most economical assumption that word-initial \*h<sub>2</sub> and \*h<sub>3</sub> before vowels are preserved as *h* in Armenian, while \*h<sub>1</sub> is lost, leaves some problems unaccounted for, as we would expect initial *h-* in Arm. *acem* < \*h<sub>2</sub>eg’- (L *ago*, Skt. *ajāmi*, etc.), Arm. *ařnum* ‘take’ < \*h<sub>2</sub>er- (G *árnymai* ‘receive’) and Arm. *arawr* ‘plough’ < \*h<sub>2</sub>erh<sub>3</sub>-tro- (G *árotron*, L *aratrum*). However, *h* was an unstable consonant in Armenian, and we already saw that it is lost in some instances where it developed from PIE \*s and \*p, so one would also expect its occasional loss in words where it had to develop from a laryngeal.

TABLE 2: PIE CONSONANTS IN ARMENIAN

PIE	ARMENIAN	SPECIAL DEVELOPMENTS
*p	h	➤ 0, w, p <sup>c</sup>
*t	t <sup>c</sup>	➤ y, d

<sup>12</sup> Hitt. *harpzi* ‘changes allegiance’ is probably unrelated, as the semantic difference is too great.

<sup>13</sup> See Kortlandt 2003, Beekes 2003.

<sup>14</sup> For a discussion of laryngeal reflexes in Armenian see Greppin 1988.

*k	k <sup>c</sup>	➤ x, g, č <sup>c</sup>
*k <sup>w</sup>	k <sup>c</sup>	➤ x, g, č <sup>c</sup>
*k'	s	➤ š, 0
*b	p	
*d	t	
*g	k	➤ c
*g <sup>w</sup>	k	➤ c
*g'	c	
*b <sup>h</sup>	b	➤ w
*d <sup>h</sup>	d	➤ j
*g <sup>h</sup>	g	➤ j
*g <sup>wh</sup>	g	➤ j
*g <sup>ih</sup>	j	➤ z
*s	h	➤ s, 0, *k <sup>c</sup>
*h <sub>1</sub>	0	➤ e-
*h <sub>2</sub>	h	➤ a-, 0
*h <sub>3</sub>	h	➤ a-, 0

### PIE RESONANTS AND GLIDES IN ARMENIAN

PIE resonants are generally preserved, i.e. PIE \*m > Arm. *m*, PIE \*n > Arm. *n*, PIE \*r > Arm. *r*, PIE \*l > Arm. *l* and *l̥*:

PIE \*meg'h<sub>2</sub>- 'big' (Skt. *máhi*, G *méga*) > Arm. *mec*, PIE \*(h<sub>2</sub>)ni-sdo- 'nest' (OHG *nest*, L *nīdus*) > Arm. *nist*, PIE \*snuso- 'daughter-in-law' (G *nyós*, L *nurus*, OHG *snur*) > Arm. *nu* (Gen. *nuoy*), PIE \*newo- 'new' (G *neós*, OCS *novъ*) > Arm. *nor* (with unclear vocalism, perhaps from \*newo-ro- and subsequent contraction \*-ewo- > \*-eo- > -o-), PIE \*h<sub>1</sub>eln- 'deer' (OCS *jelenъ*, Lith. *ėlnis*, G *élaphos*) > Arm. *eln*, PIE \*men- 'wait, remain' (G *mímnō*, L *maneo*) > Arm. *mnam*, PIE \*b<sup>h</sup>er- 'carry' (L *fero*, G *phérō*) > Arm. *berem*, PIE \*worg'o- 'work' (G *érgon*, Germ. *Werk*) > Arm. *gorc*, PIE \*peruti 'last year' (G *pérysi*, Skt. *parut*) > Arm. *heru* 'last year', PIE \*g<sup>whi</sup>hslō- 'thread' (L *fīlum*, Lith. *gýsla*, OCS *žila* 'vein') > Arm. *žil*, PIE \*wleHr- 'rope?' (L *lōrum*, G *eúlēra* 'reins') > Arm. *lar* 'cord', PIE \*meli(t) 'honey' (G *méli*, L *mel*, *mellis*) > Arm. *metr*.

The distribution of reflexes of \*l, which yields *l* and *l̥*, is still unclear.<sup>15</sup> The reflex *l̥* is not found word-initially; in Arm. *eluk* 'poor', if it is from PIE \*lewg- 'break' (Skt. *rujāti* 'breaks', perhaps L *lūgeo* 'mourn'), *e-* is a prosthetic vowel. Before consonants after vowels the regular reflex is *l̥*: PIE \*sh<sub>2</sub>l- 'salt' (L *sal*, G *hāls*) > \*sal-d- (with the same suffix as in OHG *salz*) > Arm. *alt*; after consonants and word-finally the regular reflex seems also to be *l̥*, as there are several nouns whose stem ends in *l̥* (e.g. *astl̥* 'star' < \*sterlā < PIE \*h<sub>2</sub>stēr, cf. G *astēr*), but none in *l* (in o-stems such as *žil* 'thread' the *l̥* became word-final after the apocope of the final vowel). Word-medially between vowels we find both *l̥*- and *l*-, but it seems that in some cases *-VIV-* > *-VV-* in the early history of Armenian.

<sup>15</sup> For a discussion of reflexes of PIE \*l in Armenian see Džaukjan 1967: 233ff.

In Arm. *merk* ‘naked’, if it comes from PIE \*neg<sup>w</sup>no- (Skt. *nagná-*, OCS *nagъ*, etc.), and in Arm. *magil* ‘claw’, if it is from PIE \*h<sub>3</sub>nog<sup>wh</sup>-il- (OHG *nagal* ‘nail’, G *ónyks*, *ónykhos*, L *unguis*, OCS *nogъtb*), we seem to have the development \*n > Arm. *m* (perhaps by assimilation with the following labiovelar). Arm. *elungn* ‘nail’ may be from the same root, but the formal development is difficult to account for (?\*nog-no- > \*logno- by dissimilation > \*ełongno- > \*ełungno- > *elungn*).

PIE \*r is regularly metathesized with the following voiced stop, cf. Arm. *surb* ‘holy’ < \*k’ub<sup>h</sup>ro- (Skt. *śubhrás* ‘shiny’), Arm. *albewr* ‘spring’ < \*arbewr < \*b<sup>h</sup>rewr (G *phréar*), Arm. *k<sup>c</sup>irtn* ‘sweat’ < \*swidro- (G *hidrós*, Latv. *sviedri*), Arm. *merj* ‘near’ < PIE \*meg<sup>h</sup>ri (G *mékhri* ‘until’), Arm. *erkar* ‘quern’ < PIE \*g<sup>w</sup>reh<sub>2</sub>wōn (Skt. *grāvan-*, OCS *žrъny*, OIr. *bró*), Arm. *elbayr* ‘brother’ < PIE \*b<sup>h</sup>reh<sub>2</sub>tēr (L *frāter*, Skt. *bhrātā*, OCS *bratrъ*, Lith. *brólis*).<sup>16</sup>

Since Armenian does not allow word-initial \*r, the prothetic vowel \*e is added to the Anlaut before \*r, cf. also Arm. *erēc<sup>c</sup>* ‘old’ < \*preysk’- (L *prīscus* ‘former’), Arm. *erewim* ‘show, appear’ < \*prep- (G *prépō* ‘appear’).

PIE\*-m > -n (as in Greek), cf. PIE \*dōm-, \*dom- ‘house’ (L *domus*) > Arm. *tun*.

Nasals are regularly lost before \*s, cf. PIE \*meh<sub>1</sub>mso- ‘meat’ (OCS *męso*) > Arm. *mīs*, PIE \*meh<sub>1</sub>ns ‘month’ (L *mēnsis*) > Arm. *amis*, PIE \*h<sub>2</sub>ōms ‘shoulder’ (L *umerus* < \*h<sub>2</sub>omes-o-, G *ōmos*, Goth. *ams*) > Arm. *us*.

**PIE \*w** is reflected as *g* in Armenian: PIE \*(e)widet ‘he saw’ (aorist, G *eīde*) > Arm. *egit*, PIE \*wedōr ‘water’ (OCS *voda*, G *hýdōr*) > Arm. *get* ‘river’, PIE \*wok<sup>w</sup>- ‘sound’ (L *vōx*, Skt. *vácas-*) > Arm. *goc<sup>c</sup>em* ‘I say’, PIE *c<sup>c</sup>ogay* ‘I went’ < PIE \*kyow- (Skt. *cyávate* ‘moves’), PIE \*deh<sub>2</sub>iwēr ‘brother-in-law’ (Skt. *devár-*, OCS *děverbъ*) > Arm. *taygr*, PIE \*welh<sub>2</sub>-men- (Lith. *vìlna* ‘wool’, L *lāna* ‘wool’, Hitt. *hulana-*) > Arm. *gelmn* ‘wool’. In some rather unclear circumstances, \*w is preserved as Arm. *v*, *w*: Arm. *haw* ‘bird’ < PIE \*h<sub>2</sub>ewi- (L *avis*, Skt. *vi-*), Arm. *tiw* ‘day’ < PIE \*diw- (Ved. instr. *dívā* ‘by day’, L *diū* ‘id.’), Arm. *varim* ‘burn’ < PIE \*werH- (Lith. *vìrti* ‘cook’, OCS *vrěti* ‘boil’), Arm. *hoviw* ‘shepherd’ < \*h<sub>3</sub>owi-peh<sub>2</sub>- (lit. ‘sheep-grazer’, cf. L *ovis* ‘sheep’ and *pāscō* ‘graze’), Arm. *naw* ‘ship’ < \*nāw- < PIE \*neh<sub>2</sub>u- (L *nāvis*, Skt. *nau-*). The rule for the double reflexes cannot be established,<sup>17</sup> cf. the alternation in Arm. *arew* ‘sun’ < PIE \*Hrewi- (Skt. *ravi-* ‘sun’) vs. *aregagn* ‘sun’ (a compound of *areg-* and *akn* ‘eye’, originally ‘eye of the sun’). Apparently, -w is regular only word-finally.

The cluster \*dw- is regularly reflected as Arm. *erk-*, cf. PIE \*dwoh<sub>1</sub> ‘two’ (L *duo*) > Arm. *erku*, PIE \*dweh<sub>2</sub>ro- ‘long’ (G *dērós*, Skt. *dūrā-*) > Arm. *erkar*. The development was presumably from \*dw- to \*tg- > \*tk- > \*rk- > \*erk-. This rule is sometimes called ‘Meillet’s law’ after Antoine Meillet who formulated it. PIE \*tw- and \*sw- yield *k<sup>c</sup>*, cf. PIE \*twē ‘you’ (Acc., Skt. *tvām*) > Arm. *k<sup>c</sup>ez* (with analogical short -e- and a suffixed -z < \*-g<sup>hi</sup>), PIE \*k<sup>w</sup>(e)twores ‘four’ (L *quattuor*, G *téttares*) > Arm. *č<sup>c</sup>ork<sup>c</sup>*, PIE \*swesōr ‘sister’ (L *soror*, OCS *sestra*) > Arm. *k<sup>c</sup>oyr*.

<sup>16</sup> With Arm. *l* < \*r by dissimilation, as in *albewr* above.

<sup>17</sup> It may be that, at least word-medially, PIE \*w > Arm. *g* before the accented syllable and > elsewhere, but the PIE position of the accent is notoriously difficult to establish with any certainty.

PIE \*y develops as Arm. *ĵ* word-initially, and after \*r and \*n, cp. Arm. *ĵur* ‘water’ < PIE \*yuHr - (Lith. *jūra* ‘sea’). It drops between vowels, cp. Arm. *erek<sup>c</sup>* ‘three’ < PIE \*treyes (Skt. *tráyas*). In Arm. *luc* ‘yoke’ < PIE \*yugo- (Skt. *yugám*, G *zygón*, etc.) word initial *l-* is unexpected. Note, however, that maybe the same development can be observed in Arm. *leard*, if it is from PIE \*yek<sup>w</sup>rt (L *iēcur*, Skt. *yakrt*, etc.). Loss of initial \*y- is assumed in PIE \*yo- ‘who, which’ (relative pronoun, cf. Skt. *ya-*, G *ho*) > Arm. *o-r* ‘which’, *o-v* ‘who’ and in PIE \*(H)york- ‘deer, roe’ (G *zórks* ‘gazelle, roedeer’, W *iwrch* ‘roebuck’) > Arm. *ors* ‘hunt, animal for hunting’. It is unclear whether the loss of \*y- is conditioned (it may be regular only before \*-o-).

TABLE 3: PIE RESONANTS AND GLIDES IN ARMENIAN

PIE	ARMENIAN	SPECIAL DEVELOPMENTS
*m	m	➤ -n, 0
*n	n	➤ 0
*l	l, ł	
*r	r, r̥	➤ er-
*y	ĵ	➤ 0
*w	g	➤ w, v

### ACCENT AND THE APOCOPE OF FINAL SYLLABLES

The accent is regularly on the last syllable of the word, i.e. the correct accentuation is *lizané<sup>m</sup>* ‘I lick’, *mardó<sup>y</sup>* ‘of the man’. It is assumed that there was a strong penultimate accent in Proto-Armenian, which caused the apocope of the final syllables, which finally led to the oxytonesis we find in Classical Armenian.<sup>18</sup> All final consonants were lost at the time of the apocope, except *n*, *l*, and *r*, cf. Arm. *ewt<sup>n</sup>* ‘seven’ < \*septm (G *heptá*, L *septem*), Arm. *hayr* ‘father’ < \*ph<sub>2</sub>tēr (G *patér*, L *pater*), Arm. *astł* < \*h<sub>2</sub>stēr ‘star’ (G *astér*). The lost vowels are preserved in compounds, cf. Arm. *hngetasan* ‘fifteen’ < \*penk<sup>w</sup>e-dek<sup>m</sup> (the final \*-e of PIE \*penk<sup>w</sup>e is regularly lost in *hing* ‘five’).

<sup>18</sup> For possible traces of the PIE accentuation in Classical Armenian cf. Olsen 1989.

## MORPHOLOGY

Armenian has lost nearly all traces of PIE gender. Even pronouns have a single form for male and female referents, as well as inanimates (but cf. the distinction between *ov* ‘who’ and *zi* ‘what’). Adjectives agree with their head nouns in case and number when they are postponed, but polysyllabic adjectives do not agree when they are preposed: *čšmarit Astuac-oy* ‘of the true God’, but *Astuac-oy čšmarit-i* (Genitive and Dative). As a rule, the PIE adjectives in \*-o-/-eh<sub>2</sub>- are inflected as Arm. o-stems, e.g. Arm. *ĵerm* ‘warm’ < \*g<sup>wh</sup>ermo- (G *thermós*), *hum* ‘raw’ < \*HoHmo- (G *ōmós*), etc.

Intensive adjectives are often formed by repetition or reduplication, cf. Arm. *mec* ‘big’ vs. *mec mec* ‘very big’, *barjr* ‘high’ vs. *barjr-a-berjr* ‘very high’.

## NOUNS

Armenian nouns distinguish two numbers (the singular and the plural) and seven cases, though many case-forms are syncretised. There are no traces of the dual and (except for the existence of separate declension classes) of gender.

There are many nouns that have only the plural form (*pluralia tantum*), e.g. *eresk<sup>c</sup>* ‘face’, *melk* ‘sin’, *krawnk<sup>c</sup>* ‘religion’, *alawt<sup>c</sup>k<sup>c</sup>* ‘prayer’. There are remarkably many nouns formed by reduplication (as in Georgian), cf. e.g. *ker-a-kur* ‘meal’ vs. *ker* ‘food’.

The more or less regular nouns are conventionally divided into four declension classes (a, i, u, o) according to the vowel found in the oblique cases, cf. the following examples (*azg* ‘people’, *ban* ‘word’, *cov* ‘sea’, *beran* ‘mouth’):

### Singular

	a	i	u	o
<b>Nom.</b>	<i>azg</i>	<i>ban</i>	<i>cov</i>	<i>beran</i>
<b>Acc.</b>	<i>azg</i>	<i>ban</i>	<i>cov</i>	<i>beran</i>
<b>Gen.</b>	<i>azgi</i>	<i>bani</i>	<i>covu</i>	<i>beranoy</i>
<b>Dat.</b>	<i>azgi</i>	<i>bani</i>	<i>covu</i>	<i>beranoy</i>
<b>Loc.</b>	<i>azgi</i>	<i>bani</i>	<i>covu</i>	<i>beran</i>
<b>Abl.</b>	<i>azgē</i>	<i>banē</i>	<i>covē</i>	<i>beranoy</i>
<b>Inst.</b>	<i>azgaw</i>	<i>baniw</i>	<i>covu</i>	<i>beranov</i>

### Plural

	a	i	u	o
<b>Nom.</b>	<i>azgk<sup>c</sup></i>	<i>bank<sup>c</sup></i>	<i>covk<sup>c</sup></i>	<i>berank<sup>c</sup></i>
<b>Acc.</b>	<i>azgs</i>	<i>bans</i>	<i>covs</i>	<i>berans</i>
<b>Gen.</b>	<i>azgac<sup>c</sup></i>	<i>banic<sup>c</sup></i>	<i>covuc<sup>c</sup></i>	<i>beranoc<sup>c</sup></i>
<b>Dat.</b>	<i>azgac<sup>c</sup></i>	<i>banic<sup>c</sup></i>	<i>covuc<sup>c</sup></i>	<i>beranoc<sup>c</sup></i>

<b>Loc.</b>	<i>azgs</i>	<i>bans</i>	<i>covs</i>	<i>berans</i>
<b>Abl.</b>	<i>azgac<sup>c</sup></i>	<i>banic<sup>c</sup></i>	<i>covuc<sup>c</sup></i>	<i>beranoc<sup>c</sup></i>
<b>Inst.</b>	<i>azgawk<sup>c</sup></i>	<i>baniwk<sup>c</sup></i>	<i>covuk<sup>c</sup></i>	<i>beranovk<sup>c</sup></i>

The adduced vocalic stems correspond, more or less regularly, to the PIE vocalic stems, namely the stems in \*-eh<sub>2</sub> > \*-ā, the i-stems, the u-stems, and the o-stems (or thematic stems). There are also some unexpected forms, mostly due to analogy. For example, Genitive/Dative *azg-i* is innovative, while the old ending *-ay* is preserved in proper names, e.g. *Hayk-ay* ‘Armenian’ (N sg. *Hayk*) and *Titan-ay* (N sg. *Titan*).

Some nouns with invariable stems end in the vowel *-i*, e.g. *hogi* ‘spirit’:

**Singular:**

N	<i>hogi</i>
Acc.	<i>hogi</i>
Gen.	<i>hogwoy</i>
Dat.	<i>hogwoy</i>
Loc.	<i>hogi</i>
Abl.	<i>hogwoy</i>
Inst.	<i>hogwov</i>

**Plural:**

N	<i>hogik<sup>c</sup></i>
Acc.	<i>hogis</i>
Gen.	<i>hogwoc<sup>c</sup></i>
Dat.	<i>hogwoc<sup>c</sup></i>
Loc.	<i>hogis</i>
Abl.	<i>hogwoc<sup>c</sup></i>
Inst.	<i>hogwovk<sup>c</sup></i>

Some nouns of this group have Loc. sg. in *-woj*, Abl. sg. in *-wojē* and Gen./Dat./Abl. pl. in *-eac<sup>c</sup>*, e.g. *teli* ‘place’ (Gen. sg. *telwoy*, Loc. sg. *telwoj*, Gen. pl. *teleac<sup>c</sup>*, etc.). Adjectives derived from place-names with the suffix *-ac<sup>c</sup>i* are inflected according to the same pattern, e.g. *K<sup>c</sup>orenac<sup>c</sup>i* ‘from Khoren’.

Besides the adduced types, Armenian also preserved some other IE declension types. There are clear reflexes of PIE n-stems, e.g. Arm. *garñ*, Gen. *garin* ‘lamb’ < \*wrHēn (G *arēn*, *arnós*), r-stems, e.g. Arm. *taygr* ‘husband’s brother’ < \*deh<sub>2</sub>iwēr (G Hom. *daēr*, OCS *děverь*). They mostly have the same endings as the regular nouns, but in the Genitive, Dative, and Locative singular they end in the stem consonant. The PIE root-nouns have mostly become i-stems, as in many other languages, cf., e.g., Arm. *sirt* ‘heart’, Gen. *srt-i* (i-stem) vs. L *cor*, *cordis* (root-noun) < PIE \*k’ērd / Gen. \*k’rd-os. Let us compare the declensions of Arm. *hayr* ‘father’ (r-stem, G *patēr*, *patrós*) and *atamn* ‘tooth’ (n-stem, G *odoús*, *ódontos*):

**Singular:**

N	<i>hayr</i>	<i>atamn</i>
Acc.	<i>hayr</i>	<i>atamn</i>
Gen.	<i>hawr</i>	<i>ataman</i>

Dat.	<i>hawr</i>	<i>ataman</i>
Loc.	<i>hawr</i>	<i>ataman</i>
Abl.	<i>hawrē</i>	<i>atamanē</i>
Inst.	<i>harb</i>	<i>atamamb</i>

**Plural:**

N	<i>hark<sup>c</sup></i>	<i>atamunk<sup>c</sup></i>
Acc.	<i>hars</i>	<i>atamuns</i>
Gen.	<i>harc<sup>c</sup></i>	<i>atamanc<sup>c</sup></i>
Dat.	<i>harc<sup>c</sup></i>	<i>atamanc<sup>c</sup></i>
Loc.	<i>hars</i>	<i>atamuns</i>
Abl.	<i>harc<sup>c</sup></i>	<i>atamanc<sup>c</sup></i>
Inst.	<i>harbk<sup>c</sup></i>	<i>atamambk<sup>c</sup></i>

Several n-stems show the stem consonant *-n-* in the oblique cases only, e.g. *manuk* ‘child’, Gen. *manukan*, *aljik* ‘maiden’, Gen. *aljikan*.

A number of n-stems have the genitive in *-in* rather than *-an*, e.g. *harsn* ‘bride’; abstract nouns in *-t iwn* form the genitive sg. in *-ean*, e.g. *gerut<sup>c</sup>iwn* ‘imprisonment’:

**Singular:**

N	<i>harsn</i>	<i>gerut<sup>c</sup>iwn</i>
Acc.	<i>harsn</i>	<i>gerut<sup>c</sup>iwn</i>
Gen.	<i>harsin</i>	<i>gerut<sup>c</sup>ean</i>
Dat.	<i>harsin</i>	<i>gerut<sup>c</sup>ean</i>
Loc.	<i>harsin</i>	<i>gerut<sup>c</sup>ean</i>
Abl.	<i>harsnē</i>	<i>gerut<sup>c</sup>enē</i>
Inst.	<i>harsamb</i>	<i>gerut<sup>c</sup>eamb</i>

**Plural:**

N	<i>harsunk<sup>c</sup></i>	<i>gerut<sup>c</sup>iwnk<sup>c</sup></i>
Acc.	<i>harsuns</i>	<i>gerut<sup>c</sup>iwns</i>
Gen.	<i>harsanc<sup>c</sup></i>	<i>gerut<sup>c</sup>eanc<sup>c</sup></i>
Dat.	<i>harsanc<sup>c</sup></i>	<i>gerut<sup>c</sup>eanc<sup>c</sup></i>
Loc.	<i>harsuns</i>	<i>gerut<sup>c</sup>iwns</i>
Abl.	<i>harsanc<sup>c</sup></i>	<i>gerut<sup>c</sup>eanc<sup>c</sup></i>
Inst.	<i>harsambk<sup>c</sup></i>	<i>gerut<sup>c</sup>eambk<sup>c</sup></i>

There are also many irregular nouns, and they cannot possibly all be adduced here. We limit ourselves to some illustrative examples below (*ayr* ‘man’, *kin* ‘woman’, *tēr* ‘lord’, and *tikin* ‘lady’):

<b>N Sg.</b>	<i>ayr</i>	<i>kin</i>	<i>tēr</i>	<i>tikin</i>
<b>Ac</b>	<i>ayr</i>	<i>kin</i>	<i>tēr</i>	<i>tikin</i>
<b>G</b>	<i>aɾn</i>	<i>knoĵ</i>	<i>teaɾn</i>	<i>tiknoĵ</i>
<b>D</b>	<i>aɾn</i>	<i>knoĵ</i>	<i>teaɾn</i>	<i>tiknoĵ</i>
<b>L</b>	<i>aɾn</i>	<i>knoĵ</i>	<i>teaɾn</i>	<i>tiknoĵ</i>
<b>Ab</b>	<i>aɾnē</i>	<i>knoĵē</i>	<i>teaɾnē</i>	<i>tiknoĵē</i>

<b>I</b>	<i>aramb</i>	<i>kanamb, knaw</i>	<i>teramb</i>	<i>tiknamb</i>
<b>N Pl.</b>	<i>arkʻ</i>	<i>kanaykʻ</i>	<i>tearkʻ</i>	<i>tiknaykʻ</i>
<b>Ac</b>	<i>ars</i>	<i>kanays</i>	<i>tears</i>	<i>tiknays</i>
<b>G</b>	<i>arancʻ</i>	<i>kanancʻ</i>	<i>terancʻ</i>	<i>tiknancʻ</i>
<b>D</b>	<i>arancʻ</i>	<i>kanancʻ</i>	<i>terancʻ</i>	<i>tiknancʻ</i>
<b>L</b>	<i>ars</i>	<i>kanays</i>	<i>tears</i>	<i>tiknays</i>
<b>Ab</b>	<i>arancʻ</i>	<i>kanancʻ</i>	<i>terancʻ</i>	<i>tiknancʻ</i>
<b>I</b>	<i>arambkʻ</i>	<i>kanambkʻ</i>	<i>terambkʻ</i>	<i>tiknambkʻ</i>

Some ancient u-stems have a curious r-ending in the NAcc sg., e.g. *barjr* ‘high’, Gen. *barju*, *cunr* ‘knee’, *artawsr* ‘tear’; it seems that this ending has spread from original neuters, where it may represent a trace of the original heteroclita in r/n, but this is just a speculation.

Let us look at the origin of the endings of the large class of nouns with the genitive in *-oy*. These are from the PIE thematic masculines and neuters (e.g. L *lupus*, G *lýkos*, OCS *vlъkъ*, etc.).

*get* ‘river’ < PIE \*wed- (OCS *voda*)

sg.

NAcc. *get*

GD *get-oy*

Abl. *get-oy*

I *get-ov*

L *get*

It seems that this word was thematized in Proto-Armenian, so the N-Acc. form is easily derivable from \*wed-os (note that it was a heterocliton in PIE, cf. G *hýdōr*, *hýdatos*); the GD ending *-oy* is from the thematic PIE Genitive singular ending \*-o-syo (Skt. *-asya*, G Hom. *-oio* and OL *-osio* in the ‘Lapis Satricanus’). This ending was also extended to the Ablative, which means that the Ablative ending *-ē* found in other stem classes is an innovation. It has been derived from \*-tes and compared to adverbial forms such as Skt. *mukhatás* ‘from the mouth’, L *funditus* (< \*-tos) ‘from the foundation, utterly’. The endingless locative may be the regular outcome of the (apocopated) PIE ending \*-o-y (> OCS *-ě*, e.g. *vlъcě*, L sg. of *vlъkъ* ‘wolf’). Some o-stems have the L ending *-oŷ* on the analogy with the anomala such as *kin* ‘woman’, L sg. *knoŷ*, cf. e.g. *mard* ‘man’, L sg. *mardoŷ*. That ending has also been derived from a postposition \*-dhyV, cf. Greek *-thi* in *ouranóthi* ‘in heaven’.

The instrumental singular ending *-ov* is probably from \*-o-b<sup>hi</sup>, cf. G (Myc.) *-pi*, Hom. *-phi* and OIr. D dual *-aib<sup>n</sup>*. The labial stop is preserved in other stem classes, e.g. in *aramb* ‘with the man’ (from *ayr* ‘man’), cf. also instrumental pl. *arambk<sup>c</sup>*. Other IE languages show the evidence of athematic I pl. ending \*-b<sup>hi</sup>s (> Skt. *-bhiš*, OIr. D pl. *-aib*).

pl.

N	<i>get-k<sup>c</sup></i>
Acc.	<i>get-s</i>
GD	<i>get-oc<sup>c</sup></i>
Abl.	<i>get-oc<sup>c</sup></i>
I	<i>get-ovk<sup>c</sup></i>
L	<i>get-s</i>

The Nominative pl. ending *-k<sup>c</sup>* has not been explained satisfactorily. Some scholars (e.g. Meillet and Godel) take the obvious course and derive it from PIE *\*-s*, but the sound development of word final *\*-s* to *\*-k<sup>c</sup>* is not universally accepted, though it may be supported by the development of PIE *\*treyes* ‘three’ (L *trēs*) > Arm. *erek<sup>c</sup>*, and *\*k<sup>w</sup>etwores* > Arm. *č<sup>c</sup>ork<sup>c</sup>*.<sup>19</sup> Other linguists assume a pronominal particle added to the bare stem, but the origin of that particle has never been explained. A recent hypothesis derives the morpheme *\*-k<sup>c</sup>* from the agglutinated PIE *\*dwoh<sub>1</sub>* ‘two’; it would have been originally a dual marker, subsequently replacing the inherited plural.<sup>20</sup> It is worth noting another possibility, although it is a mere speculation: the plural marker *-k<sup>c</sup>* can be regularly derived from *\*-s-wes*, with the ending of the u-stems *\*-w-es* agglutinated to the regular Nom. plural marker *\*-s* (cf. the Vedic agglutinated Nom. pl. in *-ās-as*, e.g. *aśvāsas*).

The accusative pl. ending *-s* is regularly derived from *\*Vns* (cf. G dial. Apl. *lŷkons* ‘wolves’), and the L pl. ending *-s* can be derived from PIE *\*-su* (Skt. *vrkeṣu*) by apocope. It would have been preserved originally in the consonant stems, and then extended to other stems, since PIE *\*s* is lost in Armenian between vowels.

The element *-c<sup>c</sup>* in the plural cases is unexplained. Some derive it from the possessive PIE suffix *\*-sk'o-*,<sup>21</sup> which may have been first incorporated in the Genitive plural form, and thence spread to the other cases. The instrumental pl. ending *-ovk<sup>c</sup>* looks like the plural marker *-k<sup>c</sup>* agglutinated to the instrumental singular ending *-o-v*; however, if PIE *\*-s* yields *-k<sup>c</sup>*, this ending can be regularly derived from PIE *\*-b<sup>h</sup>is*, the instrumental pl. ending of athematic stems (Skt. *-bhiṣ*, OIr. D pl. *-ib*, etc.).

The accusative receives the so-called ‘nota accusativi’ *z-* when the noun is definite. With indefinites, the use of this prefix is optional, cf. *tan ptul* ‘they bear fruit’ (Mark 4.20) vs. *tay z-ptul* ‘he bears the fruit’ (Matth. 13.23). This prefix is undoubtedly of pronominal or prepositional origin, but the exact source is unknown.

The functions of the cases are similar to those in the other Indo-European languages. The nominative is the case of the subject, but it is also used in addressing (as the vocative in Latin or Greek). The accusative is the case of the direct object, and the genitive (mostly syncretised with the dative) expresses possession. In a participial construction it can also be the case of the agent (or subject of transitive clauses). The participle in *-eal* (the only participle in the language) takes nominative subjects with intransitive verbs and genitive subjects with transitive verbs (see also below):

*noc<sup>c</sup>a toleal      valvalaki      z-gorci-s-n      gnac<sup>c</sup>in      zhet*

<sup>19</sup> I find it inherently improbable that *-k<sup>c</sup>* is here due to the analogy with the plural marker in nouns.

<sup>20</sup> Cf. Nocentini 1994. See also de Lamberterie 1979.

<sup>21</sup> Cf. the Slavic suffix *-sk-* which can also have the possessive meaning, e.g. in OCS *otčьskъ* ‘father’s’, from *otčьbъ* ‘father’.

3pl.Gen leave.part. immediately Acc-tool-Acc.pl.-art. walk.3pl.aor after

*nora*  
3sg.Gen

“They immediately left their tools and followed him” (Mt. 4.20).

*owrax leal êr jer*  
glad be.part. be.3sg.ipf. 2pl.Gen.

“You would be glad” (John. 14.28).

The dative is the case of the indirect object (usually expressing the semantic role of recipient), but some transitive verbs take their direct object (their undergoer argument) in the dative, e.g. *yalt<sup>c</sup>em* ‘win, conquer’, *tirem* ‘rule’, *hnazandim* ‘submit’, etc.

The ablative case expresses separation from a source (as the Latin and Sanskrit ablatives), but it can also express the partitive function, i.e. it expresses the whole from which a part is subtracted:

*mi omn i caray-ic<sup>c</sup>-n nora*  
one of servant.gen.pl.-dem. he.gen  
“One of his servants”

The instrumental case expresses the instrument, or means by which the action is performed. It can also express certain adverbial meanings such as quantity and manner of action. The locative case expresses the location where the action takes place. It can also express the time of action.

## PRONOUNS

Pronouns have seven cases, and fewer case-forms are syncretised than in nouns.

Here is the declension of the 1st person singular pronoun *es* < PIE \*(h<sub>1</sub>)eg'- (L *ego*, Skt. *ahám*, etc.), and the 2nd person sg. pronoun *du* < PIE \*tuH (L *tu*, G *sý*, etc.):

Nom. sg.	<i>es</i>	<i>du</i>
Acc.	<i>z-is</i>	<i>k<sup>c</sup>ez</i>
L	<i>y-is</i>	<i>k<sup>c</sup>ez</i>
G	<i>im</i>	<i>k<sup>c</sup>o</i>
D	<i>inj</i>	<i>k<sup>c</sup>ez</i>
Abl.	<i>y-inēn</i>	<i>k<sup>c</sup>ēn</i>
I	<i>inew</i>	<i>k<sup>c</sup>ew</i>

The stem *-i-* in the oblique cases of the 1st person singular is analogical, but the exact source of the analogy is unknown. The PIE stem \*h<sub>1</sub>me- (G accusative *emé*) is preserved in the genitive *im*. The ending *-s* in Acc. and L is probably analogical to Nom. *es* (*y-* and *z-* are prefixes); the sound development \*em-s > \*ims > \*ins > *is*

would be regular. The ending *-j* in the dative is presumably the reflex of a particle (PIE *\*-g<sup>hi</sup>*, *\*-g<sup>hey</sup>*, cf. e.g. Latin D *mihī*, and the particle *-zi* in Croat. dial. *njoj-zi* ‘to her’ (D) and in the possessive *nje-zi-n* ‘her’). The sound development of Arm. *du* is irregular (perhaps *d* < *\*t* in unaccented monosyllables, cf. also the demonstrative *da* < PIE *\*to-*, OCS *tv, ta, to*). The stem *k<sup>c</sup>e-* in the oblique cases is from *\*twe-* (cf. G accusative *sé* < *\*twe*, Skt. nominative *tvám*). The ending *-ez* in Acc., L and D is from the same particle *\*-g<sup>hi</sup>* or *\*-g<sup>he</sup>* as in the D sg. of the 1st person sg. pronoun (*inj*), with the regular development of *\*g<sup>h</sup>* > *z* between vowels.

There is a curious suppletion in the plural, where 1 pl. is formed from the stem *me-* (cf. OCS *my*, Lith. *mēs*), perhaps from earlier *\*sme-* < *\*usme-*, or rather from *\*ne-* (as in L *nōs* ‘we’, with the change of *\*n-* to *m-* by analogy with the 1st person plural ending *\*-mes* > Arm. *-mk<sup>c</sup>*). The 2nd person pl. is formed from the stems *du-* and *je-*:

	1pl. ‘we’	2pl. ‘you’
Nom.	<i>mek<sup>c</sup></i>	<i>duk<sup>c</sup></i>
Acc.	<i>mez</i>	<i>jez</i>
L	<i>mez</i>	<i>jez</i>
G	<i>mer</i>	<i>jer</i>
D	<i>mez</i>	<i>jez</i>
Abl.	<i>mēnj, mezēn</i>	<i>jēnj, jezēn</i>
I	<i>mewk<sup>c</sup></i>	<i>jewk<sup>c</sup></i>

The form of the 2pl. Nom. looks like the agglutinated stem of the 2sg. pronoun plus the pluralizing *-k<sup>c</sup>*, but it is possible that it is actually from PIE *\*yuH-* (Lith. *jūs*, Skt. *yūyam*) with *d-* instead of *ǵ-* on the analogy with the 2sg. *du-*. The stem *je-* is unexplained; a recent proposal (by Joshua Katz) traces it to PIE *\*us-we-* > *\*swe-* (W *chi*) with the added particle *\*-g<sup>hi</sup>* (also in *-z* in the oblique cases, as well as in D sg. *inj*). The postulated *\*swe-g<sup>hi</sup>* was then assimilated as *\*sg<sup>he</sup>-g<sup>hi</sup>*, hence Arm. *jez*. This is slightly too complicated to be believed. The ending *-r* in the Gen. pl. is compared with the Latin forms *nostrum, vestrum*, Goth. *unsara, izwara*.

The declension of the 3rd person pronoun is as follows:

	sg.	pl.
Nom.	<i>na</i>	<i>nok<sup>c</sup>a</i>
Acc.	<i>z-na</i>	<i>z-nosa</i>
L	<i>i nma</i>	<i>i nosa</i>
G	<i>nora</i>	<i>noc<sup>c</sup>a</i>
D	<i>nma</i>	<i>noc<sup>c</sup>a</i>
Abl.	<i>i nmanē</i>	<i>i noc<sup>c</sup>anē</i>
I	<i>novaw</i>	<i>nok<sup>c</sup>awk<sup>c</sup></i>

The demonstrative pronoun system is quite complex. Armenian uses deictic suffixes *-s, -d, -n* added to nouns and adjectives.<sup>22</sup> They form a three-way deictic contrast,

<sup>22</sup> See Greppin 1993. The demonstrative suffixes developed from PIE demonstrative pronouns (PIE *\*so-*, *\*to-*, *\*no-*); a similar system of postposed demonstratives existed in Old Georgian. For a synchronic description of Old Armenian usage see Klein 1996.

similarly as in OCS *тѣ – оувѣ – онѣ*. In the classical language these suffixes function like postposed definite articles, similarly as in the Balkan languages (e.g. Bulgarian *žena-ta* ‘the woman’).

There are also demonstrative adjectives *ay-s*, *ay-d* and *ay-n*, formed from a demonstrative stem *ay-* and the same deictic suffixes which are added to the nouns. This demonstrative adjective then inflects as follows: singular NAcc. *ayn*, G *ayn-r*, DLabl. *ayn-m*, Inst. *ayn-u*, plural: N *ayn-k<sup>c</sup>*, Acc. *ayn-s* G *ayn-c<sup>c</sup>*, D *ayn-c<sup>c</sup>*, L *ayn-s*, Abl. *aync<sup>c</sup>*, *aync<sup>c</sup>anē*, I *aynuk<sup>c</sup>*. The demonstrative adjectives *ays* and *ayd* follow the same pattern. When used in emphasis, this pronoun (as well as *ayd*, *ays*) has longer forms with the suffix *-ik* added in some cases, e.g. G sg. *ay-so-r-ik*, D sg. *ay-s-m-ik*, GDabl. pl. *ay-so-c<sup>c</sup>-ik*, etc.

Finally, there are demonstrative pronouns and adjectives *soyn*, *doyn*, *noyn* ‘this/that same’, which inflect in the following manner (the same pattern given for *noyn* is valid for *soyn* and *doyn* as well):

sg.	pl.
Nom. <i>noyn</i>	<i>nok<sup>c</sup>in</i> , <i>noynk<sup>c</sup></i>
Acc. <i>noyn</i>	<i>nosin</i> , <i>noyns</i>
L <i>nmin</i>	<i>nosin</i> , <i>noyns</i>
G <i>nmin</i>	<i>noc<sup>c</sup>in</i> , <i>noc<sup>c</sup>unc<sup>c</sup></i>
D <i>nmin</i>	<i>noc<sup>c</sup>in</i> , <i>noc<sup>c</sup>unc<sup>c</sup></i>
Abl. <i>nmin</i>	<i>noc<sup>c</sup>in</i> , <i>noc<sup>c</sup>unc<sup>c</sup></i>
I <i>novin</i> , <i>novimb</i>	<i>nok<sup>c</sup>imbk<sup>c</sup></i> , <i>nok<sup>c</sup>umbk<sup>c</sup></i>

The suffix *-s* comes from the PIE demonstrative stem \*k<sup>i</sup>- (L *-c* in *hic*, Lith. *šis* ‘he’, OCS *sb*) and the suffix *-d* is undoubtedly from PIE \*to- (OCS *тѣ* ‘that’, Skt. *tad* ‘that’). The suffix *-n* may be connected with OCS *онѣ* ‘that one yonder, he’, Lith. *anàs*, and Skt. *ana-*. The deictic suffixes/definite articles may be freely combined with the independent demonstratives, but they must agree in the “deictic distance” (the forms in *-s-* denote referents close to the speaker, the forms in *-t-* denote referents close to the addressee, and the forms in *-n-* denote referents close to non-participants in the speech act), e.g. *ayr* ‘man’, *ayr-s* ‘the man’, *ayr-s ays* ‘that man’.

Here is the declension of the possessive and possessive-reflexive pronouns:

	<b>im</b>	<b>k’o</b>	<b>nora</b>	<b>iwr</b>	<b>mer</b>	<b>jer</b>	<b>noc’a</b>
	'my'	'thy'	'his'	'his'(refl.)	'our'	'your' (pl.)	'their'
<b>Sg.</b>							
<b>N</b>	<i>im</i>	<i>k’o</i>	<i>nora</i>	<i>iwr</i>	<i>mer</i>	<i>jer</i>	<i>noc’a</i>
<b>Acc</b>	<i>im</i>	<i>k’o</i>	<i>nora</i>	<i>iwr</i>	<i>mer</i>	<i>jer</i>	<i>noc’a</i>
<b>G</b>	<i>imoy</i>	<i>k’oyoy</i> , <i>k’oy</i>	<i>norayoy</i>	<i>iwroy</i>	<i>meroy</i>	<i>jeroy</i>	<i>noc’ayoy</i>
<b>D</b>	<i>imum</i>	<i>k’um</i>	<i>norayum</i>	<i>iwrum</i>	<i>merum</i>	<i>jerum</i>	<i>noc’ayum</i>

<b>L</b>	<i>imum</i>	<i>k'um</i>	<i>norayum</i>	<i>iwrum</i>	<i>merum</i>	<i>jerum</i>	<i>noc'ayum</i>
<b>Ab</b>	<i>immē</i>	<i>k'umē</i>	<i>norayoy</i>	<i>iwrmē</i>	<i>mermē</i>	<i>jermē</i>	<i>noc'ayoy</i>
<b>I</b>	<i>imov</i>	<i>k'uov</i>	<i>norayov</i>	<i>iwrov</i>	<i>merov</i>	<i>jerov</i>	<i>noc'ayov</i>
<b>Pl.</b>							
<b>N</b>	<i>imk'</i>	<i>k'oyk'</i>	<i>norayk'</i>	<i>iwr</i>	<i>merk'</i>	<i>jerk'</i>	<i>noc'ayk'</i>
<b>Ac</b>	<i>ims</i>	<i>k'oys</i>	<i>norays</i>	<i>iwr</i>	<i>mers</i>	<i>jers</i>	<i>noc'ays</i>
<b>G</b>	<i>imoc'</i>	<i>k'oyoc', k'oc'</i>	<i>norayoc', norayic'</i>	<i>iwroc'</i>	<i>meroc'</i>	<i>jeroc'</i>	<i>noc'ayoc', noc'ayic'</i>
<b>D</b>	<i>imoc'</i>	<i>k'oyoc'</i>	<i>norayoc', norayic'</i>	<i>iwroc'</i>	<i>meroc'</i>	<i>jeroc'</i>	<i>noc'ayoc', noc'ayic'</i>
<b>L</b>	<i>ims</i>	<i>k'oys</i>	<i>norays</i>	<i>iwrum</i>	<i>mers</i>	<i>jers</i>	<i>noc'ays</i>
<b>Abl</b>	<i>imoc'</i>	<i>k'oyoc'</i>	<i>norayoc', norayic'</i>	<i>iwroc'</i>	<i>meroc'</i>	<i>jeroc'</i>	<i>noc'ayoc', noc'ayic'</i>
<b>I</b>	<i>imovk'</i>	<i>k'oyovk'</i>	<i>norayovk', norayiwk'</i>	<i>iwrovk'</i>	<i>merovk'</i>	<i>jerovk'</i>	<i>noc'ayovk', noc'ayiwk'</i>

The possessive-reflexive pronoun is *iwr* 'suus', perhaps from \*siwro- < PIE \*swē-wro-. It lacks the nominative and the accusative, and the remaining cases are: Gen./Dat./Loc. *iwr*, Abl. *iwrmē*, Inst. *iwrew*, *iwreamb*, Nom. pl. *iwreank<sup>c</sup>*, Acc./Loc. pl. *iwreans*, Gen./Dat./Abl. pl. *iwreanc<sup>c</sup>*, Inst. pl. *iwreambk<sup>c</sup>*.

The interrogative pronouns are *ov*, *o* 'who' (Gen. sg. *oyr*, Dat./Loc. sg. *um*, Abl. sg. *umē*) and *zi*, *zinč<sup>c</sup>* 'what' (Nom./Acc. *zi*, *zinč<sup>c</sup>*, Gen. *ēr*, Dat./Loc. *im*, *him*, Abl. *imē*, Inst. *iw*).

The indefinite pronouns are *omn* 'someone', *imn* 'something', *ok<sup>c</sup>* 'someone'. These forms consist of the stems *o-*, *i-* and the suffixes *-mn* and *-k<sup>c</sup>*, which are mostly added to the inflected forms. Thus, for *o-mn* the Nom./Acc. is *omn*, Gen. sg. *uru-mn*, Dat./Loc. *ume-mn*, etc.; for *o-k<sup>c</sup>* the Gen. sg. is *uruk<sup>c</sup>*, Dat./Loc. *umek<sup>c</sup>*, but Abl. *ume-k<sup>c</sup>-ē*.

The history of the interrogatives and indefinites is unclear. The vowel alternation between *-o-* and *-i-* is reminiscent of the one in PIE \*k<sup>w</sup>o- (OCS *kъto* 'who') and \*k<sup>w</sup>i- (OCS *čъto*), but the loss of word-initial \*k<sup>w</sup> is difficult to account for (it is generally agreed that *z-* in *zi*, *zinč<sup>c</sup>* is simply the *nota accusativi*). Possibly the voiceless velar was lost in unstressed monosyllables, cf. the preserved *k<sup>c</sup>* < \*k<sup>w</sup> in Arm. *k'ani* 'how much'. The stems of the indefinites *o-*, *i-* are probably originally the same stems as those of the interrogatives. The pronoun *ok<sup>c</sup>* 'someone' is formed from the interrogative stem and the clitic *-k<sup>c</sup>* < PIE \*k<sup>w</sup>e 'and' (Skt. *-ca*, L *-que*, etc.).

The relative pronoun is *or* 'who, which' (N-Acc. *or*, Gen. sg. *oroy*, Dat./Loc. sg. *orum*, Abl. sg. *ormē*, Inst. sg. *orov*; Nom. pl. *ork<sup>c</sup>*, Acc./Loc. pl. *ors*, Gen./Dat./Abl. pl. *oroc<sup>c</sup>*, Inst. pl. *orovk<sup>c</sup>*). It may be derivable from the PIE relative pronoun stem \*yo- under the assumption that \*y- was lost (perhaps in unstressed position before \*o, see above).

The reflexive construction is usually formed with *anjn* (Gen. sg. *anjin*) ‘person’ and the reflexive possessive *iwr* ‘own, *suus*’:

*yaytn-eac<sup>c</sup> z-anjn iwr*  
 reveal-AOR.3SG ACC-person his.own  
 “He revealed himself”

There are two reciprocal pronouns, *irears* (acc. pl.) ‘each other’ and *mimeans* (acc. pl.) ‘one another’:

*zi sir-ic<sup>c</sup>ēk<sup>c</sup> z-mimean-s*  
 so.that love-SUBJ.PRES.2PL ACC-one.another-ACC.PL  
 “So that you may love one another”

## ADJECTIVES

Adjectives are morphologically not distinguished from nouns. We saw above that they do not agree with the head noun in gender (since there is no gender), and case agreement is rare and syntactically constrained. Generally, preposed adjectives in the NP are unmarked for case and number, i.e. there is no agreement:

*nor vima-w-k<sup>c</sup>*  
 new stone-INST-PL  
 ‘with new stones’

Postposed adjectives are usually marked for number and case:

*išxan-ac<sup>c</sup> imastu-ac<sup>c</sup>*  
 prince-GEN.PL wise-GEN.PL  
 ‘of wise princes’

There is no synthetic comparative or superlative. The comparative is expressed analytically with the adverbs *k<sup>c</sup>an* ‘more’, *coaweli* ‘more’, *arawel* ‘more’, *ews* ‘yet, still, even’, and the superlative usually with the construction involving *amenayn* and *amenek<sup>c</sup>ean* ‘all, every’:

*hzawragoyn k<sup>c</sup>an z-na*  
 very.strong than acc-he  
 ‘stronger than he’

*or p<sup>c</sup>rk<sup>c</sup>rik-n ē y-amensean i jez*  
 who small-DEF is of-all among you  
 ‘whoever is the smallest among you’

Analytic comparative and superlative constructions predominate in the languages of the Caucasus.

Intensive forms of adjectives can be formed with the suffix *-a-goyn*, e.g. *imastun* ‘wise’ vs. *imastnagoyn* ‘very wise’, *bari* ‘good’ vs. *baregoyn* ‘very good’.

## NUMERALS

Here are the numerals from 1 to 10: *mi*, *erku*, *erek<sup>c</sup>*, *č<sup>c</sup>ork<sup>c</sup>*, *hing*, *vec<sup>c</sup>*, *ewt<sup>c</sup>n*, *ut<sup>c</sup>*, *inn*, *tasn*. Although this is not obvious at first sight, their forms are inherited from PIE: *mi* ‘1’ < \*smi-yo- (cf. G *mía* ‘one’ (f.)), *erku* ‘2’ < \*dwoh<sub>1</sub> (cf. L *duo*, OCS *dъva*, etc.), *erek<sup>c</sup>* ‘3’ < \*treyes (L *trēs*, OCS *trъje*, etc.), *č<sup>c</sup>ork<sup>c</sup>* ‘4’ < \*k<sup>w</sup>etwores (L *quattuor*, OCS *četyre*, etc.; in Armenian, the word-initial \*k<sup>c</sup> was perhaps lost by dissimilation), *hing* ‘5’ < \*penk<sup>w</sup>e (G *pénte*, L *quinque*, etc.), *vec<sup>c</sup>* ‘6’ < \*(k’s)wek’s (L *sex*, G *héc*; word-initial \*sw- is attested in W *chwech* and the loss of initial \*k<sup>c</sup> < \*sw- in Arm. *vec<sup>c</sup>* may be due to dissimilation), *ewt<sup>c</sup>n* ‘7’ < \*septm (L *septem*, G *heptá*, etc.), *ut<sup>c</sup>* ‘8’ < \*h<sub>3</sub>ek’toh<sub>1</sub>, (L *octō*, OIr. *ocht*, etc.; Arm. *u-* points to initial \*ō, perhaps by metathesis from \*h<sub>3</sub>e- > \*eh<sub>3</sub>-), *inn* ‘9’ < \*(h<sub>1</sub>)newn (G *ennéa*, L *novem*), *tasn* ‘10’ < \*dek’m(t) (L *decem*, G *déka*, etc.).

The numerals from one to four are inflected according to the following pattern:

	‘one’	‘two’	‘three’	‘four’
<b>N</b>	<i>mi</i>	<i>erku</i> , <i>erkuk<sup>c</sup></i>	<i>erek<sup>c</sup></i>	<i>č<sup>c</sup>ork<sup>c</sup></i>
<b>Acc</b>	<i>mi</i>	<i>erkus</i>	<i>eris</i>	<i>č<sup>c</sup>ors</i>
<b>G</b>	<i>mioy</i> , <i>mioj</i>	<i>erkuc<sup>c</sup></i>	<i>eric<sup>c</sup></i>	<i>č<sup>c</sup>oric<sup>c</sup></i>
<b>D</b>	<i>mium</i> , <i>mioj</i>	<i>erkuc<sup>c</sup></i>	<i>eric<sup>c</sup></i>	<i>č<sup>c</sup>oric<sup>c</sup></i>
<b>L</b>	<i>mium</i> , <i>mioj</i>	<i>erkus</i>	<i>eris</i>	<i>č<sup>c</sup>ors</i>
<b>Abl</b>	<i>mioy</i> , <i>miojē</i>	<i>erkuc<sup>c</sup></i>	<i>eric<sup>c</sup></i>	<i>č<sup>c</sup>oric<sup>c</sup></i>
<b>I</b>	<i>miov</i>	<i>erkuk<sup>c</sup></i>	<i>eriwk<sup>c</sup></i>	<i>č<sup>c</sup>oriwk<sup>c</sup></i>

The higher numerals are normally uninflected, but they take on the case endings of the G, D, Abl. and I when they follow the noun in an NP, e.g. *ayr hngac<sup>c</sup>* ‘from the five men’ (Abl.). Here are the numerals from 11 to 20:

- 11 - *metasan* (< \*mi a tasan ‘one and ten’)
- 12 - *erko-tasan*
- 13 - *erek<sup>c</sup>-tasan*
- 14 - *č<sup>c</sup>orek<sup>c</sup>-tasan*
- 15 - *hnge-tasan*
- 16 - *veš-tasan*
- 17 - *ewt<sup>c</sup>n ew tasn* (‘seven and ten’)
- 18 - *ut<sup>c</sup> ew tasn*
- 19 - *inn ew tasn*
- 20 - *k<sup>c</sup>san* (< \*dwi-dk’mtiH, cf. G *eíkosi*, L *vigintī*)

The tens are old compounds with the element \*sun < \*-k’omt-, e.g. *eresun* ‘30’ < \*eri-a-sun, *k<sup>c</sup>arasun* ‘40’, *yisun* ‘50’, *vat<sup>c</sup>sun* ‘60’, *ewt<sup>c</sup>anasun* ‘70’, *ut<sup>c</sup>sun* ‘80’, *innsun* ‘90’.

The hundreds are formed by adding the suffix *-(h)ariwr* ‘100’ (from *hariwr* ‘100’) to simple numerals from 1 to 10, e.g. *erkeriwr* ‘200’, *erek<sup>c</sup>hariwr* ‘300’, *č<sup>c</sup>orek<sup>c</sup>hariwr* ‘400’, etc. The word for ‘1000’ *hazar* is an Iranian loanword (MPers. *hazār*).

The ordinal numerals are formed by adding the suffix *-rord* (for numerals 1-4), or *-erord* (for numerals higher than 5), e.g. *erord* ‘third’, *vec<sup>c</sup>erord* ‘sixth’. The ordinal *araĵin* ‘first’ is derived from *araĵ* ‘before’. There are also collective numerals formed with the suffix *-k<sup>c</sup>ean*, distributives formed by reduplication (*mi mi* ‘by one’), etc.

## VERBS

The verbal system is significantly simplified, when compared to the reconstructed PIE.<sup>23</sup> Like the nominals, verbs have also lost the dual in Armenian. The optative was also lost, so that only indicative, subjunctive, and imperative moods remain. Subjunctive (especially aorist subjunctive) is also usually used instead of the future.

There are two aspects, *present* and *aorist*. Each Armenian verb has a present stem and an aorist stem, the PIE perfect being lost with very few traces.

There are two diatheses, active and mediopassive. They are clearly distinguished in the aorist, less so in the present tense. Many present tense forms can have both the passive and the (medio-)passive interpretation, and only in the active presents in *-e* do we find a systematic opposition to the mediopassive presents in *-i-*, cf. *berem* ‘I carry’ vs. *berim* ‘I am being carried’. The marker *-i-* in the present mediopassive is certainly derived from the PIE ‘stative’ suffix *\*-eh<sub>1</sub>-* (cf. L *maneo*, *manēre* ‘remain’, or OCS *bъděti* ‘be awake’ < *\*b<sup>h</sup>ud<sup>h</sup>-eh<sub>1</sub>-* vs. the causative *buditi* < *\*b<sup>h</sup>owd<sup>h</sup>-eye-*).

Armenian also has an imperfect, which is an isogloss it shares with Greek and Indo-Iranian. Like Greek, Indo-Iranian, and Phrygian, it also has an augment, which is added to the monosyllabic verb stems in the aorist (sometimes these forms are continuants of the PIE imperfect), cf. Arm. *e-ber*, imperfect to *berem* ‘I bring’ (G present *phérō*, imperfect *é-pheron*).

There are remarkably few traces of the PIE perfect, e.g. Arm. *goy* ‘there is’ < PIE *\*h<sub>2</sub>wos-e* (OE *was*, cf. also Hitt. *huišzi* ‘lives’ < PIE *\*h<sub>2</sub>wes-ti*).

The following table shows which verbal categories are formed from the present and the aorist stems:

present stem	aorist stem
present indicative	aorist indicative (active and mediopassive)
imperfect	
present subjunctive	aorist subjunctive

<sup>23</sup> For Indo-Europeanists, the fundamental study of the Armenian verbal system is Klingenschmitt 1982, cf. also Jasanoff 1979.

present imperative (prohibitive)	(aorist) imperative
infinitive	
(some participles)	participle

## PRESENT

The present stem is used to form the indicative and subjunctive present, as well as the imperative present, the imperfect and the infinitive. It is usual to divide the Armenian verbs into five conjugations according to the stem vowel: 1. e-conjugation (type *sirem* ‘I love’, 2. i-conjugation (type *sirim* ‘I am being loved’), 3. a-conjugation (type *lam* ‘I cry’), 4. u-conjugation (type *hehum* ‘I pour’), and the very small o-conjugation (ancient perfects, type *gom* ‘I am there’). The e-conjugation verbs are mostly PIE thematic presents (*berem* ‘I carry’ < PIE \*b<sup>h</sup>er-e/o-, G *phérō*), but there are also some denominals and causatives in \*-eye- (Arm. *gorcem* ‘I work’ < \*worg’eye-). This group also includes some verbs with the complex suffix *-an-e-*; these verbs come from PIE infixed presents, where the infix was metathesized and became a suffix (Arm. *lk<sup>c</sup>anem* ‘I leave’ < PIE \*li-n-k<sup>w</sup>-, L *linquo*, Arm. *lizanem* ‘I lick’, cf. L *lingo*). The i-conjugation verbs includes the reflexes of PIE statives in \*-eh<sub>1</sub>-, e.g. Arm. *nstim* ‘sit’ (cf. L *sedeo*, *sedēre*); some are built with the very productive present suffix *-č<sup>c</sup>i-*, e.g. Arm. *hangč<sup>c</sup>im* ‘I rest’. The a-verbs include deverbatives built with the suffix \*-eh<sub>2</sub>-, e.g. Arm. *mnam* ‘I remain’ (cf. L *maneo*, *manēre*, with the PIE stative suffix \*-eh<sub>1</sub>-), but also some old athematic presents, e.t. *tam* ‘I give’ < PIE \*deh<sub>3</sub>- (OCS *damъ*); the u-verbs are often built with the suffix *-nu-* from PIE \*-new-/nu-, e.g. Arm. *z-genum* ‘I dress’ < \*wes-nu- (G *hénnyμι*).

Indicative present active of *sirem* ‘I love’:

singular	plural
1. <i>sire-m</i>	<i>sire-mk<sup>c</sup></i>
2. <i>sire-s</i>	<i>sirēk<sup>c</sup></i> < *sire-yk <sup>c</sup>
3. <i>sirē</i> < *sire-y	<i>sire-n</i>

Indicative present of *lam* ‘I cry’:

1. <i>la-m</i>	<i>la-mk<sup>c</sup></i>
2. <i>la-s</i>	<i>la-yk<sup>c</sup></i>
3. <i>la-y</i>	<i>la-n</i>

Indicative present of *hayim* ‘I look’:

1. <i>hayi-m</i>	<i>hayi-mk<sup>c</sup></i>
2. <i>hayis</i>	<i>hayi-k<sup>c</sup></i>
3. <i>hayi</i>	<i>hayi-n</i>

Indicative present of *argelum* ‘I hinder’:

- |                    |                              |
|--------------------|------------------------------|
| 1. <i>argelu-m</i> | <i>argelu-mk<sup>c</sup></i> |
| 2. <i>argelu-s</i> | <i>argelu-k<sup>c</sup></i>  |
| 3. <i>argelu</i>   | <i>argelu-n</i>              |

Some verbs can form their presents in more than one way. Particularly important is the variation between e-presents and i-presents, where the latter are generally intransitive and often formed as mediopassives to presents of other conjugations, cf., e.g. *varem* ‘I lead’ vs. *varim* ‘I am being led, I behave’, *čanač<sup>c</sup>em* ‘I know’ vs. *čanač<sup>c</sup>im* ‘I am known’, or *patmen* ‘They tell’ vs. *patmin* ‘(Things) are told’. Some verbs are deponents, in that they only have the mediopassive forms, e.g. *erknč<sup>c</sup>im* ‘I fear’ (aor. *erkeay*, also with mediopassive morphology). Note that verbs with present stems in *-a-* and *-u-* cannot express the mediopassive (they do *not* alternate with the *-i-* verbs), hence a transitive verb such as *kardam* is actually ambiguous: it can mean both ‘I call’ and ‘I am called’.

The origin of the present endings is only partially understood. In the 1st person sg. *-m* is from PIE athematic *\*-mi* (OCS *jes-mь*, Skt. *ás-mi* ‘I am’, etc.). The 2nd person sg. *-s* is perhaps abstracted from the 2nd person sg. of the verb ‘to be’ (Arm. *es*), where it is regular (from *\*h<sub>1</sub>es-si* > Skt. *ási*), and the 3rd person singular can be from *\*-ti* with the regular development of *\*t* > *y* between vowels. In the plural, the element *-k<sup>c</sup>* is presumably the same plural marker as in the N pl. of nouns. In the 1st person pl. we find *-m* < *\*-mes*, *\*-mos* (L *-mus* in *legi-mus* ‘we read’), in the 2nd person pl. the element *-y-* may be from *\*-te-* (L *-tis* in *legi-tis*), and in the 3rd person pl. the ending *-n* is from PIE *\*-nti* (Skt. *bhára-nti*, L *feru-nt* ‘they carry’). In e-verbs, this must be analogical after the other present classes, since *\*e* was regularly raised to *i* before *\*n* in Armenian (see above).

## PRESENT SUBJUNCTIVE

The present subjunctive is formed agglutinatively, by adding the clearly segmentable suffix *-ic<sup>c</sup>-* to the present stem; this is followed by the suffixes *-i-*, *-u-* and *-e-* for verbs with the present stem in *-im*, *-um* and *-em*; verbs with the present stem in *-am* form subjunctive present in *-ic<sup>c</sup>-em*, e.g. *lam* ‘cry’ has the subjunctive *layc<sup>c</sup>em* (< *\*la-ic<sup>c</sup>-em*). Unlike in the indicative, such verbs can also form the passive subjunctive in *-ic<sup>c</sup>-im*, e.g. *alam* ‘grind’ has the active subjunctive *alayc<sup>c</sup>em* and passive subjunctive *alayc<sup>c</sup>im*. The endings are basically the same as in the present indicative:

*sirem* ‘I love’

- |                                 |   |
|---------------------------------|---|
| 1. <i>sir-ic<sup>c</sup>-em</i> | <i>sir-ic<sup>c</sup>-emk<sup>c</sup></i> |
| 2. <i>sir-ic<sup>c</sup>-es</i> | <i>sir-ic<sup>c</sup>-ēk<sup>c</sup></i>  |
| 3. <i>sir-ic<sup>c</sup>-ē</i>  | <i>sir-ic<sup>c</sup>-en</i>              |

*xorhim* ‘I think’

- |                                |  |
|--------------------------------|--|
| 1. <i>horxic<sup>c</sup>im</i> | <i>horxic<sup>c</sup>imk<sup>c</sup></i> |
| 2. <i>horxic<sup>c</sup>is</i> | <i>horxic<sup>c</sup>ik<sup>c</sup></i>  |

3. *horxic<sup>i</sup>*                      *horxic<sup>i</sup>n*

*t<sup>o</sup>lum* ‘I leave’ (note that *-u-* + *-ic<sup>c</sup>-* > *-uc<sup>c</sup>-*)

- |  |  |
|--|--|
| 1. <i>t<sup>o</sup>luc<sup>c</sup>um</i> | <i>t<sup>o</sup>luc<sup>c</sup>umk<sup>c</sup></i> |
| 2. <i>t<sup>o</sup>luc<sup>c</sup>us</i> | <i>t<sup>o</sup>luc<sup>c</sup>uk<sup>c</sup></i>  |
| 3. <i>t<sup>o</sup>luc<sup>c</sup>u</i>  | <i>t<sup>o</sup>luc<sup>c</sup>un</i>              |

The present subjunctive is used to express a possible, or desired action, and it can also express an order, especially in the 3rd person where the imperative form is lacking, e.g. *beric<sup>c</sup>ē* may be used to mean “let him bring”. The endings of the subjunctive have the same origin as in the indicative present; they are agglutinated to the subjunctive suffix. The suffix *-ic<sup>c</sup>-* appears to be the agglutinated present subjunctive of *em* ‘to be’ < PIE \*h<sub>1</sub>es-; PIE \*h<sub>1</sub>es-e- would yield Arm. *-i-* regularly, and the element *-c<sup>c</sup>-* may be derived from PIE \*-sk’-, but it is unclear why this should have become a marker of the subjunctive. The present-stem suffix \*-sk’- has the inchoative function in a number of languages (cf. L *senesco* ‘to become aged’, *proficiscor* ‘to set out, start’, etc.). It is at least conceivable that the subjunctive function developed from the inchoative.

#### IMPERFECT

The imperfect is formed from the present stem by adding a distinctive set of endings.

*sirem* ‘I love’

- |                                  |                            |
|----------------------------------|----------------------------|
| 1. <i>sire-i</i>                 | <i>sire-ak<sup>c</sup></i> |
| 2. <i>sire-ir</i>                | <i>sire-ik<sup>c</sup></i> |
| 3. <i>sirēr</i> < <i>sire-yr</i> | <i>sire-in</i>             |

*lam* ‘I cry’

- |                 |                          |
|-----------------|--------------------------|
| 1. <i>layi</i>  | <i>layak<sup>c</sup></i> |
| 2. <i>layir</i> | <i>layik<sup>c</sup></i> |
| 3. <i>layr</i>  | <i>layin</i>             |

*t<sup>o</sup>lum* ‘I leave’

- |                             |                                      |
|-----------------------------|--------------------------------------|
| 1. <i>t<sup>o</sup>lui</i>  | <i>t<sup>o</sup>luak<sup>c</sup></i> |
| 2. <i>t<sup>o</sup>luir</i> | <i>t<sup>o</sup>luik<sup>c</sup></i> |
| 3. <i>t<sup>o</sup>luyr</i> | <i>t<sup>o</sup>luin</i>             |

The origin of the imperfect endings is disputed. Some scholars derive the suffix *-i-* from the PIE optative suffix \*-yeh<sub>1</sub>-/ \*-ih<sub>1</sub>- (the type of Skt. *syāt*, OL *siēt* ‘may he be’), and it has been proposed that the 3 sg. ending *-yr-* is originally the medial PIE ending \*-tor (cf. L *amātur* ‘is being loved’), but it is unclear why it should have ended up in the imperfect paradigm. If PIE. \*-swe yields Arm. *-r*, the 2<sup>nd</sup> person sg. ending

could be from PIE secondary \*-s and a postposed particle \*-we. This is, of course, just a speculation.

Imperfective does not distinguish active and mediopassive (the distinction arises in post-Classical Armenian).

## IMPERATIVE PRESENT

There are special forms only in the 2nd person sg. and pl.:

2sg. <i>sire-r</i> ‘love!’	2pl. <i>sirēk<sup>c</sup></i>
2sg. <i>la-r</i> ‘cry!’	2pl. <i>la-yk<sup>c</sup></i>

The ending *-r* of the imperative present is unclear; Meillet saw it as a reflex of some particle comparable to G *rha*. However, if PIE \*-sw- yields Arm. *-r-* (which is far, far from established fact), it is possible that the Armenian ending comes from PIE medial imperative \*-swe (cf. Skt. *bhārasva*, L *sequere*, see the Arm. imperfect paradigm for a possible parallel sound development). The plural ending is the same as in the indicative and may be from PIE \*-te- with the added plural morpheme *-k<sup>c</sup>*.

The imperative present is only used in prohibitions; in positive imperative sentences the imperative aorist is used (see below). There is also a special prohibitive negation, Arm. *mi* < PIE \*meh<sub>1</sub> (Skt. *mā*, Alb. *mos*, etc.). The combination of a special prohibitive verbal form and the special prohibitive negation is typical of Caucasian languages, and in Armenian it is likely to be inherited from PIE.

## AORIST

The aorist expresses not only the past tense, but also the perfective action (that the action of the verb has been accomplished fully). The following categories are derived from the aorist stem: indicative aorist, aorist subjunctive, aorist imperative and mediopassive aorist.

There are two major types of aorist: the strong aorist (without the suffix) and the weak aorist (with the suffix *-c<sup>c</sup>-*). The latter suffix has been derived from PIE \*-sk'- (cf. the Greek dialectal imperfects and aorists with iterative value in *-esk-*, e.g. Hom. *ídeske* ‘he was accustomed to see’ < \*wid-e-sk'-e-t). However, as there are otherwise no traces of the PIE sigmatic aorist in Armenian, it is at least possible that the weak aorist suffix *-c<sup>c</sup>-* is the regular reflex of word-final \*-s-t, where \*-s- was the suffix of the sigmatic aorist (as in G *édeiksa* ‘I showed’, L *dīxī* ‘I said’ < \*deyk'-s-), and \*-t was the 3<sup>rd</sup> person sg. secondary (aorist) ending. The reflex *-c<sup>c</sup>* may have been re-interpreted as a stem formant and extended to the other persons in the paradigm; note that there is a typological parallel to this development in Old Irish, where the t-preterite (the type *bert* ‘he carried’) was created in a similar manner from the sigmatic aorist (by ‘Watkins’ law’). The problem with this explanation is, admittedly, that there are no other known cases of the development of word-final \*-st in Armenian (word-medially \*-st- remains in Armenian, as in Arm. *z-gest* ‘clothes’ < \*westu-, cf. L *vestis*, Goth. *wasti*).

The strong aorist stem generally corresponds to the thematic aorist found in other IE languages, e.g. \*lik<sup>w</sup>e > G *élipē* ‘he left’ (Arm. *e-lik<sup>c</sup>*). This formation was rare in PIE itself, but it became productive in individual languages, such as Greek, Armenian and Slavic. It developed from the PIE root aorist, which had been formed by adding the aorist endings directly to the root, which had the full grade in the singular and the zero-grade in the plural. In Armenian, either the zero-grade or the full grade was generalized in the Aorist stem. The zero-grade of the root is preserved, e.g. in the aorists *e-barj* ‘lifted up’ < \*b<sup>h</sup>rg<sup>h</sup>- (Skt. *bṛhant-* ‘high’), *e-lu* ‘heard’ < \*k<sup>l</sup>uw- (Skt. *á-śro-t*, with the full-grade), and the aforementioned *e-lik<sup>c</sup>* ‘left’. The full-grade of the root is preserved, e.g., in *e-boyc* ‘fed’ < \*b<sup>h</sup>ewg<sup>h</sup>- (Skt. *bhójam*, Injunctive 1sg.), *e-gel* ‘wound’ < \*wel- (cf. L *volvo* ‘turn’).

It is difficult to predict the exact shape of the aorist stem from the present stem; here are a few common combinations: 1. e-present (*ber-em* ‘I carry’) and strong root-aorist (*ber-i*); a subtype of this set is the combination of the presents with the suffix *-an-* and the strong root-aorist (e.g. *lk<sup>c</sup>-an-em* ‘I leave’ vs. aor. *lk<sup>c</sup>-i*); 2. e-present (*as-em* ‘I say’) and aorist in *-ac<sup>c</sup>-* (*as-ac<sup>c</sup>-i*), 3. i-present (*nst-im* ‘I sit’ and strong aorist in *-ay* (*nst-ay*), 4. a-present (*al-am* ‘I grind’) and weak aorist in *-ac<sup>c</sup>-* (*al-ac<sup>c</sup>-i*), 5. u-present (*zen-um* ‘I sacrifice’) and strong (root) aorist (*zen-i*), 6. u-present (*l-n-um* ‘I fill’) and weak aorist in *-c<sup>c</sup>i-* (*l-c<sup>c</sup>i*), etc.

The verb *berem* ‘I carry’ is inflected in the indicative aorist as follows:

sg.	pl.
1. <i>ber-i</i>	<i>ber-ak<sup>c</sup></i>
2. <i>ber-er</i>	<i>ber-ēk<sup>c</sup></i>
3. <i>e-ber</i>	<i>ber-in</i>

This is the paradigm of *sirem* ‘I love’, which has the weak aorist:

1. <i>sire-c<sup>c</sup>-i</i>	<i>sire-c<sup>c</sup>ak<sup>c</sup></i>
2. <i>sire-c<sup>c</sup>-er</i>	<i>sire-c<sup>c</sup>-ēk<sup>c</sup></i>
3. <i>sire-a-c<sup>c</sup></i>	<i>sire-c<sup>c</sup>-in</i>

Besides the active aorist, there is also the (**medio-**)**passive aorist** which can be formed from all verbs (not just the *-im* verbs, as in the present) by adding the special set of endings:

sg.	pl.
1. <i>ber-ay</i>	<i>ber-ak<sup>c</sup></i>
2. <i>ber-ar</i>	<i>ber-ayk<sup>c</sup></i>
3. <i>ber-aw</i>	<i>ber-an</i>

sg.	pl.
1. <i>sirec<sup>c</sup>-ay</i>	<i>sirec<sup>c</sup>-ak<sup>c</sup></i>
2. <i>sirec<sup>c</sup>-ar</i>	<i>sirec<sup>c</sup>-ayk<sup>c</sup></i>
3. <i>sirec<sup>c</sup>-aw</i>	<i>sirec<sup>c</sup>-an</i>

Note that the 1. pl. form is the same in the active and passive paradigms.

This is the aorist of *usanim* ‘learn’; the verb loses the present-stem suffix in the aorist, and the endings are passive:

- |                |                          |
|----------------|--------------------------|
| 1. <i>usay</i> | <i>usak<sup>c</sup></i>  |
| 2. <i>usar</i> | <i>usayk<sup>c</sup></i> |
| 3. <i>usaw</i> | <i>usan</i>              |

The augment *e-* is added only to monosyllabic forms of the 3rd person singular. Apparent counter-examples like *gnac<sup>c</sup>* ‘went’ had “schwa” between the initial consonants, i.e. they were bisyllabic (the pronunciation was [gənac]). The vowel-initial monosyllabic aorists are not augmented (cf. *ac* ‘he drove’, aorist to *acem* ‘drive’) and we do not find the augment in the ‘weak’ aorist. It is the same element found in G *e-* and Skt. *a-* of (dialectal) PIE origin (PIE \**h<sub>1</sub>e-*), cf. G aorist *élipē*, Skt. *a-ricat* and Arm. *e-lik<sup>c</sup>* < \**h<sub>1</sub>lik<sup>w</sup>e*.

Of all the endings of the Armenian aorist, only the 3rd person singular and plural are reasonably clear; these are the PIE secondary endings, used in the PIE aorist and imperfect, i.e. Arm. *eber* < \**h<sub>1</sub>eb<sup>b</sup>er-e-t* (Skt. imperfect *ábharat*), Arm. *berin* < \**b<sup>h</sup>erent* (Skt. imperfect *ábharan*). The 2nd person sg. ending *-er* could, in principle, be the same as the present imperative 2sg. ending, provided it comes from the PIE middle imperative \**-swe* (see above). This is, however, a very bold speculation, since there is no other evidence for the change of word-final \**-swe* to Arm. *-r*, and in other positions \**sw* is reflected as Arm. *k<sup>c</sup>*.

Here are the aorist paradigms of the irregular verbs *gam* ‘come’ *tam* ‘give’, *dnem* ‘put’, and *linim* ‘become’:

<b>1 Sg.</b>	<i>eki</i>	<i>etu</i>	<i>edi</i>	<i>elē</i>
<b>2</b>	<i>ekir</i>	<i>etur</i>	<i>edir</i>	<i>eler</i>
<b>3</b>	<i>ekn</i>	<i>et</i>	<i>ed</i>	<i>elew</i>
<b>1 Pl.</b>	<i>ekak<sup>´</sup></i>	<i>tuak<sup>´</sup></i>	<i>edak<sup>´</sup></i>	<i>eleak<sup>´</sup></i>
<b>2</b>	<i>ekik<sup>´</sup></i>	<i>etuk<sup>´</sup></i>	<i>edik<sup>´</sup></i>	<i>elēk<sup>´</sup></i>
<b>3</b>	<i>ekin</i>	<i>etum</i>	<i>edin</i>	<i>elen</i>

## AORIST SUBJUNCTIVE

The aorist subjunctive is formed, parallelly to the present subjunctive, by adding the suffix *-(i)c<sup>c</sup>-* to the aorist stem:

sg.		pl.
1.	<i>ber-ic<sup>c</sup></i>	<i>ber-c<sup>c</sup>-uk<sup>c</sup></i>
2.	<i>ber-c<sup>c</sup>-es</i>	<i>ber-ĵ-ik<sup>c</sup></i>
3.	<i>ber-c<sup>c</sup>-ē</i>	<i>ber-c<sup>c</sup>-en</i>

sg.		pl.
	1. <i>sirec<sup>c</sup>-ic<sup>c</sup></i>	<i>sires-c<sup>c</sup>uk<sup>c</sup></i>
	2. <i>sires-c<sup>c</sup>es</i>	<i>sires-ĵik<sup>c</sup></i>
	3. <i>sires-c<sup>c</sup>ē</i>	<i>sires-c<sup>c</sup>en</i>

The mediopassive forms of the aorist subjunctive have the mediopassive endings:

sg.		pl.
	1. <i>berayc<sup>c</sup></i>	<i>berc<sup>c</sup>uk<sup>c</sup></i>
	2. <i>berc<sup>c</sup>is</i>	<i>berĵik<sup>c</sup></i>
	3. <i>berc<sup>c</sup>i</i>	<i>berc<sup>c</sup>in</i>

sg.		pl.
	1. <i>sirec<sup>c</sup>ayc<sup>c</sup></i>	<i>siresc<sup>c</sup>uk<sup>c</sup></i>
	2. <i>siresc<sup>c</sup>is</i>	<i>siresĵik<sup>c</sup></i>
	3. <i>siresc<sup>c</sup>i</i>	<i>siresc<sup>c</sup>en</i>

The aorist stem suffix  $-c^c-$  becomes  $-s-$  before another  $-c^c-$ , and this is usually interpreted as dissimilation (see above); however, if Armenian weak aorist is actually a development of PIE sigmatic aorist (see the preceding chapter), then it is possible that  $-s-$  in the subjunctive of the weak aorist stems is actually an archaism. In the 2<sup>nd</sup> person plural of the verbs with the weak aorist stem, it is possible that  $*c^c c^c$  is dissimilated as  $sĵ$  before  $*i$ , as in *siresĵik<sup>c</sup>* ‘may you love’ <  $*sirec^c c^c ik^c$ . In that case the ending in *berĵik<sup>c</sup>* ‘may you carry’ is analogical.

The aorist subjunctive is used to express the future tense, but it can also express desire or intention:

*Astuač oč<sup>c</sup> mořasc<sup>c</sup>i*                      *z-uxt*                      *har-c<sup>c</sup>-n*                      *k<sup>c</sup>o-c<sup>c</sup>*  
 Lord not forget.3SG.AOR.SUBJ ACC.-covenant      father-GEN.PL-DEF your-GEN  
 “Lord will not forget the covenant of your fathers”

*harc<sup>c</sup>ic<sup>c</sup>*                      *inč<sup>c</sup>*                      *z-jez*  
 ask.AOR.SUBJ.1SG something ACC-you  
 “I want to ask you something” (Lucas, XV, 23)

In the Armenian Bible translation, it is used as an equivalent of both Greek present and aorist subjunctives.

In purpose clauses the subjunctive (both aorist and present subjunctive) is usually introduced by the preposition *zi* ‘so that’:

*mi datēk<sup>c</sup>,*                      *zi*      *mi*                      *datišĵik<sup>c</sup>*  
 not judge.2PL.IPV that not                      judge.2PL.PASS.SUBJ.AOR  
 “Do not judge lest you be judged”

## AORIST IMPERATIVE

The aorist imperative has, like the present imperative, only the forms of the 2nd person sg. and pl.

2sg. <i>ber</i> ‘carry’	<i>sirea</i> ‘love!’
2pl. <i>berēk<sup>c</sup></i>	<i>sirec<sup>c</sup>ēk<sup>c</sup></i>

Occasionally one also finds mediopassive imperative forms such as *ber-ir* ‘may you be carried’, but these are rare in the texts.

The aorist imperative is regularly used as the positive imperative (in prohibitions the present imperative is used, see above). The form of the 2 sg. is inherited from the PIE imperative, i.e. Arm. *ber* < PIE \*b<sup>h</sup>ere (G *phére*, Skt. *bhára*).

## MEDIOPASSIVE AORIST

Most transitive verbs form a mediopassive aorist, while in the present only some have the mediopassive forms (these are the i-conjugation verbs). The mediopassive aorist is formed by adding a special set of endings to the aorist stem.

sg.

1. <i>ber-ay</i>	<i>sire-c<sup>c</sup>-ay</i>
2. <i>ber-ar</i>	<i>sire-c<sup>c</sup>-ar</i>
3. <i>ber-aw</i>	<i>sire-c<sup>c</sup>-aw</i>

pl.

1. <i>ber-ak<sup>c</sup></i>	<i>sire-c<sup>c</sup>-ak<sup>c</sup></i>
2. <i>ber-ayk<sup>c</sup></i>	<i>sire-c<sup>c</sup>-ayk<sup>c</sup></i>
3. <i>ber-an</i>	<i>sire-c<sup>c</sup>-an</i>

The endings of the mediopassive aorist are mostly unclear in terms of their origin. The 1st person sg. may well be from PIE 1 sg. middle \*-h<sub>2</sub>ey (Skt. *-e* in *bhar-e*, G. *-may* in *phéro-mai* with secondary *-m-*). If so, the vowel *-a-* may be analogical in the other endings in the paradigm. If *-a-* is originally a suffix, this formant may be compared with the Baltic preterite suffix \*-ā- < \*-eh<sub>2</sub>-, cf. Lith. *buv-o* ‘he was’, *buvome* ‘we were’, *liko* ‘he left’, *likome* ‘we left’, etc.

## IRREGULAR AND DEFECTIVE VERBS

The verb *em* ‘to be’ is defective. It forms the present and imperfect quite regularly, but forms derived from the aorist stem do not exist. Instead of them, forms of *linim* ‘become’ are used. Similarly, *goy* ‘there is, are’ has only the present, and *gog-* ‘speak’ only the imperative (2sg. *gog*) and subjunctive (2sg. *gog<sup>c</sup>es*).

present	imperfect
sg.	

1. *em*            *ei*
2. *es*            *eir*
3. *ē*             *ēr*

pl.

1. *emk<sup>c</sup>*        *eak<sup>c</sup>*
2. *ēk<sup>c</sup>*         *eik<sup>c</sup>*
3. *en*            *ein*

Suppletive verbs include *utem* ‘I eat’ (< perf. \*h<sub>1</sub>eh<sub>1</sub>od-, cf. L *edo*, G *édomai* < \*h<sub>1</sub>ed-), aor. *keray* (< \*g<sup>w</sup>erh<sub>3</sub>-, cf. L *voro*, G *bibrōskō*), *əmpem* ‘I drink’ (< \*peh<sub>3</sub>-, cf. OCS *piti*, L *bibo*), aor. *arbi* (< \*srb<sup>h</sup>-, cf. L *sorbeo* ‘suck up’), *gam* ‘I come’, (< \*g<sup>h</sup>eH-, cf. G *kikhānō* ‘reach’, OHG *gān* ‘go’), aor. *eki* (< \*g<sup>w</sup>em-, cf. L *venio*, G *bainō*), *ert<sup>c</sup>am* ‘I go’, aor. *č<sup>c</sup>ogay* (< \*kyow-, cf. Skt. *cyávate*), *unim* ‘I have’ (< PIE perf. \*h<sub>1</sub>eh<sub>1</sub>op-n-, from the root \*h<sub>1</sub>ep- ‘get’, cf. Hitt. *ēpzi* ‘takes’, L *apiscor* ‘reach’, *co-epī* ‘begin’), aor. *kalay*. Arm. *čanač<sup>c</sup>em* ‘I know’ forms the aorist *caneay*, but both are from the PIE \*g<sup>h</sup>nh<sub>3</sub>- ‘know’ (G *gignōskō*), with assimilation in the present stem (*čanač<sup>c</sup>-* < \*canač<sup>c</sup>-).

## THE INFINITIVE

There is only one infinitive formed with the suffix *-l* added to the present stem, e.g. *sirem* ‘love’: inf. *sirel*, *helum* ‘pour’: inf. *helul*.

The infinitive is used after certain verbs such as *sksim* ‘begin to’, *t<sup>c</sup>olum* ‘allow’, *kamim* ‘wish’, *karem* ‘can, be able’, as well as after certain expressions such as *law ē* ‘it is good to’.

Infinitive can be in a subordinate clause and then it takes its subject in the dative:

*oč<sup>c</sup> kami-mk<sup>c</sup>            t<sup>c</sup>agawor-el dma*  
 not want-1PL.PRES    rule-INF        he.DAT  
 “We don’t want him to be king” (Luke 19.14)

A similar construction with infinitives taking dative subjects exists in Old Church Slavic.

## THE PARTICIPLE AND OTHER VERBAL ADJECTIVES

Armenian has only one participle, formed with the suffix *-eal* added to the aorist stem. It makes no distinction between active or passive voice and generally has past tense reference. For example *asac<sup>c</sup>eal* may mean ‘having spoken’ or ‘having been said’ and *bereal* means ‘having carried’. This participle is best interpreted as a verbal adjective meaning, roughly ‘pertaining to the action denoted by the verb’.

The participle with the present of the verb ‘to be’ is used to form a kind of periphrastic perfect, a construction expressing the action which started in the past, but

which is still relevant in the present, e.g. *sireal em* ‘I have loved’, *sireal es* ‘you have loved’, *sireal ē* ‘he/she/it has loved’, etc.

In narration, participles can be used without the auxiliary *em* to express a past action:

*z-ays-u*                      *žamank-aw miaban-eal Alan-k<sup>c</sup>*  
 about-that-INST.SG    time-INST.SG unify-PART Alan-NOM.PL  
 “The Alans were unified about that time”

The Armenian participle is also used in one typologically unusual periphrastic construction with the present of the verb ‘to be’ (*em*), in which the Actor is expressed in the genitive (or with the possessive pronoun), and the Undergoer in the Accusative case:

*gr-eal*                      *ē k<sup>o</sup>*  
 write-PART is your  
 “You wrote”

*gorc-eal*    *ē k<sup>o</sup>*    *z-gorc*  
 work-PART is your ACC-work  
 “You did your work’, ‘Your work is done”

*noc<sup>a</sup>*                      *ber-eal*                      *ē z-šiš-n*  
 they.GEN.PL bring-PART is ACC-flask-ART  
 “They have brought the flask”

This construction is sometimes considered to have arisen under the influence of Caucasian substratum (Solta 1963: 123), but it may also be interpreted as a syntactic Iranianism (Old Persian has constructions with genitive subjects and predicative participles).

The Armenian participle in *-eal* has been compared to Slavic participles in *-lъ*, used in the formation of the periphrastic Slavic perfect (e.g. OCS *neslъ jesmъ* ‘I have carried’). It doubtlessly represents a parallel development of what may originally have been a very productive way of forming deverbal adjectives.<sup>24</sup>

Other verbal adjectives include:

- the necessitative in *-oc<sup>c</sup>*, formed from the infinitive, e.g. *sirel-oc<sup>c</sup>* ‘who should be loved’ (from *sirem* ‘love’). These adjectives are indeclinable and they are comparable to Latin gerundive (*amandus*).
- the verbal adjectives in *-i*, which is also added to the infinitive, e.g. *sireli* ‘desirable’ (from *sirel* ‘to love’), *ereweli* ‘visible’, *goveli* ‘praiseworthy’. These adjectives are declined like the nouns of the type *teli* ‘place’ (Gen. sg. *telwoy*).
- The adjectives in *-ol*, formed from the present stem, e.g. *tesanol* ‘seeing’ (from *tesanem* ‘see’), *karol* ‘able’ (from *karem* ‘be able, can’).

<sup>24</sup> See Stempel 1983.

## THE CAUSATIVE

Like the other languages of the Caucasus, Classical Armenian has a productive morphological pattern of causative formation. Causatives can be formed from both transitive and intransitive verbs by adding the compound suffix  $-uc^c-an-$  <  $*-oy-sk^c-an-$  to the aorist stem, cf., e.g. *usanim* ‘I learn’ vs. *usuc<sup>c</sup>anem* ‘I teach’. In the aorist, the morpheme  $-an-$  is lost, e.g. *molorec<sup>c</sup>uc<sup>c</sup>anem* ‘I lead astray’ vs. aor. *molorec<sup>c</sup>uc<sup>c</sup>i*. Word-finally,  $-uc^c > -oyc^c$ , so the 3<sup>rd</sup> person sg. aor. is *molorec<sup>c</sup>oyc<sup>c</sup>*, cf. also *usuc<sup>c</sup>anem* ‘I teach’, aor. 1sg. *usuc<sup>c</sup>i*, aor. 3sg. *usoyc<sup>c</sup>*.

Here is the paradigm of *usuc<sup>c</sup>anem* ‘teach’:

## Present indicative

sg.	pl.
1. <i>usuc<sup>c</sup>anem</i>	<i>usuc<sup>c</sup>anemk<sup>c</sup></i>
2. <i>usuc<sup>c</sup>anes</i>	<i>usuc<sup>c</sup>anek<sup>c</sup></i>
3. <i>usuc<sup>c</sup>anē</i>	<i>usuc<sup>c</sup>anen</i>

## Aorist indicative

sg.	pl.
1. <i>usuc<sup>c</sup>i</i>	<i>usuc<sup>c</sup>ak<sup>c</sup></i>
2. <i>usuc<sup>c</sup>er</i>	<i>usuc<sup>c</sup>ēk<sup>c</sup></i>
3. <i>usoyc<sup>c</sup></i>	<i>usuc<sup>c</sup>in</i>

A number of verbs with roots in  $-l-$  form the causative with the suffix  $-uzane-$ , e.g. *eluzanem* ‘make exit, go away’, from *elanem* (aor. *el*) ‘go (away)’, *p<sup>c</sup>luzanem* ‘make fall, throw down’ from *p<sup>c</sup>l-am* ‘fall’.

The origin of the causative formation is uncertain.<sup>25</sup> Attempts to derive the causative suffix  $-uz-/uc^c-$  from a compound PIE suffix  $*-ow-$ , to which  $*-sk^c-$  or  $*-g^h-$  would have been added, explain the form, but not the connection with the PIE inchoative  $*-sk^c-$  or any other formant. An analogical formation within Armenian is possible, but complicated: the idea is that the relationship between inherited *mtanem* ‘go in’ < PIE  $*mud-$  and *mucanem* ‘lead in’ < PIE  $*mowd-eye-$  was parallel to *usanim* ‘learn’ < PIE  $*h_1uk-$  (cf. OCS *učiti* ‘learn’) and  $*uc^c-an-e-$  <  $*h_1owk-eye-$  ‘teach’, and that the form *usuc<sup>c</sup>anem* was made to restore the original shape of the root. From this verb (and a handful of similar ones, such as *busuc<sup>c</sup>anem* ‘make grow’ (to *busanim* ‘grow’), the formation would have spread to other verbs.

Besides the morphological causative, there is also a syntactic causative formed with the verb *tam* ‘give’ and the infinitive:

*et tan-el zna ar Herovdēs*  
 give.AOR.3SG lead-INF him to Herod  
 “He had him brought to Herod / He sent him to Herod” (Luke 23.7)

<sup>25</sup> Cf. Meillet 1936: 116, Klingenschmitt 1982: 264ff.

## IMPERSONAL CONSTRUCTION

The third person plural of verbs can be used to express an impersonal construction:

*oč' arkan-en gini nor i tik-s hin-s*  
 not throw-3PL.PRES wine new into wineskin-ACC.PL old-ACC.PL  
 “One does not put new wine into old wineskins”

## ADVERBS

Adverbs of manner are usually identical to the Instrumental case of a noun or adjective, e.g. *bun* ‘nature’ vs. *bunaw* ‘absolutely’, *diwr* ‘easy’ vs. *diwraw* ‘easily’; some are formed by adding the suffix *-pēs* to the nominal stem, e.g. *p<sup>c</sup>oyt<sup>c</sup>* ‘haste’ vs. *p<sup>c</sup>ut<sup>c</sup>apēs* ‘quickly’. Some adjectives can be used as adverbs without a change of form, e.g. *ulil* ‘straight, directly’, cf. also *aysawr* ‘today’, lit. ‘this day (*awr*)’.

Common adverbs of place are *ast* ‘here’ (equivalent to L *hic*), *aydr* ‘there’ (L *istic*) and *and* ‘there’ (L *illic*).

## ADPOSITIONS, CONJUNCTIONS AND PARTICLES

Most Armenian adpositions are prepositions, but a few may also be used as postpositions (e.g. *handerj* ‘with’, which takes the genitive). Several adpositions have different meanings depending on the cases they are used with. Here are the most common ones (with the cases they govern):

	+ Acc.	+ Loc.	+ Inst.	+ Abl.
<i>and</i>	through, along	with	under	
<i>ař</i>	to	beside	beside	
<i>z-</i>	(marks def. object)		around	concerning
<i>i</i>	to, into	in		out of
<i>c<sup>c</sup></i> <i>ast</i>	to, up to on	according to		one after another

The following prepositions govern the genitive case and are derived from adverbs:

*ařaji* ‘in front of, before’; *nedk<sup>c</sup>oy* ‘under, inside’; *artak<sup>c</sup>oy* ‘outside’; *vasn* ‘concerning’; *het* ‘with’; *yet* ‘after, following’; *p<sup>c</sup>oxanak* ‘instead of, for’.

The phrases *i mēj* ‘amidst’ and *i veray* ‘above’ function as circumpositions, i.e. they encompass the governed noun, e.g. *i hroy mēj* ‘into the fire’ (*hroy* is the Gen. sg. of *hur* ‘fire’).

In complex NPs with a noun modified by a demonstrative pronoun, the preposition is regularly repeated before both constituents, e.g. Luke 2.1:

*ənd awurs-n ənd aynosik*  
in days-ART in those  
‘in those days’

The preposition *i* with the ablative is used to express the actor of a passive verb:

*mkrte-in i nmanē*  
baptize-3PL.IPF i he.ABL  
“They were baptized by him” (Matth. 3.6)

There are two negations: the default one, *oč̣*, cognate with G *oukhi* < \*(ne)...h<sub>2</sub>oyu k<sup>w</sup>id ‘(not)...in a lifetime’ and probably Alb. *as*, ‘s. The other one is the prohibitive negation *mi* < PIE \*meh<sub>1</sub> (G *mē*, Skt. *mā*, Alb. *mos*).

The most common conjunctions are:

*ew* ‘and’ (almost every sentence in the Biblical texts begins with this conjunction, cf. G *kaí*)

*kam* ‘or’ (actually a form of the verb *kamim* ‘want’, cf. L *vel* from *volo*, *velle* ‘want’)

*k<sup>c</sup>an* ‘as, like’

*zi* ‘because, so that’ (actually the definitive accusative form of the interrogative/relative pronoun *i-*)

*minč̣(ew)* ‘until, so that’

*t<sup>e</sup>e/et<sup>e</sup>* ‘that’ (used for indirect speech and in dependent clauses), e.g.:

*as-ein, et<sup>e</sup>e du e-s ordi Astuc-oy*  
say-3SG.IPF that you be-2SG.PRES son.NOM.SG god-GEN.SG  
“They said that you were the son of God” (Luc. 4.42)

*oč̣ kamēr et<sup>e</sup>e ok<sup>c</sup> gitas-c<sup>c</sup>-ē*  
not want.3SG.IPF that anyone know-AOR.SUBJ.3SG  
“He did not want anyone to know”

Finally, *et<sup>e</sup>e* means ‘if’, and is used in conditional clauses:

*et<sup>e</sup>e Kamis, karol es*  
if want.2sg.pres able be.2sg.pres  
“If you wish, you can”

*tes-c<sup>c</sup>uk<sup>c</sup> et<sup>e</sup>e gay Elia p<sup>c</sup>rkel z-da*  
see-AOR.SUBJ.2PL if come Elias save.INF ACC.DEF-he  
“Let us see if Elias comes to save him”

## TEXTS

## 1. Vahagn's Birth

This poem from the pre-Christian period is preserved in Mowsēs K<sup>c</sup>orenac<sup>i</sup>'s 'Armenian History'. It was reportedly recited by travelling bards (Arm. *ergič<sup>c</sup>*). The hero Vahagn is none other than the pagan Indo-Aryan thunder god, Skt. *Vṛtra-han-* 'Vrtra-slayer'. This text is taken from Schmitt's handbook (1981) together with the glosses.

*Erknēr erkin, erknēr erkir  
erknēr ew covn cirani;  
erkn i covun unēr ew zkarmrikn elegnik;  
ənd elegan p<sup>c</sup>ol cux elanēr,  
ənd elegan p<sup>c</sup>ol boc<sup>c</sup> elanēr;  
ew i boc<sup>c</sup> oyn vazēr xarteaš patanekik  
na hur her unēr, boc<sup>c</sup> unēr mōrus,  
ew ač<sup>c</sup> kunk<sup>c</sup> n ein aregakunk<sup>c</sup>.*

“The Sky was in labour, the Earth was in labour,  
The purple sea was also in labour;  
Labour caught also a small red reed in the sea.  
Through the reed's tube came a smoke,  
and from the reed's tube came a flame,  
and from the flame a red-haired youth jumped.  
He had fire as hair, flame as beard,  
and his eyes were Suns.”

*erknēr* ‘was in labour’ 3sg. ipf. of *erknem*, denominative of *erkn* ‘birth labours’ < PIE \*h<sub>1</sub>edwōn (G *odýnē*, OIr. *idu*)

*erkin* ‘sky’ Nom. sg.

*erkir* ‘earth’ Nom. sg.

*ew* ‘also’ < PIE \*h<sub>1</sub>epi- ‘on, at’ (G *epí*)

*cov* ‘sea’, -n ‘def. article’; word of probably Urartean origin (see above).

*cirani* ‘purple’

*erkn* ‘labour pains’, see *erknēr* above

*i* ‘in’ < PIE \*en- ‘in’ (L *in*, G *éni*)

*covu-n* L sg. of *cov* ‘sea’ with suffixed article.

*unēr* ‘took’ 3sg. ipf. of *unim* ‘have, hold’

*z-karmrik-n* ‘red’ (Acc. sg.); Nom. sg. is *karmrik*, *z-* is the accusative prefix. This word is a loanword from Iranian, cp. sogd. *krm'yr* ‘red’.

*elegnik* ‘small reed’, diminutive of *elegn* ‘reed’ (n-stem)

*ənd* ‘through’

*p<sup>c</sup>ol* ‘tube’

*cux* ‘smoke’

*elanēr* 3 sg. imperfect of *elanem* ‘come out’

*boc<sup>c</sup>* ‘fire’, etymologically often related to L *focus*, but the connection is difficult (L *focus* is better derived from PIE \*d<sup>h</sup>og<sup>wh</sup>-s ‘burning’, cf. OIr. *daig* ‘fire’, while a root PIE \*b<sup>h</sup>ok- would be violating phonotactic constraints of PIE; moreover, such a root would be reflected as \*bok<sup>c</sup>- in Armenian).

*vazēr* 3 sg. imperfect of *vazem* ‘jump’ (an Iranian loanword, cf. Parthian *wz-* ‘run’)

*xarteaš* ‘red-haired’

*patanekik* diminutive of *pataneak* ‘youth, boy’

*na* ‘he’

*hur* ‘fire’ < PIE \*peh<sub>2</sub>wr (G *p̄ȳr*)

*her* ‘hair’

*morus* ‘beard’ (Acc. pl.); the word is often connected to Skt. *śmáśru-* ‘beard’ (< PIE \*smok<sup>c</sup>ru-), Alb. *mjekrë*, Lith. *smakrà*, OIr. *smech*, Hitt. *zamankur*, L *māla* ‘jaws’ (< \*makslā), but the developments of this PIE etymon are highly irregular.

*ač<sup>c</sup>kunk<sup>c</sup>n* N pl. of *akn* ‘eye’ with suffixed demonstrative *-n*. From PIE \*h<sub>3</sub>ek<sup>w</sup>- ‘eye’ (L *oculus*, etc.)

*ein* ‘they were’ (3 sg. imperfect of *em*), PIE \*h<sub>1</sub>es- (L *sum*, *esse*, etc.)

*aregakunk<sup>c</sup>* N pl. to *areg-akn* ‘sun’, literally ‘sun-eye’ (cf. *arew* ‘sun’).

## 2. The birth of Jesus (Lucas' Gospel 2, 1-20)

*Ew elew ənd awurnsn ənd aynosik el hraman yAwgostos kayserē ašxarhagir arnel ənd amenayn tiezers. Ays arəjīn ašxarhagir elew i dataworut<sup>c</sup>ean Asorwoc<sup>c</sup> Kiwreneay. Ew ert<sup>c</sup>ayin amenek<sup>c</sup>ean mtanel yašxarhagir yiwrak<sup>c</sup>anč<sup>c</sup>iwr k<sup>c</sup>alak<sup>c</sup>i. El ew Yovsēp<sup>c</sup> i Galilēē i k<sup>c</sup>alak<sup>c</sup>ē Nazaret<sup>c</sup>ē i Hrēastan, i k<sup>c</sup>alak<sup>c</sup> Dawt<sup>c</sup>i or koč<sup>c</sup>i Bet<sup>c</sup>leēm, vasn lineloy nora i tanē ew yazgē Dawt<sup>c</sup>i., mtanel yašxarhagir Maremaw handerj zor xōsealn ēr nma, ew ēr yli. Ew elew i hasaneln noc<sup>c</sup>a andr, lc<sup>c</sup>an awurk<sup>c</sup> cnaneloy nora. Ew cnaw zordin iwr zandranik, ew pateac<sup>c</sup> i xanjarurs ew ed zna i msur, zi oč<sup>c</sup>*

*goyr noc<sup>a</sup> teli yjavanin. Ew hoviwk<sup>c</sup> ēin i telwojn yaynmik bacot<sup>c</sup>eagk<sup>c</sup>, ork<sup>c</sup> pahēin zpahpanut<sup>c</sup> – iwns gišeroi hōtic<sup>c</sup> iwreanc<sup>c</sup>. Ew hreštak Tearn erewec<sup>c</sup>aw noc<sup>a</sup>, ew p<sup>c</sup>ark<sup>c</sup> Tearn cagec<sup>c</sup>in ar nosa, ew erkean erkiwl<sup>c</sup> mec. Ew asē c<sup>c</sup>nosa hreštakn: ‘Mi erknc<sup>c</sup>ik<sup>c</sup>, zi ahawasik awetaranem jez uraxut<sup>c</sup>iwn mec, or elic<sup>c</sup>i amenayn žolovrdeann, zi cnaw jez ays-or P<sup>c</sup>rkič<sup>c</sup>, or ē Oceal Tēr, i k<sup>c</sup>alak<sup>c</sup>i Dawt<sup>c</sup>i. Ew ays nšanak jez, gtanic<sup>c</sup>ēk<sup>c</sup> manuk pateal i xanjarurs ew edeal i msur. Ew yanakarcaki elew and hreštakin and aynmik bazmut<sup>c</sup>iwn zōrac<sup>c</sup> erkneworac<sup>c</sup>, or ōrhnein zAstowac ew asēin: ‘P<sup>c</sup>ark<sup>c</sup> i barjuns Astucoy, ew yerkir xalahut<sup>c</sup>iwn, i mardik hačut<sup>c</sup>iwn.’ Ew elew ibrew verac<sup>c</sup>an i noc<sup>a</sup>anē hreštakk<sup>c</sup>n yerkins, asen c<sup>c</sup>mimeans hoviwk<sup>c</sup>n: ‘Ekayk<sup>x</sup> ert<sup>c</sup>ic<sup>c</sup>uk<sup>c</sup> minč<sup>c</sup>ew c<sup>c</sup>Bet<sup>c</sup>leēm, ew tesc<sup>c</sup>uk<sup>c</sup> zinč<sup>c</sup> ē bans ays or elew, zor Tēr ec<sup>c</sup>oyc<sup>c</sup> mez.’ Ew ekin p<sup>c</sup>ut<sup>c</sup>anaki, ew gtin zMariam ew zYusēp<sup>c</sup> ew zmanukn edeal i msur. Ew canean vasn banin, or asac<sup>c</sup>aw noc<sup>a</sup> zmankanēn. Ew amenek<sup>c</sup>in or lseīn, zarmanayin vasn banic<sup>c</sup>n zor xōsec<sup>c</sup>an and nosa hoviwk<sup>c</sup>n. Ew Mariam zamenayn zbans zaysosik pahēr, ew xelamut linēr i srti iwrum. Ew darjan hoviwk<sup>c</sup>n, p<sup>c</sup>arawor arnēin zAstowac vasn asmenayni zor lowan ew tesin, orpēs patmec<sup>c</sup>aw noc<sup>a</sup>.*

#### Vocabulary:

*ew* ‘and’; *linim* ‘become’; *and* ‘in, to’; *awr* ‘day’; *ayn* ‘that’; *elanem* ‘go out’; *hraman* ‘order’; *Awgostos* ‘August’; *kaysr* ‘Caesar’; *ašxarhagir* ‘census’; *arnem* ‘make, do’; *amenayn* ‘all’; *tiezerk<sup>c</sup>* (pl. tantum) ‘world’; *ays* ‘this’; *arajin* ‘first’; *i* ‘in’; *dataworut<sup>c</sup>iwn* ‘office of a governor’; *Asori* ‘Syrian’; *Kiwrenios* ‘Cyrenius’; *ert<sup>c</sup>am* ‘go’; *amenek<sup>c</sup>ean* ‘all’; *mtanem* ‘go in’; *iwrak<sup>c</sup>anč<sup>c</sup>iwr* ‘every’; *k<sup>c</sup>alak<sup>c</sup>* ‘town’; *Yovsēp<sup>c</sup>* ‘Joseph’; *Galilea* ‘Galilee’; *Nazaret<sup>c</sup>* ‘Nazareth’; *Hrēastan* ‘Judea’; *Dawit<sup>c</sup>* ‘David’; *or* ‘who, which’; *koč<sup>c</sup>em* ‘call’; *Bet<sup>c</sup>leēm* ‘Bethlehem’; *vasn* ‘because of, for’; *linel* ‘being’; *na* ‘he, she, it’; *tun* ‘house’; *azg* ‘people’; *Mariam* ‘Mary’; *handerj* ‘together with’; *xawsim* ‘speak, say’; *em* ‘be’; *yli* ‘pregnant’; *hasanem* ‘come, meet’; *andr* ‘(towards) there’; *lnum* ‘become full’; *cnanim* ‘give birth to’; *ordi* ‘son’; *iwr* ‘self’; *andranik* ‘firstborn’; *patem* ‘cover’; *xanjarur* ‘nappies’; *dnem* ‘put, place’; *na* ‘he, she, it’; *msur* ‘crib’; *zi* ‘for’; *oč<sup>c</sup>* ‘not’; *gom* ‘be, exist’; *teli* ‘place’; *ijavani* ‘inn’; *hoviw* ‘shepherd’; *bac<sup>c</sup>ōt<sup>c</sup>eag* ‘sleeping outside’; *pahem* ‘protect’; *pahpanut<sup>c</sup>iwn* ‘night-watch’; *gišer* ‘evening, night’; *hawt* ‘flock’; *hreštak* ‘angel’; *Tēr* ‘lord’; *erewim* ‘appear’; *p<sup>c</sup>ark<sup>c</sup>* ‘splendor’; *cagem* ‘come into being’; *ar* ‘around’; *erknc<sup>c</sup>im* ‘fear’; *erkiwl<sup>c</sup>* ‘fear’; *mec* ‘great’; *asem* ‘say’; *c<sup>c</sup>-* ‘to’; *mi* ‘not!’ *ahawasik* ‘behold!’; *awetaranem* ‘preach, announce’; *duk<sup>c</sup>* ‘you (pl.)’; *uraxut<sup>c</sup>iwn* ‘gladness, joy’; *žolovurd* ‘people’; *aysōr* ‘today’; *P<sup>c</sup>rkič<sup>c</sup>* ‘saviour’; *awcanem* ‘smear’; *nšanak* ‘sign, miracle’; *gtanem* ‘find’; *manuk* ‘child’; *patem* ‘cover, envelop’; *yankarcaki* ‘suddenly’; *bazmut<sup>c</sup>iwn* ‘large quantity, plentitude’; *zawr* ‘army’; *erknewor* ‘heavenly’; *awrhnem* ‘bless’; *Astowac* ‘God’; *barjr* ‘high’; *erkir* ‘earth’; *halahut<sup>c</sup>iwn* ‘peace’; *mardik* ‘humanity, people’; *hačut<sup>c</sup>iwn* ‘prosperity’; *ibrew* ‘as’; *veranam* ‘rise, go up’; *mimean* ‘each other’; *gam* ‘come’; *minč<sup>c</sup>ew* ‘until’; *tesanem* ‘see’; *zinč<sup>c</sup>* ‘what’; *ban* ‘word’; *c<sup>c</sup>uc<sup>c</sup>anem* ‘show, demonstrate’; *mek<sup>c</sup>* ‘we’; *p<sup>c</sup>ut<sup>c</sup>anaki* ‘hurriedly’; *gtanem* ‘find’; *čanač<sup>c</sup>em* ‘recognize’; *lsem* ‘hear’; *xelamut* ‘clever’; *sirt* ‘heart’; *darnam* ‘return’; *p<sup>c</sup>arawor* ‘glorious’; *orpēs* ‘how, as’; *patmem* ‘tell, relate’.

3. The story of Parandzem (P<sup>c</sup>awstos Biwzant, IV, 98-99).

Չայնու ժամանակաւ էր դուստր մի գեղեցիկ Անդովկայ ուրումն, մի ի նախարարացն նահապետին Սիւնեաց, որում անուն Փառանձեմ կոչէր. զորմէ կարի անուանեալ էր գեղեցկութեամբ և պարկեշտութեամբ: Ապա Բնել պատանեակն եղբորորդին արքային էառ զնա ի կնութիւն իւր: Եւ համբաւ գեղեցկութեան աղջկանն ընդ վայրսն տարածեցաւ, և համբաւ գեղոյ նորա յաճախեալ բազմանայր և հնչէր: Ապա առ համբաւ զանկութեան անուանն տրփեալ լինէր մին ևս հօրեղբորորդին Բնելոյ, որում անուն Տիրիթ կոչէր: Վասն որոյ անգանէր ի զաղտագործնս, մինչ զի զնուն իւր տեսանել կարասցէ: Եւ յորժամ կարացն տեսեանն՝ որում զանգայր, այնուհետև հնարս խնդրէր առն կնոջն կորստեան, ո՞րքա՞ն զկին նորա նմա հնար լիցի յափշտակել: (IV, Երբ. 98—99).

## 4. The Origin of Evil (Eznik Kołbac'i, I. 12)

*Ard ew zayn ews harc<sup>c</sup>anen et<sup>c</sup>ē č<sup>c</sup>ar inč<sup>c</sup> č<sup>c</sup>kayr arāji usti ōjn zor Satanay koč<sup>c</sup>ēk<sup>c</sup> imac<sup>c</sup>aw zhangamans č<sup>c</sup>arin. Asemk<sup>c</sup> et<sup>c</sup>ē Satanay č<sup>c</sup>ar zstunc<sup>c</sup>aneln mardoyn Astucoy imac<sup>c</sup>aw vasn oroy zmardn yayn yōžarec<sup>c</sup>oyc<sup>c</sup>. Orpēs yoržam ic<sup>c</sup>ē ok<sup>c</sup> uruk<sup>c</sup> t<sup>c</sup>šnami ew t<sup>c</sup>aguc<sup>c</sup>eal zt<sup>c</sup>šnamuk<sup>c</sup>iwnn galt kamic<sup>c</sup>i inasel ew č<sup>c</sup>gitic<sup>c</sup>ē zhangamans vnasakarut<sup>c</sup>ean ew šurj ekeal yajic<sup>c</sup>i hnars xndrel.*

## Vocabulary:

*Ard* ‘accordingly’, *ew* ‘and’, *ayn* ‘this’, *ews* ‘also’, *harc<sup>c</sup>anem* ‘ask’, *kam* ‘go, exist’, *č<sup>c</sup>-* ‘negative prefix’, *arāji* ‘before’, *usti* ‘whence’, *awj* ‘snake’, *or* ‘who, which’, *Satanay* ‘Satan’, *koč<sup>c</sup>em* ‘call’, *imanam* ‘learn’, *hangamank<sup>c</sup>* (pl.) ‘characteristics’, *asem* ‘say’, *stunc<sup>c</sup>anem* ‘disobey’, *mard* ‘man’, *Astuac* ‘god’, *vasn* ‘for, because of’, *yawžarem* ‘persuade’, *orpēs* ‘just as’, *yoržam* ‘when’, *em* ‘be’, *ok<sup>c</sup>* ‘someone’, *t<sup>c</sup>šnami* ‘enemy’, *t<sup>c</sup>aguc<sup>c</sup>anem* ‘hide’, *t<sup>c</sup>šnamuk<sup>c</sup>iwn* ‘enmity’, *galt* ‘secretly’, *kamim* ‘wish’, *inasem* ‘harm’, *gitem* ‘know’, *vnasakarut<sup>c</sup>iwn* ‘harm’, *šurj* ‘about, around’, *gam* ‘go’, *yajim* ‘wander’, *hnark<sup>c</sup>* (pl.) ‘means’, *xndrem* ‘search’.

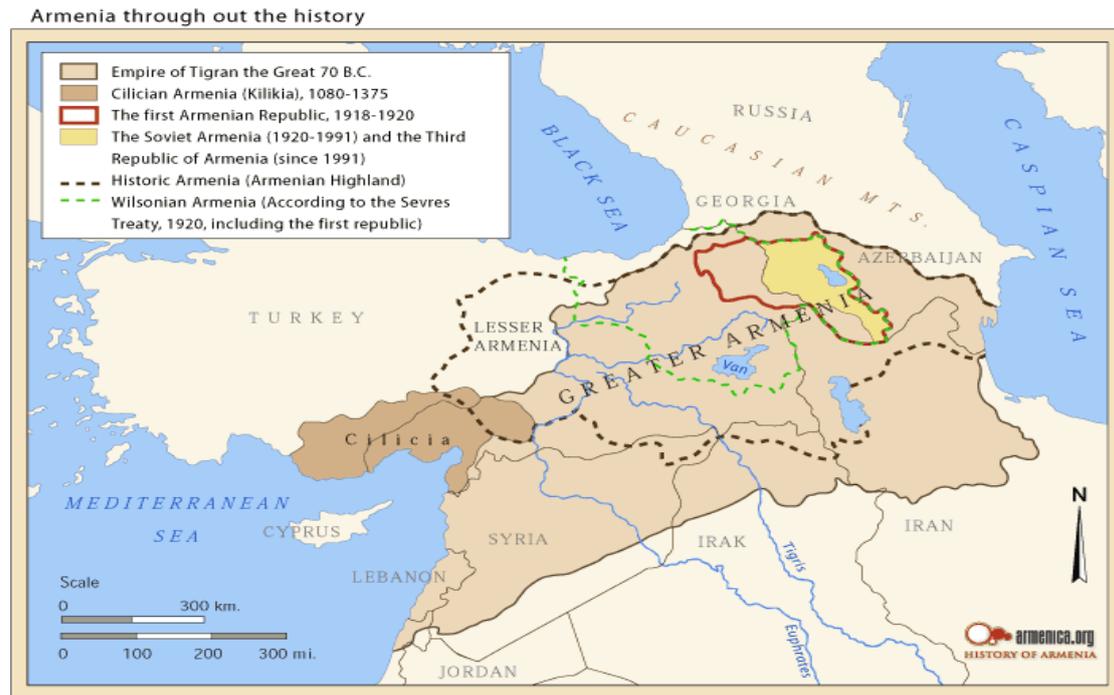
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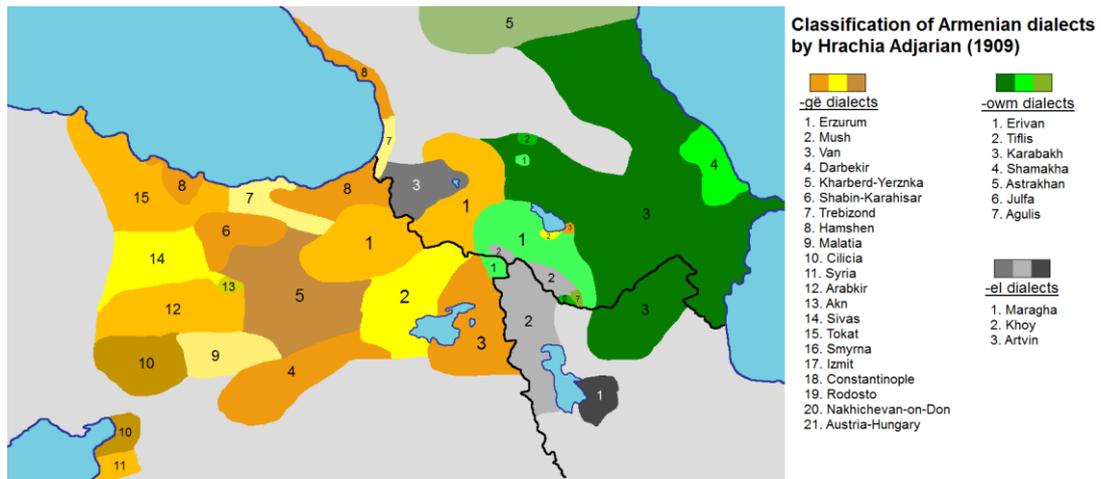
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APPENDIX1 : HISTORICAL MAP OF ARMENIA



APPENDIX 2: ARMENIAN DIALECTS



### APPENDIX 3: LIST OF ABBREVIATIONS

#### A) Languages

Alb. = Albanian

Arm. = Armenian

Av. = Avestan

Croat. = Croatian

G = Greek

Goth. = Gothic

Hitt. = Hittite

Hom. = Homeric

L = Latin

Latv. = Latvian

Lith. = Lithuanian

MIr. = Middle Iranian

MPers. = Middle Persian (Pehlevi)

Myc. = Mycenaean

OCS = Old Church Slavic

OE = Old English

OHG = Old High German

OIc. = Old Icelandic

OIr. = Old Irish

ON = Old Nordic

OPr. = Old Prussian

Parth. = Parthian

PIE = Proto-Indo-European

Russ. = Russian

Skt. = Sanskrit

Toch. B = Tocharian B

W = Welsh

B) Grammatical terms

Abl. = Ablative

Acc. = Accusative

Aor. = Aorist

Art. = Article

D = Dative

Def. = Definite

Gen. = Genitive

Inf. = Infinitive

Inst. = Instrumental

Ipf. = Imperfect

Ipv. = Imperative

Loc. = Locative

Nom. = Nominative

Part. = Participle

Pass. = (Medio-)passive

Pf. = perfect

Pl. = Plural

Pres. = Present

Sg. = Singular

Subj. = Subjunctive