A GRAMMATICAL SKETCH OF CLASSICAL ARMENIAN

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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.[1] 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.[2] However, a recent examination of this hypothesis by J. Clackson (1994) is sceptical.[3]

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 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 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-kᶜ,* 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*, 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,[4] and it has been

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[1] Iranian loanwords in Armenian are mostly from Parthian, e.g. *anapat* "desert", *paštem* "I worship", *mah* "death", *xrat* "judgement", *kᶜen* "hatred", *tap* "heat", *hraman* "order" (Parth. *frm'n*), *ašxarh* "world, land" (Parth. *xšahr*), *hreštak* "angel, messenger" (Parth. *fryštg*), etc. On this topic see Schmitt 1983, Job 1993.

[2] Note, e.g. the parallel word formation of Arm. *jiwn* "snow" and G *khíōn* (< *gʰi̯ṓm), or Arm. *kin,* Gen. *knoĵ* "woman" vs. G *gynḗ*, *gynaikós*, or the development of prothetic vowels from laryngeals, or the extension of the formant *-sk'- 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).

[3] See also Solta 1960.

[4] E.g. Arm. *astem* "I marry" < Hurrian *ašte* "wife", Arm. *hnjor* "apple(-tree)" < Hurrian *hinzuri,* Arm. *cov* "sea" < Urartean *šuə*, Arm. *ułt* "camel" < Hurrian *uḷtu*. There are also many Akkadian words which were borrowed into Armenian through Hurro-Urartean, e.g. Arm. *knikᶜ* "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", *zokᶜančᶜ* „wife's mother", 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 Maštocᶜ) 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 and Syriac, notably the works of Pᶜawstos Biwzant (from Greek), and St. Epᶜrem's Hymns (from Syriac). Original works in Classical Armenian include Mowsēs Xorenacᶜi's "History of Armenia" (*Patmutᶜiwn Hayocᶜ*), Koriwn's biography of Holy Mesrop, and "Against Heresies" (*Ełm ałandocᶜ*) of Eznik from Kołb, composed between 441 and 448.

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 inscriptions from Nazareth, from the first half of the 5th century (see below).[5]

"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.
[5] See Stone et alii 1996-7.

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 *koiné* which, like its Greek counterpart, replaced all other early dialects.[6] 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 $t^c > d$ 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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[6] See Winter 1966.

THE ALPHABET

This is the Classical Armenian alphabet invnted by Maštoc[c] in the 5th century. Its Armenian name is «*Erkatagir*», or «iron alphabet».

ayb	ben	gim	da	ech	za	eh	et	to	zhe	ini	liwn	xeh
a	b	g	d	e, y	z	ē	ĕ	t'	zh	i	l	kh
[a]	[b]	[g]	[d]	[jɛ-, -ɛ-]	[z]	[e]	[ə]	[tʰ]	[ʒ]	[ɪ]	[l]	[x]
1	2	3	4	5	6	7	8	9	10	20	30	40

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	ch'	p
[ts]	[k]	[h]	[dz]	[ɣ]	[ʧ]	[m]	[h-, -j-]	[n]	[ʃ]	[vo, -o-]	[ʧʰ]	[p]
50	60	70	80	90	100	200	300	400	500	600	700	800

jheh	ra	seh	vew	tiwn	reh	co	yiwn	piwr	keh	u	oh	feh
j	ṛ	s	v	t	r	ts'	w	p'	k'	u	ō	f
[ʤ]	[r]	[s]	[v]	[t]	[ɹ]	[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>*. In the post-classical period, it represents the reflex of classical *–aw-*.

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.

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^c	b
t	t^c	d
k	k^c	g

affricates:

voiceless	aspirated	voiced
c	c^c	j
č	$č^c$	ĵ

fricatives:

voiceless	voiced
š	ž
s	z
h	
x	

resonants:

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

Note that the consonant transliterated as *j* is actually the affricate [dz]; likewise, Arm. *ĵ* 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. *poṙnik* «whore» < G *pornē*, Arm. *kēt* «whale» < G *kêtos*.

Arm. *v* and *w* seem to be merely allographs in the classical period. Arm. *ł* is velar ("dark") *l* (as in Polish *ł*), and *ṙ* is an alveolar "strong" *r* (as in Spanish, or perhaps a geminate). The vibrants *ṙ* and *r* are partially in complementary distribution. As a rule, *ṙ* occurs before *n*, while *r* is not permitted in this environment, hence the alternations

of the type *leaṙn* „mountain", Gen. *lerin*. In traditional prounuciation, *ł* is the voiced counterpart of *x*, but there are indications that it was pronounced as a lateral in the classical period (it is found in Greek loanwords with Greek *l*, e.g. *titłos* < G *títlos* „title".

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 and whenever word-initial *r- would be the outcome of the regular sound change, e.g. in Arm. *erkar* „quern" < PIE *g^wreh₂wōn (Skt. *grā́ van,* OCS *žrъny*, OIr. *bró*).

Arm. c^c is dissimilated to *s* before another c^c in polysyllabic words, cf. Arm. $sireac^c$ «he loved», $sirec^cic^c$ «I will love» vs. $siresc^ces$ "you will love" (< *$sirec^cc^ces$).

B) Vowels:

i   u
   ē   ə
      e   o
        a

There are no quantitative oppositions in the vowel system; the vowel *ē* is a closed [ẹ], originally a diphthong *ey. The vowel *ə* 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", *əłjam* „I demand" (but cf. also the monosyllable *əst* „according to, until"); there are reasons to believe that *ə* was pronounced in cases where it was not written, usually in complex consonant clusters, e.g. *skzbnakan* „in the beginning" was pronounced /skəzbənakan/. It was never stressed. The pronunciation of /ə/ can be deduced from the aorsit forms such as *mnac^c* „he remained" which do not begin with the „augment" *e-*, characteristic of monosyllabic 3sg. aorist forms such as *e-ber* „he carried". This means tha the pronunciation of *mnac^c* was bisyllabic, i.e. /mənac^c/.

VOWEL ALTERNATIONS

Armenian has an extensive system of vowel alternations, only in part inherited from PIE ablaut, but mostly innovative; in pretonic position *i* and *u* are lost, while *ē* > *i*, *oy* > *u*, *ea* > *e*; this resulted in the reduction of vowels in the first syllable of disyllabic words, cp. Nom. *sirt* "heart", Gen. *srti*, Nom. *hur* "fire", Gen. *hroy*, Nom. *dustr* "daughter"*,* Gen. *dster,* Nom. *mēg* "fog", Gen. *migi*, Nom. *loys*, Gen. *lusi*, Nom. *leard* "liver", Gen. *lerdi*. 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 loss of the vowels *i and *u in initial syllables created several difficult consonant clusters which have been compared typologically to Georgian.[7]

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[7] Cf. Solta 1963.

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^{h}eroh$_2$ «I carry» (L *fero*, G *phérō*) > Arm. *berem*, PIE *g'erh$_2$o- «old man» (G *gérōn*, Ossetic *zarond*) > Arm. *cer*.

PIE *o > Arm. *o*, cf. PIE *pod- «foot» (G Acc. *póda*) > Arm. *otn,* PIE *lowh$_3$oh$_2$ «I bathe» (L *lavo,* G *loúomai*, OIr. *lóathar* „basin") > Arm. *loganam*.

PIE *a, *h$_2$e > Arm. *a*, cf. PIE *h$_2$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^{w}e "five" (G *pénte*) > Arm. *hing*, PIE *seno- „old" (G *hénos*, OIr. *sen*) > Arm. *sin*, PIE *ponth$_1$- „path, bridge (through swamp)" (OCS *pątь* „path", L *pōns* „bridge", G *póntos* „sea", *pátos* „path") > Arm. *hun* „ford", PIE *g'onu „knee" (G *góny,* Skt. *jānu-*) > Arm. *cunr*.

In some ill-understood cases, Arm. has *a* where other IE languages have *e* or *o*: Arm. *tasn* "ten" < *dek'm (L *decem*), Arm. *garun* «spring» < PIE *wesr, *wesnos (G *éar,* Russ. *vesná*), Arm. *akn* "eye" < *h$_3$ek^w- (OCS *oko,* L *oculus*), Arm. *ateam* "I hate" < *h$_3$ed- (L *odium* «hate», OE *atol* «ugly»). Theoretically, it would be possible to derive the word-initial *a-* from PIE *h$_3$- before consonants (see below), e.g. Arm. *akn* from PIE *h$_3$k^w-n-, but there is otherwise little justification in positing the zero-grade of the root in such cases.

PIE *i and *u are preserved, cf. PIE *mus- „fly" (L *musca*, OCS *mъšica*) > Arm. *mun* (< *mus-no-), PIE *k'ub^{h}ro- „brilliant" (Skt. *śubhrá-*) > Arm. *surb*, PIE *diwoh$_1$ „during the day" (Skt. *divā*, L *diū*) > Arm. *tiv*, perhaps PIE *k'tin- „bird of prey" (G *iktînos* „a kite") > Arm. *c^{c}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$_3$ > Arm. *u,* PIE *deh$_3$rom "gift" (OCS *darъ*) > Arm. *tur*, PIE *HoHmo- «raw» (Skt. *āmás,* G *ōmós*, OIr. *om*) > Arm. *hum*, 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$_1$ > Arm. *i*, PIE *meh$_1$ "not" (prohibitive particle, G *mē'*) > Arm. *mi*, PIE *pleh$_1$yo- «full» (L *plēnus*) > Arm. *li*, PIE *wēsno- „price" (L *vēnum*) > Arm. *gin*.

PIE *eh$_2$ > Arm. *a*, PIE *b^{h}eh$_2$mi "I say" (G *phēmí*) > Arm. *bam*, PIE *meh$_2$tēr "mother" (L *māter*, OCS *mati*) > Arm. *mayr*.

PIE *uH (> *ū) is likewise shortened, as well as PIE * ɨH (> * ɨ̄), cf. PIE *muHs- «mouse» (L *mūs,* OE *mūs,* OCS *myšь*) > Arm. *mukn* (with the same Arm. suffix as in *jukn* «fish» < *dʰgʰuH-, see below), PIE *puh₂r- «fire» (Hitt. *pahhur,* G *pŷr*) > Arm. *hur,* PIE *gʷʰiHslo- "thread" (L *fīlum,* Lith. *gýsla,* OCS *žila* "vein") > Arm. *ĵil.*

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 *mrtos "mortal" (L *mortuus* "dead") > Arm. *mard* "man", PIE *gʷlh₂n- „acorn“ (G *bálanos,* Lith. *gilė*) > Arm. *kałni* „oak“, PIE *wiH-k'mti- „twenty“ (L *vigintī*) > Arm. *kᶜsan.*

It appears that laryngeals before consonants developed as prothetic vowels word-initially, similarly as in Greek, cp. PIE *h₁newn „nine“ (G *ennéa,* Skt. *náva*) > Arm. *inn,* PIE *h₁regʷos „evening, darkness“ (G *érebos,* Skt. *rájas*) > Arm. *erek* „evening“, PIE *h₃neyd- „curse“ (G *óneidos* „shame“) > Arm. *anicanem* „I curse“, PIE *h₂ster- „star“ (G *astḗr,* L *stēlla,* Germ. *Stern*) > Arm. *astł,* PIE *h₂rtk'o- «bear» (Hitt. *hartagga-,* L *ursus,* G *árktos*) > Arm. *arĵ,* PIE *h₂rewi- „sun, sunshine“ (Skt. *ravi-* „sun, sun-god“, Hitt. *harwanai-* „to become bright“) > Arm. *arew* „sun“, PIE *h₃nomn „name“ (G *ónoma,* Skt. *nā́ma*) > Arm. *anun,* PIE *h₃ner-yo- "dream" (G *óneiros*) > Arm. *anurĵ.* It seems from the reliable examples (as the ones above) that both *h₂ and *h₃ fell together as Arm. *a-.* This development of laryngeals is similar to the one in Greek, but there we find different reflexes of *h₂ and *h₃.

The development of laryngeals before syllabic resonants word-initially is unclear;[8] we find *HrC > *arC* in Arm. *arcatᶜ* „silver“[9] < *h₂rg'nto- (L *argentum,* G *árgyros*) and in *arnum* „I take“ < *h₂r-new- (G *árnymai*) „gain, earn“, but the regular development of syllabic resonants without the preceding laryngeal would also have yielded *ar-.* Although Arm. *orjikᶜ* „testicles“ is usually derived from *h₃rgʰ- (Alb. *herdhe,* OIr. *uirge,* G *órkhis*), Hitt. *arki-* shows that the correct reconstruction is *h₁orgʰi-.

PIE *H > Arm. *a* in syllabic position, cp. PIE *h₂erh₃trom "plow" (G *árotron,* Skt. *áritra-*) > Arm. *arawr,* PIE *bʰh₂ti- > Arm. *bay* „word“ (cf. G *phḗmi* „I say“, verbal adjective *phatós*), PIE *ph₂tēr „father“ (L *pater,* Skt. *pitā*) > Arm. *hayr.*

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, *h₂ey > Arm. *ay*: *h₂eyg'- 'goat' (G *aíks, aigós*) > Arm. *ayc*
PIE *ey, *h₁ey > Arm. *ē*: PIE *(e-)dʰeygʰ- (Skt. *dehī-* 'wall') > Arm. *e-dēz* „he built“

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[8] See Olsen 1985, Greppin 1988.
[9] According to some linguists, this word is a loanword from Iranian, but in that case *–c-* is unexpected.

PIE *oy, *h₃ey > Arm. *ē*: PIE *dʰoygʰos 'wall' (G *toîkhos*) > Arm. *dēz* „wall"
PIE *ew, *h₁ew > Arm. *oy*: PIE *lewk- 'light' (G *leukós* 'white') > Arm. *loys* 'light'
PIE *ow, *h₃ew > Arm. *oy*: PIE *bʰowgo- „food" (Skt. *bhógas*) > Arm. *boyc*
PIE *h₂ew is perhaps reflected as *aw* in Arm. *awtᶜ* „bed", if it is related to G *aûlis* „tent (for passing the night in)".

The development in Arm. *ayt* „cheek", *aytumn* «tumor» is unclear, if these words are derived from PIE *h₃eyd- «swell» (G *oidáō*, OHG *eitar* «poison»); we would expect PIE *h₃ > Arm. *h-* (see below), so perhaps the correct PIE reconstruction is *h₁oyd-, and the development of PIE *oy to Arm. *ē* is limited to the position after consonants.

TABLE 1: PIE VOWELS IN ARMENIAN

PIE	ARM	special developments	problems
*a	a		
*h₂e	a		
*e, *h₁e	e	➢ i before nasals	tasn „ten"
*o, *h₃e	o	➢ u before nasals	akn „eye"
*u	u	alternating with zero	
*i	i	alternating with zero	
*H	a		
*eh₂	a		
*ē, *eh₁	i		
*ō, *eh₃	u		
*iH	i		
*uH	u		
*r̥	ar		
*l̥	al		
*m̥	am		
*n̥	an		
*ay, *h₂ey	ay		
*ey	ē	alternating with i	
*oy, *h₃ey	ē	alternating with i	
*aw, *h₂ew	aw (?)		
*ew, *h₁ew	oy	alternating with u	
*ow, *h₃ew	oy	alternating with u	

THE ORIGIN OF ARMENIAN CONSONANTS

Voiceless stops develop into aspirated stops, but *p > *h* or 0, cp. Arm. *hun* "ford, channel" < *pont- (L *pōns* "bridge"), PIE *podm "foot" (Acc. sg., G *póda*) > Arm. *otn*. After a vowel, PIE *p > *w,* cf. PIE *h₁epi (G *epí* "at") > Arm. *ew* "and", PIE *swopno- "sleep" (G *hýpnos*) > Arm. *kᶜun*. PIE *p is lost before *s in Arm. *sut* „false"

< *psewd- (G *pseûdos*), and *sp- is reflected as *p^c- in Arm. *p^{c}oyt* „eagerness" < *spowd- (G *spoudḗ*). PIE *septm „seven" (Skt. *saptá*, G *heptá*) > Arm. *ewt^{c}n*.

Armenian *x* develops from PIE *k+H, cp. Arm. *c^{c}ax* "branch" < PIE *k'okHo- (OCS *soxa*, OHG *hōha* "plow"). It is probable that *x* also develops from *g^h after *s, at least word-initially, cf. Arm. *sxalem* „stumble, fail" < *sg^{wh}al- or *sg^{wh}h$_2$el- (G *sphállō* „bring down", L *fallo* „deceive", Skt. *skhálati* „stumbles". Possibly *t^c* develops from *tH, if *yałt^c* „large" is from *plth$_2$u- „broad" (cf. G *platýs,* Skt. *prthú-*); *y-* may be a petrified prefix.

Between vowels, PIE *t > *y*, cf. PIE *ph$_2$tēr "father" (L *pater*) > Arm. *hayr*. Before word-medial *r, *t > *w*, cf. Arm. *arawr* "plow" < PIE *h$_2$erh$_3$tro- (G *árotron*, OIr. *arathar*). For the different outcomes of PIE *t cf. the opposition between Nom. *hayr* < *ph$_2$tēr and Gen. *hawr* < *ph$_2$tr-os.

Voiceless stops are voiced after *r, *n, cf. PIE *mrto- „mortal" (G *ám-brotos* „immortal") > Arm. *mard* „man", PIE *h$_2$rti «now» (G *árti*) > Arm. *ard*, PIE *dur-h$_2$enHt- „door-post" (Skt. *ātā*, L *antae* „square pilasters") > Arm. *dr-and* „doorpost", PIE *h$_2$erk-el- (G *arkéō* "I defend", L *arceo* "I cover") > Arm. *argel* "barrier", PIE *penk^{w}e "five" (G *pénte*) > Arm. *hing*.

Voiced stops are devoiced: Arm. *hot* "smell" = L *odor* (< PIE *h$_3$ed-), Arm. *sirt* "heart" = L *cor, cordis* (< PIE *k'erd-), Arm. *tam* „I give" = OCS *damь,* L *do, dare* (< PIE *deh$_3$-), Arm. *stipem* "I urge, compel" = G *steíbō* "I tread, stamp on" (PIE *steyb- or *steypH-, cf. G *stibarós* "fastened, strong"), Arm. *kin* „woman" = G *gynḗ*, OCS *žena* (< PIE *g^{w}en(e)h$_2$).

Aspirated stops develop into voiced stops or affricates: Arm. *berem* "bring" < *b^{h}er- (L *fero*), Arm. *dalar* "green" < PIE *d^{h}h$_2$l- (G *thalerós* "flowery"), Arm *di-k^c* „gods" < *d^{h}eh$_1$s-es (G *theós*), Arm. *jeṙn* "hand" < *g^{rh}esr (G *kheír*), Arm. *jukn* «fish» < *d^{h}g^{rh}uH- (G *ikhthýs*, Lith. *žuvìs*).

Between vowels, PIE *b^h > *w*, cf. the instr. ending –*w* < -V-b^{h}i (G Hom. –*phi*), or PIE *h$_3$b^{h}el- „increase" > Arm. *awelum*, G *ophéllō*. Likewise, PIE *d^{h}y > Arm. *ĵ*, cf. Arm. *mēĵ* (Gen. *mijoy*) < *med^{h}yo- (Skt. *mádhya-*); the vocalism in *mēĵ* is unexplained (we would expect Arm. –*e-*).

PIE labiovelars are delabialized: PIE *lik^{w}et "he left" (aorist, G *élipe*) > Arm. *elik^c*, PIE *g^{w}enh$_2$ "woman" (OCS *žena*) > Arm. *kin*, PIE *g^{w}ōw- „cow" (G *boús*, OIr. *bó*) > Arm. *kov*, PIE *g^{wh}en- "strike" (G *theínō*) > Arm. *gan* "a strike". Before front vowels, PIE *g^{wh} > Arm. *ĵ*, cf. Arm. *ĵerm* "warm" < PIE *g^{wh}ermo- (G *thermós*), see below.

PIE velars are preserved as velars *k, k^c, g*, cp. PIE *ker- "scrap, cut" (G *keírō*, Alb. *qeth*) > Arm. *k^{c}erem* "scrap", *k^{c}ert^{c}em* „cut", PIE *gerh$_2$no- „crane" (G *géranos*) > Arm. *kṙunk*, PIE *h$_3$moyg^{h}os "fog, cloud" (Skt. *meghá-*, OCS *mьgla*) > Arm. *mēg* (the absence of word-initial *a-* < *h$_3$ is unexpected, cf. G *omíkhlē*).

Armenian *k^c, g* are palatalized before front vowels and *y*, so that PIE *k > Arm. *k^c > č^c*, PIE *g^h, *g^{wh} > Arm. *g > ĵ*, cp. PIE *g^{wh}ermos "warm" (G *thermós*) > *germ- >

Arm. *ĵerm*, PIE *k^wetwores "four" > *keyor- > Arm. *čcorkc*, PIE *kyew- (Skt. *cyávate* „moves") > Arm. *čcogay* „I went". Note that *k* < PIE *g^w is not palatalized (cf., e.g., Arm. *kin* „woman" < *g^weneh₂, OCS *žena*). It appears that PIE *g, *g^w > Arm. *k > *c* after *u*, cf. Arm. *boyc* „food" < *b^howgo- (Skt. *bhóga-* „pleasure").

PIE palatalized velars occur as fricatives or aspirates: PIE *k' > *s,* *g' > *c,* *g'^h > *j.* Arm. *siwn* "pillar" < PIE *k'iHwon- (G *kíōn*), PIE *h₂ek'- «sharp» (L *acus* «needle») > Arm. *asełn* «needle», Arm. *cunr* "knee" < PIE *g'onu (G *góny*, L *genu*), PIE *g^heyōm «winter» (L *hiems*, G *khíōn*) > Arm. *jiwn*, PIE *h₂eng^hu- «narrow» (L *angustus,* Goth. *aggwus*) > Arm. *anjuk*. PIE *k' is lost before *l, cf. Arm. *lu* „famous" < PIE *k'luto- (G *klytós*, L *in-clutus,* Skt. *śrutá-*). In Arm. *šun* „dog" (Gen. *šan*) < PIE *k'wōn (G *kýōn*, Skt. *śvā*, Lith. *šuo*) there must be some special development (*k'w > š?*). The same development may be attested in Arm. *nšoyl* „light" if it is from *k'woyt-l-, cf. OCS *světlo* „light", but this etymology is disputed[10]. Likewise, Arm. *ēš* (Gen. *išoy*)„donkey" can be from PIE *h₁ek'wo- „horse" (L *equus* etc.), but the meanings do not match completely, and the vocalism *ē-* is odd.

PIE *sk' > Arm. *cc*, cf. PIE *prk'-sk'-e-ti „asks" (Skt. *pṛccháti*, L *poscit*) > Arm. *e-harcc* „asked".

Between vowels *g^h > *z* (Arm. *lizanem* "I lick" < *leyg^h-, L *lingo*), PIE *h₃meyg^h- „urinate" (G *omeíkhō*, L *mingo,* Skt. *méhati*) > Arm. *mizem.*

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 *žьdą* „wait" < PIE *g^heyd^h-, which is hardly persuasive) and *žmit, žmbit* „smile" (compared to OIc. *gaman* „joy", which is not much to start with).

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 *sh₂l- "salt" (G *háls*) > Arm. *ał*. 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*) > Arm. *kcoyr*; note the development of *sw- > *kc*, but cf. also Arm. *skesur* „mother in law" < *swek'uro- (G *hekyrá,* L *socera*). It is preserved before stops, cp. Arm. *z-gest* "clothes" < *westu- (L *uestis*). The clusters *rs and *sr both yield Arm. *ṙ*, cf. PIE *g^hesr „hand" (G *kheír*, Hitt. *keššar*) > Arm. *jeṙn*, PIE *h₁orso- „arse" (Hitt. *ārra-,* OE *ears*) > Arm. *oṙ*. 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. *tcaṙamim* besides *tcaršamim* „I wither",

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[10] For a fuller treatment of the development of PIE gutturals in Armenian see Stempel 1994.

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^{wh}iHslo- "thread" (L *fīlum,* Lith. *gýsla,* OCS *žila* "vein") > Arm. *ĵil.*

It is unclear whether word-final *-s yields -k^c (in the plural marker, see below), and the correspondence of Arm. *bok* «barefoot» and OCS *bosъ*, Lith. *bãsas*, OHG *bar* is likewise uncertain (? PIE *b^{h}oso-).

CONSONANTAL LARYNGEALS

Many linguists believe that PIE *h$_2$ and *h$_3$ are preserved as Armenian *h-* word-initially, at least before *e, cf. Arm. *haw* „grandfather" < *h$_2$ewH- (L *avus*, Hitt. *huhhaš*), Arm. *hac^{c}i* „ash tree" > *h$_3$esk- (OIc. *askr*, L *ornus*), Arm. *hot* „odour" < PIE *h$_3$ed- (L *odor*), Arm. *hoviw* „shepherd" < *h$_3$ewi- „sheep" (L *ovis*, OCS *ovьca*), Arm. *hum* „raw" < *HoHmo- (G *ōmós*). The lack of word-initial *h* in *orb* „orphan" may be explained by positing PIE *h$_3$orb^{h}o- (L *orbus*), if laryngeals were lost before *o (in contradistinction to the position before *e). A similar explanation might hold for Arm. *ost* «branch» (Gen. *ostoy*) vs. G *ózos*, Goth. *asts* if from *h$_3$osdo-. If Arm. *oror* „gull" is at all related with G *órnis* „bird" and Russ. *orël* „eagle", it may be from PIE *h$_3$or-.[11]

TABLE 2: PIE CONSONANTS IN ARMENIAN

PIE	ARMENIAN	SPECIAL DEVELOPMENTS
*p	h	➢ 0, w, p^c
*t	t^c	➢ y, d
*k	k^c	➢ x, g, č^c
*k^w	k^c	➢ x, g, č^c
*k'	s	➢ š, 0
*b	p	
*d	t	
*g	k	➢ c
*g^w	k	➢ c
*g'	c	
*b^h	b	➢ w
*d^h	d	➢ ĵ
*g^h	g	➢ ĵ
*g^{wh}	g	➢ ĵ
*g'^{h}	j	➢ z
*s	h	➢ s, 0, *k^c
*h$_1$	0	➢ e-
*h$_2$	h	➢ a-, 0
*h$_3$	h	➢ a-, 0

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[11] For a discussion of laryngeal reflexes in Armenian see Greppin 1988.

PIE RESONANTS AND GLIDES IN ARMENIAN

PIE resonants are generally preserved, cf. PIE *meg'h₂- "big" (Skt. *máhi*) > Arm. *mec*, PIE *(h₂)ni-sdo- "nest" (OHG *nest*) > Arm. *nist*, PIE *snuso- «daughter-in-law» (G *nyós,* L *nurus,* OHG *snur*) > Arm. *nu* (Gen. *nuoy*), PIE *men- «wait, remain» (G *mímnō*) > Arm. *mnam*, PIE *bʰer- "carry" (L *fero*) > Arm. *berem*, PIE *worg'o- "work" (G *érgon*, Germ. *Werk*) > Arm. *gorc*, PIE *gʷʰiHslo- "thread" (L *fīlum,* Lith. *gýsla*, OCS *žila* "vein") > Arm. *ĵil*.

PIE *r is regularly metathesized with the following voiced stop, cf. Arm. *surb* „holy" < *k'ubʰro- (Skt. *śubhrás* „shiny"), Arm. *ałbewr* „spring" < *arbewr < *bʰrewr (G *phréar*), Arm. *kᶜirtn* „sweat" < *swidro- (G *hidrṓs̩* Latv. *sviedri*), Arm. *merj* „near" < PIE *megʰri (G *mékhri* „until") Arm. *erkar* „quern" < PIE *gʷreh₂wōn (Skt. *grā́van,* OCS *žrьny*, OIr. *bró*), Arm. *ełbayr* „brother" < PIE *bʰreh₂tēr (L *frāter*, Skt. *bhrātā*).[12] Since Armenian does not tolerate word-initial *r, the prothetic vowel *e is added to the Anlaut before *r, cf. also Arm. *erēcᶜ* „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 *meh₁mso- „meat" (OCS *mȩso*) > Arm. *mis*.

PIE *w is reflected as *g* in Armenian: PIE *widet "he saw" (aorist, G *eîde*) > Arm. *egit*, PIE *wedor "water" (OCS *voda,* G *hýdōr*) > Arm. *get* "river", PIE *wokʷ- „sound" (L *vox*) > Arm. *gočᶜem* "I say", PIE *čᶜogay "I went" < PIE *kyow- (Skt. *cyávate* "moves"), PIE *deh₂iwēr "brother-in-law" (Skt. *devár-*, OCS *děverь*) > Arm. *tayG* In some, rather unclear circumstances, *w is preserved as Arm. *v, w*: PIE *haw* "bird" < PIE *h₂ewi- (L *avis*), Arm. *tiw* "day" < PIE *diw- (Ved. instr. *dívā* "by day"), Arm. *var̄im* „burn" < PIE *werH- (Lith. *vìrti* „cook", OCS *vrěti* „boil"). The rule for the double reflexes cannot be established,[13] cf. the alternation in Arm. *arew* „sun" < PIE *Hrewi- (Skt. *ravi-* „sun") vs. *aregakn* „sun" (a compound of *areg-* and *akn* „eye", originally „eye of the sun").

The cluster *dw- is regularly reflected as Arm. *erk-*, cf. PIE *dwoh₁ „two" (L *duo*) > Arm. *erku*, PIE *dweh₂ro- „long" (G *dērós*, Skt. *dūrá-*) > Arm. *erkar*. The development was presumably from *dw- to *tg- > *tk- > *rk- > *erk-. This rule is sometimes called „Meillet's law". PIE *tw- yields *kᶜ,* cf. PIE *twē "you" (Acc., Skt. *tvām*) > Arm. *kᶜez* (with analogical short –*e*- and a suffixed –*z* < *-gʰi).

PIE *y develops as Arm. *ĵ* word-initially, and after *r and *n, cp. Arm. *ĵur* "water" < PIE *yuHr - (Lith. *jū́ra* "sea"). It drops between vowels, cp. Arm. *erekᶜ* "three" < PIE *treyes (Skt. *tráyas*). In Arm. *luc* «yoke» < PIE *yugo- (Skt. *yugám,* G *zygón*, etc.)

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[12] With Arm. *l* < *r by dissimilation, as in *ałbewr* above.

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

word initial *l-* is unexpected. Note, however, that maybe the same development can be observed in Arm. *leard*, if it is from PIE *yek^{w}rt (L *iēcur,* Skt. *yakrt,* etc.).

TABLE 3: PIE RESONANTS AND GLIDES IN ARMENIAN

PIE	ARMENIAN	SPECIAL DEVELOPMENTS
*m	m	➢ -n, 0
*n	n	➢ 0
*l	l, ł	
*r	r, ṛ	➢ 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 *lizaném* „I lick", *mardóy* „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. All final consonants were lost at the time of the apocope, except *n, l,* and *r*, cf. Arm. *ewt^{c}n* „seven" < *septm (G *heptá,* L *septem*), Arm. *hayr* „father" < *ph₂tēr (G *patḗr,* L *pater*), Arm. *astł* < *h₂stēr „star" (G *astḗr*). The lost vowels are preserved in compounds, cf. Arm. *hngetasan* „fifteen" < *penk^{w}e-dek'm (the final *-e of PIE *penk^{w}e is regularly lost in *hing* „five").

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-/-eh₂- are inflected as Arm. o-stems, e.g. Arm. *ĵerm* „warm" < *g^{wh}ermo- (G *thermós*), *hum* „raw" < *HoHmo- (G *ōmós*), etc.

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^c* „face", *melk* „sin", *krawnk^c* „religion", *aławt^{c}k^c* „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**
Nom.	azg	ban	cov	beran
Acc.	azg	ban	cov	beran
Gen.	azgi	bani	covu	beranoy
Dat.	azgi	bani	covu	beranoy
Loc.	azgi	bani	covu	beran
Abl.	azgē	banē	covē	beranoy
Inst.	azgaw	baniw	covu	beranov

Plural

	a	**i**	**u**	**o**
Nom.	azgk^c	bank^c	covk^c	berank^c
Acc.	azgs	bans	covs	berans
Gen.	azgac^c	banic^c	covuc^c	beranoc^c
Dat.	azgac^c	banic^c	covuc^c	beranoc^c
Loc.	azgs	bans	covs	berans
Abl.	azgac^c	banic^c	covuc^c	beranoc^c

Inst.   azgawkʿ   baniwkʿ   covukʿ   beranovkʿ

The adduced vocalic stems correspond, more or less regularly, to the PIE vocalic stems, namely the stems in *-eh$_2$ > *-ā, the i-stems, the u-stems, and the o-stems (or thematic stems).

Besides the adduced types, Armenian also preserved some other IE declension types. There are clear reflexes of PIE n-stems, e.g. Arm. *gaṙn*, Gen. *gaṙin* „lamb" < *wrHēn (G *arḗṇ arnós*), r-stems, e.g. Arm. *taygr* „husband's brother" < *deh$_2$iwēr (G Hom. *daḗṛ* OCS *děverъ*). They mostly have the same endings as the regular nouns, but in the Genitive, Dative, and Locative singular they end on 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 *patḗṛ patrós*) and *atamn* „tooth" (n-stem, G *odoús, ódontos*):

N	hayr	atamn
Acc.	hayr	atamn
Gen.	hawr	ataman
Dat.	hawr	ataman
Loc.	hawr	ataman
Abl.	hawrē	atamanē
Inst.	harb	atamamb

N	harkᶜ	atamunkᶜ
Acc.	hars	atamuns
Gen.	harcᶜ	atamancᶜ
Dat.	harcᶜ	atamancᶜ
Loc.	hars	atamuns
Abl.	harcᶜ	atamancᶜ
Inst.	harbkᶜ	atamambkᶜ

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"):

N Sg.	ayr	kin	tēr	tikin
Ac	ayr	kin	tēr	tikin
G	aṙn	knoǰ	teaṙn	tiknoǰ
D	aṙn	knoǰ	teaṙn	tiknoǰ
L	aṙn	knoǰ	teaṙn	tiknoǰ
Ab	aṙnē	knoǰē	teaṙnē	tiknoǰē
I	aramb	kanamb, knaw	teramb	tiknamb
N Pl.	arkʿ	kanaykʿ	tearkʿ	tiknaykʿ
Ac	ars	kanays	tears	tiknays

G	arancʿ	kanancʿ	terancʿ	tiknancʿ
D	arancʿ	kanancʿ	terancʿ	tiknancʿ
L	ars	kanays	tears	tiknays
Ab	arancʿ	kanancʿ	terancʿ	tiknancʿ
I	arambkʿ	kanambkʿ	terambkʿ	tiknambkʿ

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 "water" < 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 –*ĕ,* e.g. *vlъcĕ,* L sg. of *vlъkъ* „wolf"). Some o-stems have the L ending –*oĵ* on the analogy with the anomala such as *kin* „woman", L sg. *knoĵ*, cf. e.g. *mard* „man", L sg. *mardoĵ*.

The instrumental singular ending –*ov* is probably from *-o-b^{h}i, cf. G (Myc.) –*pi*, Hom. –*phi* and OIr. D dual –*aib^n*. The labial stop is preserved in other stem classes, e.g. in *aramb* „with the man" (from *ayr* „man"), cf. also instrumental pl. *arambkʿ*. Other IE languages show the evidence of athematic I pl. ending *-bhis (> Skt. –*bhiš*, OIr. D pl. *-aib*).

pl.
N   *get-k^c*
Acc.   *get-s*
GD   *get-oc^c*
Abl.   *get-oc^c*
I   *get-ovk^c*
L   *get-s*

The Nominative pl. ending $-k^c$ 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^c is not universally accepted, though it may be supported by the development of PIE *treyes "three" (L *trēs*) > Arm. *erek^c*, and *k^{w}etwores > Arm. *č^{c}ork^c*.[14] 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^c- from the agglutinated PIE *dwoh$_1$ "two"; it would have been originally a dual marker, subsequently replacing the inherited plural.[15] It is worth noting another possibility, although it is a mere speculation: the plural marker $–k^c$ 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 oblique sg. ending *–ǰ* has been derived from a postposition *-d^{h}yV, cf. Greek *–thi* in *ouranóthi* „in heaven".

The accusative pl. ending *–s* is regularly derived from *Vns (cf. G dial. Apl. *lýkons* "wolves"), and the L pl. ending *–s* can be derived from PIE *-su (Skt. *vrkešu*) 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 $–c^c$ in the plural cases is unexplained. Some derive it from the possessive PIE suffix *–sk'o-,[16] which may have been first incorporated in the Genitive plural form, and thence spread to the other cases. The instrumental pl. ending *–ovk^c* looks like the plural marker $–k^c$ agglutinated to the instrumental singular ending *–o-v*; however, if PIE *-s yields $–k^c$, this ending can be regularly derived from PIE *-b^{h}is, the instrumental pl. ending of athematic stems (Skt. *–bhiš*, 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 ptuł* „they bear fruit" (Mark 4.20) vs. *tay z-ptuł* „he bears the fruit" (Matth. 13.23). This prefix is undoubtedly of pronominal or prepositional origin, but the exact source is unknown.

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$_1$)eg'- (L *ego*, Skt. *ahám*, etc.), and the 2nd person sg. pronoun *du* < PIE *tuH (L *tu*, G *sý*, etc.):

Nom. sg. *es*   *du*
Acc.   *z-is*   *k^{c}ez*
L   *y-is*   *k^{c}ez*
G   *im*   *k^{c}o*

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[14] I find it inherently improbable that $–k^c$ is here due to the analogy with the plural marker in nouns.
[15] Cf. Nocentini 1994. See also de Lamberterie 1979.
[16] Cf. the Slavic suffix *–sk-* which can also have the possessive meaning, e.g. in OCS *otьčьskъ* "father's", from *otьcь* "father".

D	*inj*	$k^c ez$
Abl.	*y-inēn*	$k^c \bar{e}n$
I	*inew*	$k^c ew$

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 *h₁me-* (G accusative *emé*) is preserved in the genitive *im*. The stem *–is* in Acc. and L are probably analogical to Nom. *es* (*y-* and *z-* are prefixes). The ending *–j* in the dative is is presumably the reflex of a particle (PIE *–gʰi*, *-gʰey, 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 *tъ, ta, to*). The stem $k^c e$- 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 *–gʰi* or *–gʰe* as in the D sg. of the 1st person sg. pronoun (*inj*), with the regular development of *gʰ > z* between vowels.

There is a curious suppletion in the plural, where 1 pl. is formed from the stem *me-* (cf. OCS *my,* Lith. *mẽs*), perhaps from earlier *sme- < *usme-, and the 2 pl. from the stems *du-* and *je-*:

Nom. pl.	mek^c	duk^c
Acc.	*mez*	*jez*
L	*mez*	*jez*
G	*mer*	*jer*
D	*mez*	*jez*
Abl.	*mēnĵ*	*jēnĵ*
I	$mewk^c$	$jewk^c$

The form of the 2pl. Nom. looks like the agglutinated stem of the 2sg. pronoun plus the pluralizing $-k^c$, but it is possible that it is actually from PIE *yuH-* (Lith. *jūs,* Skt. *yūyam*) with *d-* instead of *ĵ-* 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 *–gʰi* (also in *–z* in the oblique cases, as well as in D sg. *inj*). The postulated *swe-gʰi* was then assimilated as *sgʰe-gʰi, 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 demonstrative pronoun system is quite complex. Armenian uses deictic suffixes *-s, -d, -n* added to nouns and adjectives.[17] They form a three-way deictic contrast, similarly as in OCS *tъ – ovъ – onъ*. 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 $ayn-k^c$, Acc. *ayn-s* G $ayn-c^c$, D $ayn-c^c$, L *ayn-s*, Abl. $aync^c$, $aync^c an\bar{e}$, I $aynuk^c$. When used in emphasis, this pronoun

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[17] 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.

(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-cᶜ-ik,* etc.

The suffix *–s* is from the PIE demonstrative stem *k'i- (L *–c* in *hic*, Lith. *šis* „he") and the suffix *–d* is undoubtedly from PIE *to- (OCS *tъ* „that", Skt. *tad* „that"). The suffix *–n* may be connected with OCS *onъ* „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:

	im 'my'	**kˁo** 'thy'	**nora** 'his'	**iwr** 'his'(refl.)	**mer** 'our'	**jer** 'your' (pl.)	**nocˁa** 'their'	**[iwreancˁ]** 'their' (refl.)
N Sg.	*im*	*kˁo*	*nora*	*iwr*	*mer*	*jer*	*nocˁa*	*[iwreancˁ]*
Ac	*im*	*kˁo*	*nora*	*iwr*	*mer*	*jer*	*nocˁa*	
G	*imoy*	*kˁoyoy, kˁoy*	*norayoy*	*iwroy*	*meroy*	*jeroy*	*nocˁayoy*	
D	*imum*	*kˁum*	*norayum*	*iwrum*	*merum*	*jerum*	*nocˁayum*	
L	*imum*	*kˁum*	*norayum*	*iwrum*	*merum*	*jerum*	*nocˁayum*	
Ab	*immē*	*kˁumē*	*norayoy*	*iwrmē*	*mermē*	*jermē*	*nocˁayoy*	
I	*imov*	*kˁuov*	*norayov*	*iwrov*	*merov*	*jerov*	*nocˁayov*	
N Pl.	*imkˁ*	*kˁoykˁ*	*noraykˁ*	*iwr*	*merkˁ*	*jerkˁ*	*nocˁaykˁ*	*[iwreancˁ]*
Ac	*ims*	*kˁoys*	*norays*	*iwr*	*mers*	*jers*	*nocˁays*	
G	*imocˁ*	*kˁoyocˁ, kˁocˁ*	*norayocˁ, norayicˁ*	*iwrocˁ*	*merocˁ*	*jerocˁ*	*nocˁayocˁ, nocˁayicˁ*	
D	*imocˁ*	*kˁoyocˁ*	*norayocˁ, norayicˁ*	*iwrocˁ*	*merocˁ*	*jerocˁ*	*nocˁayocˁ, nocˁayicˁ*	
L	*ims*	*kˁoys*	*norays*	*iwrum*	*mers*	*jers*	*nocˁays*	
Abl	*imocˁ*	*kˁoyocˁ*	*norayocˁ, norayicˁ*	*iwrocˁ*	*merocˁ*	*jerocˁ*	*nocˁayocˁ, nocˁayicˁ*	
I	*imovkˁ*	*kˁoyovkˁ*	*norayovkˁ, norayiwkˁ*	*iwrovkˁ*	*merovkˁ*	*jerovkˁ*	*nocˁayovkˁ, nocˁayiwkˁ*	

The possessive-reflexive pronoun is *iwr* „suus" < PIE *swo-.

Note also the interrogative pronouns *ov* „who" and *zi, zinčᶜ* „what", and the indefinites *omn* „someone", *imn* „something". The vowel alternation between *-o-* and *–i-* is reminiscent of the one in PIE *kʷo- (OCS *kъto* „who") and *kʷi- (OCS *čьto*), but the loss of word-initial *kʷ is difficult to account for (it is generally agreed that *z-* in *zi, zinčᶜ* is simply the *nota accusativi*). Possibly the voiceless velar was lost in unstressed monosyllables, cf. the preserved *kᶜ* < *kʷ in Arm. *kᶜani* „how much".

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.

There are no synthetic comparative or superlative. The comparative is expressed analytically with the adverbs *coaweli* 'more', *ar̄awel* 'more', *ews* 'yet, still, even', and the superlative usually with the construction involving *amenayn* 'all, every'. Analytic comparative and superlative constructions predominate in the languages of the Caucasus.

NUMERALS

Here are the numerals from 1 to 10: *mi, erku, erekᶜ, čᶜorkᶜ, hing, vecᶜ, ewtᶜn, utᶜ, inn, tasn*. Although this is not obvious at first sight, their forms are inherited from PIE (*smi-yo-, *dwoh$_1$, *treyes, *kʷetwores, *penkʷe, *(k's)wek's, *septm, *h$_3$ek'toh$_1$, *newn, *dek'm).

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

	'one'	'two'	'three'	'four'
N	mi	erku, erkukˁ	erekˁ	čˁorkˁ
Acc	mi	erkus	eris	čˁors
G	mioy, mioĵ	erkucˁ	ericˁ	čˁoricˁ
D	mium, mioĭ	erkucˁ	ericˁ	čˁoricˁ
L	mium, mioĭ	erkus	eris	čˁors
Abl	mioy, mioĭē	erkucˁ	ericˁ	čˁoricˁ
I	miov	erkukˁ	eriwkˁ	čˁoriwkˁ

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 hngacᶜ* „from the five men" (Abl.).

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", *vecᶜerord* „sixth". The ordinal *ar̄ajin* „first" is derived from *ar̄aĵ* „before". There are also collective numerals formed with the suffix *-kᶜean*, distributives formed by reduplication (*mi mi* „by one"), etc.

VERBS

The verbal system is significantly simplified, when compared to the reconstructed PIE.[18] 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 $*–eh_1$- (cf. L *maneo, manēre* „remain").

Armenian also has an imperfect, which is an isogloss it shares with Greek and Indo-Iranian. Monosyllabic stems form the imperfect by adding the prefix *e*-, the "augment", which also exists only in Greek, Indo-Iranian, and Phrygian, cp. Arm. *e-ber*, imperfect to *berem* "I bring" (G present *phérō*, aorist *é-pheron*).

There are remarkably few traces of the PIE perfect, e.g. Arm. *goy* „there is" < PIE $*h_2wos$-e (OE *was*, cf. also Hitt. *huišzi* „lives" < PIE $*h_2wes$-ti).

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. e-conjugation (type *lam* „I cry"), 4. u-conjugation (type *hełum* „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 $*b^her$-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. *lkᶜanem* „I leave" < PIE $*li$-n-k^w-, L *linquo*, Arm. *lizanem* „I lick", cf. L *lingo*). The i-conjugation verbs includes the reflexes of PIE statives in $*-eh_1$-, e.g. Arm. *nstim* „sit" (cf. L *sedeo, sedēre*); some are built with the very productive present suffix –*čᶜi*-, e.g. Arm. *erknčᶜim* „I am afraid". The a-verbs include deverbatives built with the suffix $*-eh_2$-, e.g. Arm. *mnam* „I remain" (cf. L *maneo, manēre*, with the PIE stative

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[18] For Indo-Europeanists, the fundamental study of the Armenian verbal system is Klingenschmitt 1982, cf. also Jasanoff 1979.

suffix *-eh$_1$-); the u-verbs are often built with the suffix –*nu*- from PIE *-new-/-nu-, e.g. Arm. *z-genum* „I dress" < *wes-nu- (G *hénnymi*).

Indicative present active of *sirem* "I love":

singular   plural

1. *sire-m*   *sire-mk^c*
2. *sire-s*   *sirēk^c* < *sire-yk^c
3. *sirē* < *sire-y   *sire-n*

Indicative present of *lam* „I cry":

   1. *la-m*   *la-mk^c*
   2. *la-s*   *la-yk^c*
   3. *la-y*   *la-n*

The origin of the present endings is only partially understood. In the 1st person sg. –*m* is from PIE athematic *-mi (OCS *jes-mъ*, 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$_1$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^c* 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 agluttinatively, by adding the clearly segmentable suffix -*ic^c*-:

1. *sir-ic^c-em*   *sir-ic^c-emk^c*
2. *sir-ic^c-es*   *sir-ic^c-ēk^c*
3. *sir-ic^c-ē*   *sir-ic^c-en*

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^{c}ē* may be used to mean «let him bring». The endings of the subjunctive are basically the same as in the indicative present, agglutinated to the subjunctive suffix. The suffix –*ic^c*- appears to be the agglutinated present subjunctive of *em* „to be" < PIE *h$_1$es-; the element –*c^c*- 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.

1. *sire-i*   *sire-ak^c*
2. *sire-ir*   *sire-ik^c*
3. *sirēr < sire-yr*   *sire-in*

1. *layi*   *layak^c*
2. *layir*   *layik^c*
3. *layr*   *layin*

The origin of the imperfect endings is disputed. Some scholars derive the suffix *–i-* from the PIE optative suffix *-yeh$_1$-/ -ih$_1$- (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").

IMPERATIVE PRESENT

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

2sg. *sire-r* „love!"   2pl. *sirēk^c*
2sg. *la-r* „cry!"   2pl. *la-yk^c*

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. *bhárasva*, L *sequere*). The plural ending is the same as in the indicative and may be from PIE *-te- with the added plural morpheme *-k^c*.

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$_1$ (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^c-*). The latter suffix has been derived from PIE *-sk'- (cf. the

Greek dialectal imperfects and aorists with iterative value is –*eskon,* e.g. Hom. *ídeske* „he was accustomed to see" < *wid-e-sk'-e-t).

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 root-aorist (*ber-i*); 2. e-present (*as-em* „I say") and aorist in –*ac^c*- (*as-ac^c-i*), 3. i-present (*nst-im* „I sit" and root aorist (*nst-ay*), 4. a-present (*ał-am* „I grind") and weak aorist in –*ac^c*- (*ał-ac^c-i*), 5. u-present (*zen-um* „I sacrifice") and root aorist (*zen-i*), 6. u-present (*l-n-um* „I fill") and weak aorist in –*c^{c}i*- (*l-c^{c}i*), etc.

The verb *berem* „carry" is inflected in the indicative aorist as follows:

sg.   pl.
1. *ber-i*   *ber-ak^c*
2. *ber-er*   *ber-ēk^c*
3. *e-ber*   *ber-in*

1. *sire-c^c-i*   *sire-c^{c}ak^c*
2. *sire-c^c-er*   *sire-c^c-ēk^c*
3. *sirea-c^c*   *sire-c^c-in*

The augment *e-* is added only to monosyllabic forms of the 3rd person singular. We do not find it in the so-called „weak" aorist It is the same element found in G *e-* and Skt.*a-* of (dialectal) PIE origin (PIE *h₁e-), cf. G aorist *élipe,* Skt. *a-ricat* and Arm. *e-lik^c* < *h₁lik^{w}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* < *h₁eb^{b}er-e-t (Skt. imperfect *ábharat*), Arm. *berin* < *b^{h}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.

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

1 Sg.	eki	etu	edi	ełē
2	ekir	etur	edir	ełer
3	ekn	et	ed	ełew
1 Pl.	ekakʿ	tuakʿ	edakʿ	ełeakʿ
2	ekikʿ	etukʿ	edikʿ	ełēkʿ
3	ekin	etum	edin	ełen

AORIST SUBJUNCTIVE

The aorist subjunctive is formed, parallelly to the present subjunctive, by adding the suffix –*(i)c^c*- to the aorist stem:

sg. pl.
1. *ber-ic^c* *ber-c^c-uk^c*
2. *ber-c^c-es* *ber-ĵ-ik^c*
3. *ber-c^c-ē* *ber-c^c-en*

The aorist subjunctive is used to express the future tense, but it can also express desire or intention, cf. e.g. *harc^{c}ic^c inč^c zjez* «I want to ask you something» (Lucas,XV, 23).

AORIST IMPERATIVE

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

2sg. *ber* „carry" *sirea* „love!"
2pl. *berēk^c* *sirec^{c}ēk^c*

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^{h}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. *ber-ay* *sire-c^c-ay*
2. *ber-ar* *sire-c^c-ar*
3. *ber-aw* *sire-c^c-aw*

pl.
1. *ber-ak^c* *sire-c^c-ak^c*
2. *ber-ayk^c* *sire-c^c-ayk^c*
3. *ber-an* *sire-c^c-an*

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$_2$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$_2$-, 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.

present	imperfect
sg.	
1. *em*	*ei*
2. *es*	*eir*
3. *ē*	*ēr*
pl.	
1. *emk^c*	*eak^c*
2. *ēk^c*	*eik^c*
3. *en*	*ein*

Suppletive verbs include *utem* «I eat» (< *h₁od-, cf. L *edo*), aor. *keray* (< *g^{w}erh₁, cf. L *voro*), *əmpem* «I drink» (< *peh₃-, cf. OCS *piti,* L *bibo*), aor. *arbi* (< *srb^h-, cf. L *sorbeo* „suck up"), *gam* «I come», (< *g^{h}eH-, cf. G *kikhā́rō* „reach", OHG *gān* „go"), aor. *eki* (< *g^{w}em-, cf. L *venio*, G *baínō*), *ert^{c}am* «I go», aor. *č^{c}ogay*, *unim* «I have», aor. *kalay*.

INFINITIVE

There is only one infinitive formed with the suffix *–l* added to the present stem, e.g. *sirem* „love": inf. *sirel*, *hełum* „pour": inf. *hełul*.

The suffixes *–oc^c-* and *–i-* added to infinitives express the debitative form (or participle of necessity, such as the Latin gerundive), e.g. *sirel* „to love": *sireloc^c, sireli* „which should be loved, *amandus*".

PARTICIPLE

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 *asacʿeal* 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.

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^co
write-part. is your
"You wrote"

gorc-eal   ē k^co   z-gorc
work-part. is your Acc.-work
"You did your work", "Your work is done"

This construction is usually considered to have arisen under the influence of Caucasian substratum (Solta 1963: 123).

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 jesmь* "I have carried"). It doubtlessly represents a parallel development of what may originally have been a very productive way of forming deverbal adjectives.[19]

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 suffix compound –*uc^c-an-* < *-oy-sk'-an-* to the aorist stem, cf., e.g. *usanim* "I learn" vs. *usuc^canim* "I teach".

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[19] See Stempel 1983.

TEXTS

1. "Vahagn's Birth"

This poem from the pre-Christian period is preserved in Mowsēs Kᶜorenacᶜi's "Armenian History". It was reportedly recited by travelling bards (Arm. *ergičᶜ*). The hero Vahagn is none other than the pagan Indo-Aryan thunder god, Skt. *Vrtra-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 ełegnik;
ənd ełegan pᶜoł cux elanēr,
ənd ełegan pᶜoł bocᶜ elanēr;
ew i bocᶜoyn vazēr xarteaš patanekik
na hur her unēr, bocᶜ unēr mōrus,
ew ačᶜkunkᶜn ein aregakunkᶜ.

"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 *h₁edwōn (G *odýnē,* OIr. *idu*)

erkin "sky" Nom. sg.

erkir "earth" Nom. sg.

ew "also" < PIE *h₁epi- „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".

ełegnik "small reed", diminutive of *ełegn* „reed" (n-stem)

ənd „through"

p^coł „tube"

cux „smoke"

elanēr 3 sg. imperfect of *elanem* „come out"

boc^c „fire", etymologically often related to L *focus*, but the connection is difficult (L *focus* is better derived from PIE *d^hog^wh-s „burning", cf. OIr. *daig* „fire", while a root PIE *b^hok- would be violating phonotactic constrains of PIE; moreover, such a root would be reflected as *bok^c- 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$_2$wr (G *pŷr*)

her „hair"

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

ač^ckunk^cn N pl. of *akn* „eye" with suffixed demonstrative *–n*. From PIE *h$_3$ek^w- „eye" (L *oculus,* etc.)

ein „they were" (3 sg. imperfect of *em*), PIE *h$_1$es- (L *sum, esse*, etc.)

aregakunk^c N pl. to *areg-akn* „sun", literally „sun-eye" (cf. *arew* „sun").

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

Ew ełew ənd awursn ənd aynosik el hraman yAwgostos kayserē ašxarhagir aṙnel ənd amenayn tiezers. Ays aṙajin ašxarhagir ełew i dataworut ^cean Asorwoc^c Kiwreneay. Ew ert^cayin amenek^cean mtanel yašxarhagir yiwrak^canč^ciwr k^całak^ci. El ew Yovsēp^c i Galilēē i k^całak^cē Nazaret^cē i Hrēastan, i k^całak^c Dawt^ci or koč^ci Bet^cłeēm, vasn lineloy nora i tanē ew yazgē Dawt^ci., mtanel yašxarhagir Maremaw handerj zor xōsealn ēr nma, ew ēr yłi. Ew ełew i hasaneln noc^ca andr, lc^can awurk^c cnaneloy nora. Ew cnaw zordin iwr zandranik, ew pateac^c i xanjarurs ew ed zna i msur, zi oč^c goyr noc^ca teli yǰavanin. Ew hoviwk^c ēin i tełwōĵn yaynmik bacot^ceagk^c, ork^c pahēin

zpahpanut^c – iwns gišeroy hōtic^c iwreanc^c. Ew hreštak Teaṙn erewec^{c}aw noc^{c}a, ew p^{c}aṙk^c Teaṙn cagec^{c}in aṙ nosa, ew erkean erkiwł mec. Ew asē c^{c}nosa hreštakn: „Mi erknč^{c}ik^c, zi ahawasik awetaranem jez uraxut^{c}iwn mec, or ełic^{c}i amenayn žołovrdeann, zi cnaw jez ays-or P^{c}rkič^c, o r ē Ocea l Tēr, i k^{c}ałak^{c}i Dawt^{c}i. Ew ays nšanak jez, gtanic^{c}ēk^c manuk pateal i xanjarurs ew edeal i msur. Ew yanakarcaki ełew ənd hreštakin ənd aynmik bazmutíwn zōrac^c erknaworac^c, or ōrhnēin zAstowac ew asēin: „P^{c}aṙk^c i barjuns Astucoy, ew yerkir xałałut^{c}iwn, i mardik hačutíwn.“ Ew ełew ibrew verac^{c}an i noc^{c}anē hreštakk^{c}n yerkins, asen c^{c}mimeans hoviwk^{c}n: „Ekayk^x ert^{c}ic^{c}uk^c minč^{c}ew c^{c}Bet^{c}łeēm, ew tesc^{c}uk^c zinč^c ē bans ays or ełew, zor Tēr ec^{c}oxc^c mez.“ Ew ekin p^{c}ut^{c}anaki, ew gtin zMariam ew zYusēp^c ew zmanukn edeal i msur. Ew canean vasn banin, or asac^{c}aw noc^{c}a zmankanēn. Ew amenek^{c}in or lsēin, zarmanayin vasn banic^{c}n zor xōsec^{c}an ənd nosa hoviwk^{c}n. Ew Mariam zamenayn zbans zaysosik pahēr, ew xelamut linēr i srti iwrum. Ew darjan hoviwk^{c}n, p^{c}aṙawor aṙnēin zAstowac vasn asmenayni zor lowan ew tesin, orpēs patmec^{c}aw noc^{c}a.

3. The story of Parandzem (P^{c}awstos Biwzant, IV, 98-99).

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APPENDIX1 : MAP OF ANCIENT ARMENIA
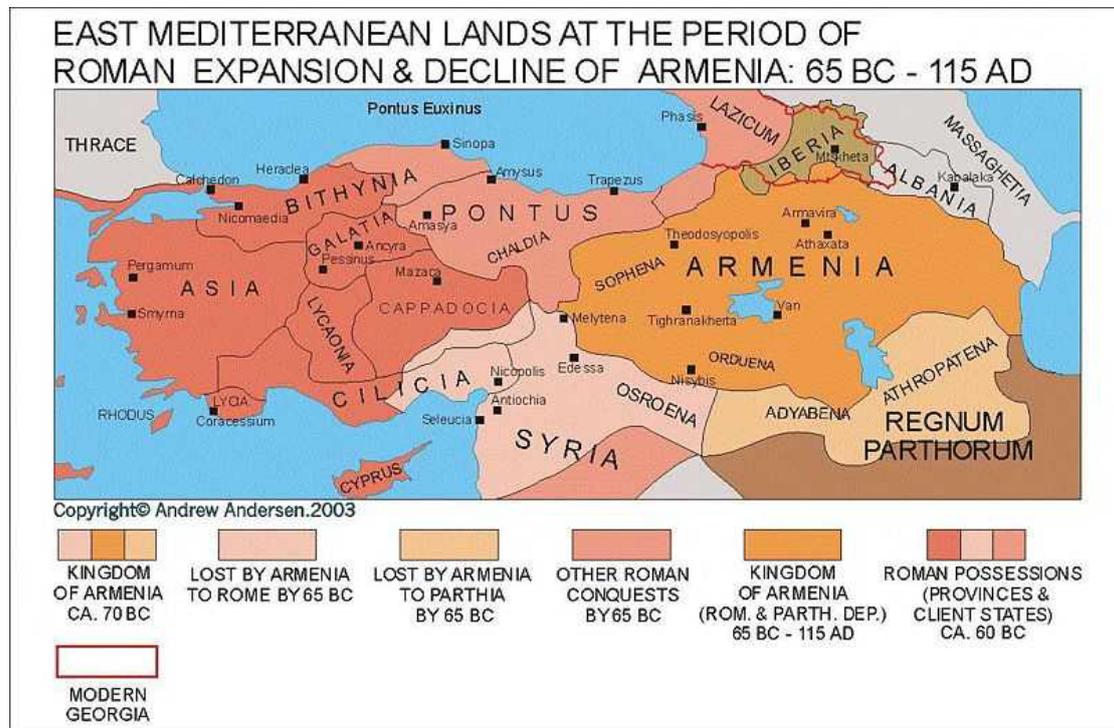
APPENDIX 2: LIST OF ABBREVIATIONS

    A) Languages

Alb. = Albanian

Arm. = Armenian

G = Greek

Goth. = Gothic

Hitt. = Hittite

Hom. = Homeric

L = Latin

Lith. = Lithuanian

Myc. = Mycenaean

OCS = Old Church Slavic

OE = Old English

OHG = Old High German

OIc. = Old Icelandic

OIr. = Old Irish

ON = Old Nordic

Parth. = Parthian

PIE = Proto-Indo-European

Skt. = Sanskrit

W = Welsh

    B) Grammatical terms

Abl. = Ablative

Acc. = Accusative

Aor. = Aorist

D = Dative

Gen. = Genitive

Inst. = Instrumental

Loc. = Locative

Nom. = Nominative

part. = participle

Pres. = Present