

Origins and historical development of the Armenian language

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Introduction

1. Indo-European origins of Armenian

- 1.1 General
- 1.2 The PIE homeland and the dispersal
- 1.3 The place of Armenian in the Indo-European language family
- 1.4 Substrate
- 1.5 Lexical material
- 1.6 Preliminary conclusions
- 1.7 Chronological background: inherited and borrowed
- 1.8 The first millennium BC: Armenian and Urartian
- 1.9 The third and second millennia BC
- 1.10 Cultural excursus: “Dragon stones”

2. The development of the Proto-Indo-European phonemic system in Armenian

3. Archaisms and innovations of the Armenian nominal system

4. Archaisms and innovations of the Armenian verbal system

5. Onomastics

Supplement: Armenian dialects: archaisms and innovations

Reading

(1) Introduction

(2) As an Indo-European language, Armenian has been the subject of research for about two hundred years.

- The high number of Iranian loans led scholars in the mid-19th century to conclude that Armenian belonged to the Iranian group of Indo-European languages.
- This opinion prevailed until 1875, when Heinrich Hübschmann proved that Armenian is an independent branch of the Indo-European language family.
- The later decades are marked by two fundamental studies, namely Hübschmann 1897 and Meillet 1936, as well as works by a number of other scholars such as Pedersen and Lidén.

(3-5) The next phase of comparative-historical Armenian linguistics starting in the 1930s is notable for several fundamental works of the most outstanding figure in Armenological disciplines, Hrač‘ya Ačařyan, who successfully maintained the high standards of his great teachers, Hübschmann and Meillet. Of his works we should mention especially:

- “History of the Armenian language” (AčařHLPatm 1940-1951),

- *Liakatar K'erakanut 'yun* ("Complete grammar", AčařLiak 1952-2005),
- and especially his magnificent "Armenian Etymological Dictionary" (HAB), originally published between 1926 and 1935.

(6) Ačařyan's traditions have been continued by his pupils, such as Ėduard Ałayan and Gevorg Ėahukyan. Especially valuable are "History of the Armenian language" (Ėahukyan 1987) and the posthumously published "Armenian Etymological Dictionary" (Ėahukyan 2010).

(7) Some handbooks & studies on comparative Armenian linguistics:

Meillet 1936, Godel 1975, Clackson 1994, Olsen 1999, Kortlandt 2003, Martirosyan 2010.

(8) Ačařyan's corpora roughly reflect the state of research in the 1940s. Since then:

- a large number of critical texts, concordances and dialect descriptions;
- voluminous corpora of inscriptions and colophons of Armenian manuscripts;
- a large amount of lexicological and etymological examinations: corrections and supplements to HAB, newly found words, revision of the philological status of words, many new etymologies.

(9) One of the main tasks of comparative-historical Armenian linguistics is to newly re-evaluate Ačařyan's achievements, and to combine them with the huge amount of new materials in order to create new corpora, such as:

- "History of Armenian Language and Culture";
- "Linguo-Cultural and Etymological Thesaurus of the Armenian Language and Culture (organized by semantic fields: sky, world, flora, fauna, kinship, body parts, craft, arts, poetry, religion, etc.)".

This work will benefit greatly from the possibilities presented by modern data storage and processing techniques.

(10) Main shortcomings that can be observed in etymological studies is that scholars often:

- neglect internal etymology;
- take poorly explained, or unexplained, choices between conflicting etymologies.

(11) Examples from Mkrtč'yan 2005 (*Нерсес Мкртчян, Семитские языки и армянский*):

Derives the dialectal word *p'etat* 'hoe, mattock' from Akkadian *petut* 'implement'.

- In fact, its derivation from Classical Armenian *p'aytahat* / *p'aytat* 'wood-cutter; axe, hatchet, mattock' is impeccable.

Removes native (Indo-European) etymologies of a number of words, such as *arawr* 'plough' and *erekoy* 'evening' with no solid argumentation, replacing them with Semitic explanations.

- In fact, the IE etymologies of these words are impeccable:

PIE **h₂rh₃trom*, cf. Gr. *ἄροτρον*, Lat. *arātrum*, Mlr. *arathar*, Welsh *aradr*, OIc. *arðr*, etc.;

PIE **h₁reg^wos-*, cf. Gr. *ἔρεβος* n. ‘the dark of the underworld’, Goth. *riqis* n. ‘darkness, twilight’, etc.

(12) In the last few decades an increasing usage of linguistic data in the study of Armenian historical and cultural issues can be observed:

- ideas that violate the most elementary principles of philological and etymological research;
- Armenian as cognate with or identical to a non-Indo-European isolated language, such as Sumerian, Basque or Etruscan.
- Armenian as the Indo-European mother tongue or the mother of all languages in the world.

► It is essential to:

- carry out some work towards popularizing some of the elements of comparative-historical Armenian linguistics;
- write reviews on at least the most influential pseudo-scientific publications and present them in academic journals, as well as in more popular media.

1. Indo-European origins of Armenian

1.1 General

(13) Armenian is genetically related to Indo-European languages such as Hittite, Sanskrit, Avestan, Greek, Latin, Gothic, and Slavic. Lexical correspondences belonging to basic vocabulary:

anun, dial. *anum* ‘name’: Gr. *ὄνομα*, Lat. *nōmen*, Skt. *nāman-*, Goth. *namo*

asth, *asteł* ‘star’: Gr. *ἀστήρ*, Av. *star-*, Goth. *stairno*, Lat. *stella*, Hiit. *hasterza*

duñ ‘door’: Skt. *dvār-*, Gr. *θύρα*, Lat. *foris*, Welsh *dor*, Engl. *door*, OCS *dvъrb*

dustr ‘daughter’: Skt. *duhitār-*, Gr. *θυγάτηρ*, Lith. *duktė*

kin, *kanay-* ‘woman, wife’: OAv. *gəñā-* ‘woman’, Gr. *γυνή, γυναί-*, Goth. *qino*

kov ‘cow’: Skt. *gauh* ‘cow, bull’, Latv. *gūovs* ‘cow’, OCS *gov-g-do*

sirt ‘heart’: OCS *srъdbce*, Lith. *širdis* ‘heart’, Goth. *hairto* ‘heart’

(14) Systematical and consequent phonological agreements:

An initial **s-* drops: Arm. *alt* ‘salt’ vs. Engl. *salt* ‘salt’; Arm. *ewt’n* ‘seven’ vs. Skt. *saptá* and Lat. *septem*, etc.

The PIE initial **p-* yields Arm. *h-*, and the intervocalic **-t-* drops:

hayr ‘father’: Skt. *pitā*, Gr. *πατήρ*, Lat. *pater*, OHG *fater*, Toch. B *pācer*

heru ‘last year’: Gr. *πέρσι*, Dor. *πέρσι*, Skt. *parut* ‘last year’

č’or-k ‘four’: Skt. plur. *cátasras*, Pers. *čahār*, Lat. *quattuor*, OCS *četyre*

(15-17) Even more significant are grammatical agreements. Here are two examples:

(1) Arm. nominative *hayr* ‘father’ from PIE **ph₂tēr* = Gr. *πατήρ*, Lat. *pater*; genitive *hawr* from PIE **ph₂tr-ós* = Gr. *πατρός*, Lat. *patris*; instrumental *har-b* from **ph₂tr-b^hi-*, cf. Skt. dative plural *pitṛ^h-bhyas*;

(2) Arm. present *berem* ‘to bring, bear’ from PIE **b^her-e-*: Skt. *bhárati*, Lat. *ferō*, Gr. *φέρω* ‘to carry, bear’; 3sg aorist *e-ber* from PIE **é-b^her-et* = Skt. *á-bhar-at*, Gr. *ἔ-φερ-ε*.

1.2 The PIE homeland and the dispersal

(18) Speakers of the Indo-European cognate languages once spoke the same language, which we conventionally call Proto-Indo-European. Furthermore, they once lived in a defined geographical area, the PIE homeland (*Urheimat*), the location of which has not yet been established. The dispersal of PIE is dated to about 4000–3000 BC by most scholars and a few millennia earlier by the followers of the Anatolian model.

(19) PIE homeland (*Urheimat*): Various locations have been proposed (see the map, Mallory 1989: 144):

(20) The archaeological material and the linguistic relationship between the Indo-Iranian and the Finno-Ugric languages seem to favour the view according to which, after the dispersal, the ancestors of the Indo-Iranian languages were once in contact with those of the Finno-Ugric languages somewhere in the southern Urals. However, this would make it hard to explain the close relationship between the Indo-Iranians and Proto-Armenians, if the latter would have been in the Near East around the 3rd millennium BC. Besides, even more impressive lexical correspondences between Armenian and Greek, both shared innovations and substrate words especially in the domains of agriculture and technical activities, imply a long and multistage stay of Proto-Armenians in the regions not very far from the Black Sea.

(21) Therefore, even if one accepts the Near-Eastern origin of the Indo-Europeans, it is hard to claim that the PIE dispersal took place in the Near East, and that the Proto-Armenians stayed there all the time. Efforts have been made to reconcile the two theories within a chronological framework implying two phases: an earlier stage (in the Near East) and a later stage (north of the Caucasus mountains and the Black Sea).

1.3 The place of Armenian in the Indo-European language family

(22) The linguistic evidence allows to draw the following preliminary conclusions on the place of Armenian in the Indo-European language family. Armenian, Greek, (Phrygian) and Indo-Iranian were dialectally close to each other or even formed a dialectal group at the time of the Indo-European dispersal. Within this hypothetical dialect group, Proto-Armenian was situated between Proto-Greek (to the west) and Proto-Indo-Iranian (to the east).

(23) There are a large number of connections between Armenian, Greek and Indo-Iranian on the one hand (set A), and between Armenian and Greek on the other (set B). The latter set of lexical agreements also involves European branches of the Indo-European language family, a large portion of which should be explained in terms of substrate rather than Indo-European heritage.

(24) Method

Archaic features and independent developments are not significant for determining a close genetic relationship between two languages or dialects. Instead, one should rely on shared innovations from the outset. The drawback with this method: there is often (if not always) the possibility of independent innovations yielding similar results. Nevertheless, the cumulative evidence decreases the likelihood of chance in such cases.

(25) When an etymon is only found in two or three non-contiguous dialects, it may theoretically represent an archaic PIE lexeme that has been lost elsewhere and is thus not significant for our purpose.

But when an etymon appears in a few dialects that can be regarded as contiguous at a certain stage, we should take it seriously even if the etymon has no PIE origin and cannot be thus treated as a shared innovation in the genetic sense.

Two Indo-European dialects that were spoken in the same geographical area at a period shortly before and/or after the Indo-European dispersal could both develop shared innovations as a result of their interaction with neighbouring non-Indo-European languages.

1.4 Substrate

(26) After the Indo-European dispersal Proto-Armenian would have continued to come into contact with genetically related Indo-European dialects.

- Simultaneously, it would certainly also have been in contact with neighbouring non-Indo-European languages.
- A word can be of a substrate origin if it is characterized by:
 1. limited geographical distribution;
 2. unusual phonology and word formation;
 3. characteristic semantics (mostly: plant names, animal names, cultural words).

(27) The consonantal correspondences between substrate words in Armenian and other languages are of two kinds:

(28) 1. **archaic**, matching the correspondences of the native Indo-European heritage:

- **-rj-* > Arm. *-rj-* and **g/g^w* > Arm. *k*, e.g. Arm. *anurj* ‘dream’ vs. Gr. *ὄνε/οἰροϛ*, Arm. *kamurj* ‘bridge’ vs. Gr. *γέφῶρα*;

- $*\hat{k} >$ Arm. *s*, e.g. Arn. *siserĭn* ‘chick pea’ vs. Lat. *cicer* ‘chick pea’, Arm. *siwn* ‘column, pillar’ vs. Gr. *κίτων*;
- $*\hat{g} >$ Arm. *c*, e.g. Arm. *erbuĭc* ‘breast of animals’ vs. Gr. *φάρυγγις*, gen. *-υγος*, *-υγγος* ‘throat, dewlap’;
- $*p-$ > Arm. *h-* or zero, e.g. Arm. *atawni* (**atawun*), *ea*-stem ‘pigeon, dove’ vs. Lat. *palumbēs* ‘wood-pigeon, ring-dove’ (**p^hlh₂-b^h-ōn*, gen. **-b^h-n-os*); Arm. *hec*‘, gen. *hec*‘-i ‘felloe’, if from **pelk-s*, cf. OHG *felga*, OEngl. *felg(e)* ‘felloe’, etc.; Arm. *ort*‘, *o*-stem ‘vine’ vs. Gr. *π(τ)όρθος* ‘sprout’.

(29) 2. relatively young:

- $*k >$ Arm. *k*, e.g. Arm. *kaĭamax(i)* ‘white poplar, aspen’ vs. Hesychian *καλαμίνδαρ* ‘plane’; *kariĭc* ‘scorpion’, dial. ‘crayfish’ vs. Gr. *κᾶρις* ‘crayfish’;
- $*p-$ > Arm. *p*, e.g. Arm. *pal* ‘rock’ vs. OIr. *ail* ‘cliff’ < **pal-i-*, MIr. *all* < **p^hso-*, Gr. *πέλλα* ‘rock’;
- $*s >$ Arm. *s* (unless these words have been borrowed from lost *satəm*-forms in $*\hat{k}$), e.g. Arm. *sayl*, *i*-stem and *o*-stem ‘wagon; Ursa Major and Minor, Arcturus’ vs. Gr. *σατίνη* f. ‘chariot’ and Hesychian *σάτιλλα*· *πλειὰς τὸ ἄστρον*, the constellation being regarded as a car (considered to be of Phrygian or Thracian origin); Arm. *sring* ‘pipe, fife’ vs. Gr. *σῶριγις*, *-ιγγος* f. ‘shepherd’s pipe, panpipe’, which is considered to be of Phrygian or Mediterranean origin.

1.5 Lexical material

(30) I present the material in summarizing tables divided into semantic fields. Wherever a lexical agreement is likely to be an innovation rather than an isolated etymon, I mark it by shading.

(31) **Table set A:** Lexical isoglosses: Armenian, Greek and Indo-Iranian

(32) **Table set B:** Lexical isoglosses: Armenian, Greek, etc.

(33) Collation of the two sets

- Both sets have a roughly equal number of lexical agreements in the semantic fields of, e.g., physical world, fauna, animal husbandry and human body.
- As far as the domains of flora and agriculture are concerned, however, in A we find zero and five lexemes respectively, whereas B has 13 lexemes for each domain.
- Especially remarkable are sets of correspondences within a narrow semantic group, e.g. the three designations of plants of the legume family, all of Mediterranean origin: *olorn* ‘pea, bean’, *ospn* ‘lentil’, and *siserĭn* ‘chick pea’. Interestingly, all three Armenian words display an additional *-n* and belong to the *an*-declension class.

(34) Another remarkable difference is that, in the domain of technical activities, set A has lexemes with more general meanings, such as ‘bond’, ‘grave’ and ‘threshold’, whereas B displays a number of specific technical terms such as ‘bridge’, ‘drying implement’, ‘hinge’, ‘pillar’, ‘potter’s wheel’ and ‘rein’.

(35) Without Greek:

On the other hand, there are a number of lexical agreements between Armenian, Balto-Slavic and Germanic or Celtic especially in the domain of physical world. This might indicate that at a certain stage Armenian shared the same geographical environments with European dialects.

1.6 Preliminary conclusions

(36)

- Armenian, Greek, (Phrygian) and Indo-Iranian were dialectally close to each other or even formed a dialectal group at the time of the Indo-European dispersal.
- Within this hypothetical dialect group, Proto-Armenian was situated between Proto-Greek (to the west) and Proto-Indo-Iranian (to the east). On the northern side it might have neighbored, notably, Proto-Germanic and Proto-Balto-Slavic. After the Indo-European dispersal, Armenian developed isoglosses with Indo-Iranian on the one hand and Greek on the other.
- The Indo-Iranians then moved eastwards, while the Proto-Armenians and Proto-Greeks remained in a common geographical region for a long period and developed numerous shared innovations. At a later stage, together or independently, they borrowed a large number of words from the Mediterranean / Pontic substrate language(s), mostly cultural and agricultural words, as well as animal and plant designations.

1.7 Chronological background: inherited and borrowed

(37) The Armenian lexicon comprises three major layers:

- (1) Indo-European heritage: 5th-4th millennia BC;
- (2) late Indo-European and Mediterranean/European substrate: 3rd-2nd millennia BC;
- (3) loanwords from neighbouring languages, such as Caucasian, Anatolian, Hurrian, Urartian, Semitic and especially Iranian: 2nd-1st millennia BC to the present.

The first two layers belong to prehistoric times, whereas the third belongs to the most recent period and is partially elucidated by historical records.

1.8 The first millennium BC: Armenian and Urartian

(38) For a long time it was the common opinion of scholars that speakers of Armenian migrated into the Armenian Highlands after the fall of the Urartian Empire in the 6th century BC. However, the presence of the Armenian language in

the Armenian Highlands prior to the Urartian Empire is confirmed particularly by Armenian loanwords in Urartian, such as:

(39)

- Urart. *aršibi-* from Arm. *arcui* ‘eagle’ < **h₂rg̃ipió-*, cf. Skt. *ṛjipyá-* ‘epithet of an eagle’, m. ‘eagle’, etc.;
- Urart. *abili-d(u)* ‘to join, increase’ from Arm. *awel-* ‘to increase’ < **h₃b^hel-*, cf. Gr. *ὀφείλω* ‘to increase, enlarge, augment, advance’;
- Urart. *šû* [çô(w)ə] ‘(inland) sea’ from Arm. *cov* ‘sea’ possibly from **g̃ob^h-*, compare Ir. *gó* ‘sea’ (cf. Ir. *bó* vs. Arm. *kov* ‘cow’), perhaps also OIc. *kaf* ‘sea’, etc.;
- Urart. *qaburzani* ‘bridge’ vs. Arm. *kamurj*, *a*-stem ‘bridge’ from **g^w(e)m/b^hurjeh₂* ‘bridge’, cf. Gr. *γέφυρα* f. ‘bridge’.

(40) Armenisms in the Urartian language are not limited purely to lexical correspondences.

► Morphology:

- Urartian *me(i)* reflects the Armenian prohibitive particle *mi*, which derives from PIE **meh₁*, cf. Skt. *má*, Av. *mā*, Gr. *μή*, Alb. *mo*, Toch. AB *mā*.
- Urartian conjunction *e-’a* ‘and, also, or’, (not known in Hurrian) may be read *e-wi* and identified with Arm. *ew* ‘and, also’ < PIE **h₁e/opi* ‘by, at, on, to’, cf. Gr. *ἐπι, ἐπί* ‘on it, at it, by, at the same time’, etc.

► Toponymy:

- Urart. *Ṭuarašini ḫubi* and Armenian *Tuarac-a-tap’*

► ^{KUR}*Etiuni/Etiuh̃i*, a country attested in Urartian sources of the 9th to 7th centuries BC, which basically corresponds with the Ayrarat province of Greater Armenia

- *Diušini/Ṭiušini* ‘Divine-born’, cf. Gr. *Διο-γενής / Διο-γένης*, Thrac. *Diuzenus*, etc.

(41) Armenian *giwl* ‘village’ and Urartian *ueli* ‘crowd, army’

Urartian *ueli* ‘crowd, army’ from PArm. **wel-i-* > **gel-i-*: *giwl* ‘village’, gen. *get-j* < **wel-i-óh*, etc.; cf. Gr. *ἀλήη*, Dor. *ἀλία* ‘assembly of people’, (*F*)*άλις* adv. ‘in crowds, in plenty’ < **u_{l̥}-i-s*

- Semantic shift ‘crowd’ > ‘village’: cf. Skt. *gráma-* ‘military host, village community’, Pol. *gromada* ‘multitude, heap, village community’; Kurd. *gund* ‘village’ vs. Pers. *gund* ‘crowd, army’ (also Armenian *gund*).

(42) Urartian hieroglyphic script: Karagyozyan

A hieroglyphic inscription on a bronze vessel is read as *Ur-sa-a* (Rusa): interprets the first sign as an ideogram meaning “horse”, Arm. *ors*. However:

- Arm. *ors* always means ‘hunt, catch’ or ‘hunted animal, game’, never ‘horse’.
- Xorenacⁱ 2.61: *Et’ē du yors hecc’is* “If you mount for (or go) hunting” (*i* + acc. purpose; cf. Xorenacⁱ 2.9: *hecanel yors ew i paterazmuns* “to ride out to hunt or to war”).
- Not related with English *horse* (from **k/k̃(e)rs-*, cf. Lat. *currō* ‘to run’, OIr. *carr* ‘vehicle’, MHG *hurren* ‘hasten’).

(43) West Armenian *horsak* ‘midday’: Karagyozyan claims that the (alleged) meaning ‘horse’ of Armenian *ors* developed to ‘sun’, which in turn yielded ‘midday’

This is a violation of the principles of internal etymology. In fact, WArm. *horsak* ‘midday’ is inseparable from: Polis *ɰharsag*, Adabazar *ɰvarsag*, Nor-Naxijewan *ɰrassag*, Řodost‘o *orarsag*, etc., all meaning ‘midday’ and clearly reflecting Classical Armenian *ōr-hasarak*, an actually attested compound of *ōr* ‘day’ and *hasarak* ‘half’.

1.9 The third and second millennia BC

(44) We have seen that the presence of the Armenian language in the Armenian Highlands in the beginning of the 1st millennium is undeniable. It is also possible that it was also present in the 2nd millennium BC, albeit much harder to prove. Even more difficult is the situation with the 3rd millennium BC. In the following sections, I will briefly present a number of comments on this topic.

- *Ĥajša*- (attested in Hittite texts from the 14-13th centuries BC) vs. the ethnonym *hay* ‘Armenian’.
- ▶ Etymologies of *hay*:
 - 1) *Ĥajša*- (from PIE **h₂eios-* ‘copper, iron’; cf. Gr. *χάλυψ* ‘hardened iron, steel’, the appellative of the *Chalybes*);
 - 2) *Ĥatti*;
 - 3) IE **poti-* ‘master’.

(45) Ancient Armenisms in the Kartvelian languages

- Kartv. **ɣwino-* ‘wine’ from PArm. **ɣ^weinjo-* (cf. *gini*, gen. *ginwoy*) ‘wine’ < PIE **ue/oi(H)no-*: Hitt. *uian-* c. ‘wine’, Gr. (f) *οἶνος* m. ‘wine’, Lat. *vīnum* *ī*, n. ‘wine’, etc.
- Kartv. **ɣwi-* ‘juniper’ from PArm. **ɣ^wi-* (*gi* ‘juniper’) < **ui(H)-t-*, cf. Gr. *φῦτά* ‘willow’, etc.
- Georgian *p^honi*, Mingr. *p^honi*, etc. ‘riverbed’ from PArm. **pont^h-* (cf. Arm. *hun* ‘ford, shallow, riverbed’ < PIE **pontH-*) at an early stage before the sound changes **-oN-* > *-uN-* and **p-* > **f-* > *h-*.
- More examples of possible Kartvelisms can be found in Ĥahukyan 1988, 2: 68-70.

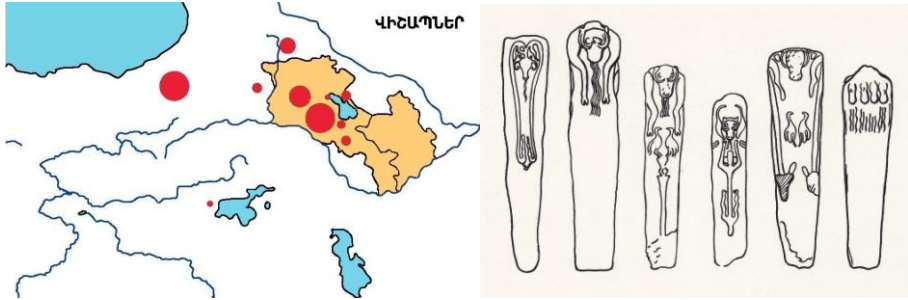
(46) Ancient Armenisms in the Anatolian languages?

Ĥahukyan (1988, 2: 85, see also 1: 70) treats a number of Hittite words as loanwords from Armenian, such as:

- Hitt. *luzzi-* n. ‘forced service, public duty, corvée’ from Arm. *luc* ‘yoke; burden of forced service and taxes, subjection; bondage’ (from PIE ‘yoke’, cf. Skt. *yugá-*, Gr. *ζυγόν*, Lat. *iugum*, etc.; the initial *l-* has been explained by influence of *luc-anem* ‘to unbind, loosen’).

1.10 Cultural excursus:

(47) “Dragon stones” (Arm. *višapak* ‘ar, composed of *višap* ‘dragon’ and *k’ar* ‘stone’)



“Višap stones”

1. Map, designed by Anush Martirosyan and Tsovinar Martirosyan
2. Some “višaps”, drawn from Barsefyan 1967 by Rafayel Martirosyan

(48) Stone stelae found in high-altitude summer pastures in the northern and northeastern regions of the Armenian highland (i.e. the historical provinces of Tayk[՝], Gugark[՝], Ayrarat and Syunik[՝]). They are interpreted as monuments related to mortuary rituals and belong to the Middle Bronze Age (ca. 2200-1600 BCE). Some are shaped in the form of a fish, on others the head and hide of a sacrificed bovid are depicted, while a third class represents a combination of both previous types.

(49) The genealogical framework of the Vishap stones and their semantics is complex and multilayered: Indo-European elements (compare the so-called “Head and Hooves” ritual burial in Sredny Stog, Yamna, Catacomb, Srubna and other cultures) have been combined with cultural features that are observable in other Caucasian and Near Eastern traditions.

2. The development of the Proto-Indo-European phonemic system in Armenian

(50-53) The Armenian alphabet and the phonemic system

| | | | | | | | | | | | | | | | | | |
|---|---|----|---|---|---|---|---|----|---|---|----|-----|---|---|----|------|---|
| Ա | ա | a | 1 | α | Ժ | ժ | ձ | 10 | Ծ | ծ | ճ | 100 | Բ | բ | բ | 1000 | Ր |
| Բ | բ | b | 2 | β | Ի | ի | i | 20 | Մ | մ | m | 200 | Ս | ս | s | 2000 | Տ |
| Գ | գ | g | 3 | γ | Լ | լ | l | 30 | Յ | յ | y | 300 | Վ | վ | v | 3000 | |
| Դ | դ | d | 4 | δ | Խ | խ | x | 40 | Ն | ն | n | 400 | Տ | տ | t | 4000 | Թ |
| Ե | ե | e | 5 | ε | Շ | ժ | c | 50 | Շ | շ | š | 500 | Ր | ր | r | 5000 | |
| Զ | զ | z | 6 | ζ | Կ | կ | k | 60 | Ո | ո | o | 600 | Գ | գ | c' | 6000 | |
| Է | է | ē | 7 | η | Հ | հ | h | 70 | Չ | չ | č' | 700 | Լ | լ | w | 7000 | Ս |
| Ը | ը | ə | 8 | | Ձ | ձ | j | 80 | Պ | պ | p | 800 | Փ | փ | p' | 8000 | Փ |
| Թ | թ | t' | 9 | θ | Ղ | ղ | l | 90 | Ջ | ջ | j | 900 | Թ | թ | k' | 9000 | Շ |

| | Հ.-Ե. | Հայ. | Հ.-Ե. | Հայ. | Հ.-Ե. | Հայ. |
|--------------------|--------------------|-------------------|--------------------|-----------------|--------------------|----------|
| <i>labials</i> | *p | h-/ϕ-, -l-, (u)uy | *b | uy | *b ^h | բ, -l- |
| <i>dentals</i> | *t | թ, -t-/ϕ-, (u)ut | *d | ut | *d ^h | դ |
| <i>palatals</i> | *k | u | *g | ծ | *g ^h | ձ, զ |
| <i>labiovelars</i> | *k ^w | ք/չ | *g ^w | կ/ճ | *g ^{wh} | զ/ջ |
| | *s+K | ց | | | | |
| <i>sibilant</i> | *s | հ-/ϕ-, u(C) | | | | |
| <i>laryngeals</i> | *h ₁ | ϕ-/է- | *h ₂ | հ-/ւ- | *h ₃ | հ-/ւ- |
| <i>liquids</i> | *r | (ʁ/w)ր-, -ր/ռ- | *l | (ʁ/w)լ-, -լ/ղլ- | | |
| <i>nasals</i> | *m | մ | *n | ն, -ւ/(P) | | |
| <i>semivowels</i> | *i | ի/ϕ-' | *u | ու/ϕ-' | | |
| | *j | Յ, (R)ջ | *y | յ, -յ/լ-, -լ | | |
| <i>vowels</i> | *e | է, ի(N) | *a/h ₂ | ա | *o | ո, ու(N) |
| | *ē/eh ₁ | ի | *ā/eh ₂ | ա | *ō/eh ₃ | ու |
| <i>diphthongs</i> | *ei | է | *ai | այ | *oi | օ (այ?) |
| | *eu | ոյ | *au | աւ (օ) | *ou | ու (այ?) |

(54) Accent; vowel mutations

An inherited Indo-European musical accent changed into an intensity accent which was fixed on the prehistoric penultimate syllable. This was followed by apocope of the posttonic vocalic elements (leaving the accent in final position) and by syncope in pretonic position, e.g. gen.sg. **sirtíyo* > **sirtí* > *s(ə)rti* ‘of the heart’.

Certain vowels change according to their position on a stressed or a non-stressed syllable.

1. The vowels *i* and *u* disappear (become an unwritten Θ ə):

- *sírt* ‘heart’, gen. *srt-í*
- *súrb* ‘pure, clean; holy’, gen. *srbóy, srbém* ‘I clean’

2. The vowel *ē*, etymologically **ei*, a diphthong becomes *i*:

- *sér* ‘love’, gen. *siróy, sirém* ‘I love’

3. The diphthongs *oy* [pronounced as /uy/] and *ea* [pronounced as /ya/] become *u* and *e*, respectively:

- *lóys* /lúys/ ‘light’, gen. *lusóy*
- *leárd* /lyárd/ ‘liver’, abl. *i lerdé*

(55) PIE laryngeals: PIE **HV-* (H = any laryngeal, V = any vowel)

| PIE | Arm. | Hitt. | Skt. | Av. | Gr. | Lat. |
|--------------------------|------|-------|------|-----|-----|------|
| *h ₁ e- (*e-) | e- | e- | a- | a- | ε- | e- |
| *h ₂ e- (*a-) | ha- | ḫa- | a- | a- | α- | a- |
| *h ₃ e- (*o-) | ho- | ḫa- | a- | a- | ο- | o- |
| *Ho- (*o-) | o- | a- | a- | a- | ο- | o- |

(56) PIE *h₁e-

*h₁es-mi, *h₁es-si, *h₁es-ti ‘to be’: Arm. **em, es, ē**, Hitt. *ēšmi ēšši ēšzi*, Skt. *ásmi ási ásti*, OAv. *ahmī*, Gr. *εἶμι, εἶ* (Dor. *έσσι*), *έστί*, Lat. *sum es est*, OCS *jesmь*, OLith. *esmī*, etc.

(57) PIE *h₂e-

*h₂en-: Arm. **han**, *o*-stem (gen. *han-o-y*), **han-i**, *wo*-stem (*hanw-o-*) ‘grandmother’, Hitt. *hanna-* ‘grandmother’, Gr. *ávviς* ‘mother-in-law’, Lat. *anus* ‘old woman’, Lith. *anýta* ‘husband’s mother’, etc.

*h₂erh₃-uer/n-: Arm. **harawunk** ‘sowing, seeds; sowing-field; arable land’, Gr. *ἀροπα* f. ‘tilled or arable land; pl. corn-lands, fields’; Skt. *urvārā-* f. ‘arable land, field yielding crop’, Av. *uruuarā-* f. pl. ‘food plant, plant, ground covered with plants, flora’; Mlr. *arbor*, nom.pl. *arbanna*, OIr. gen. *arbe* ‘grain, corn’, etc.

*h₂éu-i- (genitive *h₂u-éi-s) ‘bird’: Arm. **haw₁**, *u*-stem ‘bird; rooster; hen’, Lat. *avis*, *-is* f. ‘bird’, cf. Gr. *αιετός* < *awi-etos m. ‘eagle’, Skt. *váy-*, nom. *véḥ/viḥ*, acc. *vím*, gen. *véḥ*, nom.pl. *váyah*, ins.pl. *vibhiḥ* m. ‘bird’, YAv. *vaii-* m. ‘bird’, etc.

*h₂euH-: Arm. **haw₂**, *o*-stem, *u*-stem ‘grandfather, ancestor’, Hitt. *huḥḥaš* ‘grandfather’, Lat. *avus* ‘grandfather’, OIr. *ae* ‘grandson’, Goth. *awo* ‘grandmother’, Lith. *avýnas* ‘maternal uncle’, OPr. *awis* ‘id.’, Russ. *uj*, Pol. *wuj* ‘maternal uncle’, SCr. *ùjāk*, etc.

(58) PIE *h₃e-

*h₃eui- ‘sheep’: Arm. ***hovi-** ‘sheep’, CLuw. *hāui-*, Skt. *ávi-*, Gr. *όῖς, όῖος* and *oiός*, Lat. *ovis*, Toch. B *ā(u)w* ‘ewe’ and *eye*, etc. Preserved in Arm. **hoviw**, *a*-stem ‘shepherd’ < *h₃eui-peh₂-, a compound of PIE *h₃eui- ‘sheep’ and *peh₂(s)- ‘to protect, pasture’: OCS *pasti* ‘to pasture’, Lat. *pāscō* ‘to pasture’, Hitt. *paḥš-* ‘to protect’, etc.; for the compound, cf. Skt. *go-pā-* m. ‘herdsman’ < *‘cowherd’, *avi-pālā-* ‘shepherd’.

*h₃edos-: Arm. **hot**, *o*-stem ‘smell, odour’, Gr. *όδμή* ‘smell’, Lat. *odor, odōris* m. ‘smell, scent, odour; perfume’, etc.

(59) PIE *HC- (H = any laryngeal, C = any consonant)

The so-called “prothetic vowel”, viz. Gr. *á-* (and *ó-*) and Arm. *a-*, Gr. *é-* and Arm. *e-* vs. zero in other languages, is now interpreted as a vocalized reflex of PIE initial laryngeal followed by a consonant.

(60) PIE *h₁C-

*h₁reg^w-e/os-, *s*-stem neuter: Arm. **erek**, old gen. **erekoy** (note **erek-oy**, *i*-stem ‘evening’, and a few derivatives based on ***ereko-r-**), **ere/ik-un** ‘evening’, Skt. *rájas-* n. ‘space, air; space between heaven and earth’, synonym of *antárikṣa-* (cf. also *rájas-* n. ‘dust, mist, vapour, gloom, dirt’, *rajasá-* ‘unclean, dark’, OAv. *rajiš-* n.

‘darkness’), Gr. *ἔρεβος* n. ‘the dark of the underworld’, Goth. *riqis/z* n. ‘darkness, twilight’, OIc. *røkk* n. ‘darkness’ < PGerm. **rekwiz-*.

(61) PIE **h*₂*C-*

**h*₂*le/o(u)pek-*: Arm. *atūēs*, gen. *atues-u* ‘fox’, Gr. *ἀλώπηξ, -εκος* ‘fox’, Skt. *lopāsá-* probably ‘fox’, etc.

**h*₂*reṷ-i-*: Arm. *arew*, *u*-stem, old gen. *areg* ‘sun; sunlight; life’: *Areg k’atāk* ‘the city of the Sun’ (Gr. *Ἡλίου πόλις*, e.g. Genesis 41.45, 50), *areg*, gen. *aregi* ‘the 8th month’, *areg* ‘eastern’, *areg-akn* ‘sun’, etc.; Skt. *ravi-* m. ‘sun, sun-god’ (Upaniṣad+), *ravi-putra-* m. ‘son of the Sun’ (Kāthaka-Brāhmaṇa); cf. also Hitt. *haru(ua)nae-*^{z1} ‘to become bright, get light, dawn’.

**h*₂*ster-* ‘star’: Arm. *astē*, gen. *astēl* ‘star’, Hitt. *haster(a)-*, nom. *hasterza* c., Gr. *ἀστήρ, -έρος*, pl. *ἀστέρες* m. (also old coll. *ἀστρα*), Skt. nom.pl. *tārah* (the absence of the *s-* is unexplained), instr. *stī-bhiḥ*, Av. *star-* m., Lat. *stella* f. ‘star’, Goth. *stairno*, etc.

(62) PIE **h*₃*C-*

**h*₃*neid-*: Arm. *anicanem*, 3sg.aor. *anēc* ‘to curse’ < PIE sigm. aor. **h*₃*neid-s-*, *anēc-k* ‘curse, imprecation’, Skt. *ned-*: pres. *nīdati*, aor. *ánindīsur*, desid. *nīnits-* ‘to revile; to blame; to mock’, YAv. 1sg.pres.act. *nāismī* ‘to curse’ (prob. from **nāid-s-mi*), Gr. *ὀνειδος* n. ‘reprimand, abuse’, Lith. *niedēti* ‘to despise’, etc.

**h*₃*néh₃-mn* PD *n*-stem ‘name’ > PArm. **anuwn* > *anun*, gen. *anuan* ‘name’ (dial. also *anum*, *anām*), obl. **h*₃*nh₃-mén-* (> **anumán* > dial. **anum-*): Hitt. *lāman* n., HLuw. *álaman-* n., Lyc. *alāman-*, Skt. *nāman-* n., MPers. NPers. *nām*, Gr. *ὄνομα, -ατος* n., Lat. *nōmen*, *-inis* n., Goth. *namo*, OCS *imę*, etc.

3. Archaisms and innovations of the Armenian nominal system

(63) Accusative pl. *-s*

Classical Armenian accusative plural ending *-s* < PIE **-ns*, with a regular loss of the nasal; e.g. *eris* < PIE **trins*: Goth. *þrins*, cf. nom. *ere-k* ‘three’ from PIE **trejes* ‘three’: Skt. *tráyas*, Gr. *τρεις*, etc.

Note also *ar-s* from PIE acc.pl. **anyns* vs. nom. *ayr* ‘man’ < PIE **h*₂*nēr*: Gr. *άνήρ*, etc.

(64) Archaic genitives

ařn from **arnos* < **anros* < PIE **h*₂*nr-ós*: Gr. *άνδρός*; cf. nom. *ayr* ‘man; husband’ < PIE **h*₂*nēr*: Gr. *άνήρ*, etc.

hawr from PIE **ph₂tr-ós*: Gr. *πατρός*, Lat. *patris*; cf. nom. *hayr* ‘father’ < PIE **ph₂tēr*: Gr. *πατήρ*, Lat. *pater*

k'ər from PIE **s̥uesr-ós*, cf. nom. *k'oyr* < PIE **s̥uesōr* ‘sister’

Note also PIE gen.sg. *-*osyo-*: Skt. -*asya*, Gr. -*oio*, Arm. -*oy*, etc.

(65) Instrumental

Arm. instrumental ending -*w* / -(*m*)*b* derives from PIE *-*b^hi*, cf. instr.pl.: Skt. -*bhis*, Av. -*bīš*, OPers. -*biš*; dat.abl.pl.: Skt. -*bhyas*, Av. -*byō*; Homeric Greek attests -*φi-* as a marker of the ablative, instrumental and locative in both singular and plural markers; cf. also Lat. dat.abl.pl. -*bus*, OIr. dat.pl. -*b*, etc.

eri-w- < **tri-b^hi*: Skt. dat.abl.pl. *tribhyás*; cf. nom. *ere-k'* ‘three’ from PIE **trejēs*: Skt. *tráyas*, Gr. *τρεις*, etc.

har-b from **ph₂tr^h-b^hi*: Skt. dative plural *pitṛ^h-bhyas*; cf. nom. *hayr* ‘father’ < PIE **ph₂tēr*: Gr. *πατήρ*, Lat. *pater*;

jer-b continues **je(h)ar-b* < **ǵ^hes^h-b^hi* vs. nom. *jer-n* ‘hand’ from **ǵ^hes-r-*; note the analogical instr. *jer-am-b*

k'ər-b derives from **s̥ues-r^h-b^hi*, cf. PIE nom. **s̥uesōr* ‘sister’ > Arm. *k'oyr* (*-*ehō-* > *-*e(h)u-* > -*oy-*).

(66) Noun inflection: *gorc* ‘work’, *sirt* ‘heart’, *cov* ‘sea’

| | | <i>o</i> -stem | <i>i</i> -stem | <i>u</i> -stem |
|-----------|-----|------------------|------------------|-----------------|
| Sg | N | <i>gorc</i> | <i>sirt</i> | <i>cov</i> |
| | Acc | (z) <i>gorc</i> | (z) <i>sirt</i> | (z) <i>cov</i> |
| | GD | <i>gorcoy</i> | <i>srti</i> | <i>covu</i> |
| | Abl | <i>i gorcoy</i> | <i>i srtē</i> | <i>i covē</i> |
| | I | <i>gorcov</i> | <i>srtiw</i> | <i>covu</i> |
| Pl | N | <i>gorck'</i> | <i>sirtk'</i> | <i>covk'</i> |
| | Acc | (z) <i>gorcs</i> | (z) <i>sirts</i> | (z) <i>covs</i> |
| | GD | <i>gorcoc'</i> | <i>srtic'</i> | <i>covuc'</i> |
| | Abl | <i>i gorcoc'</i> | <i>i srtic'</i> | <i>i covuc'</i> |
| | I | <i>gorcovk'</i> | <i>srtiwk'</i> | <i>covuk'</i> |

(67) Armenian *o*-stems

k'un, *o*-stem ‘sleep’ < **s̥uop-no-*: Skt. *svápna-* m. ‘sleep, dream’, Av. *x^vafna-* m. ‘sleep, dream’, Gr. *ὑπνος* ‘sleep’, Lat. *somnus* ‘sleep’, Lith. *sāpnas* ‘dream’, OCS *сънь* ‘sleep’, etc.

gin, *o*-stem ‘price, purchase price’ < **ues-no-*: Skt. *vasná-* n. ‘purchase price’, Lat. *vēnum* n. in the formula *vēnum dare* ‘to put up for sale’, cf. Gr. *ῶνος* ‘purchase price’ and the verbal form in Hittite, *uāš-* ‘to buy’.

gorc, *o*-stem ‘work, labour’ (cf. *gorcem* ‘to work, labour; to make, produce’) < **ue/orǵom*: Gr. *ἔργον* n. ‘work, labour, work of art’, OHG *werc* ‘work’, Av. *vərəz-* ‘to do, work’, etc. The vocalism of Arm. *gorc* is taken from the verb *gorcem*, an old iterative (cf. Goth. *waurk* and *waurkjan* vs. OEngl. *werk*, OHG *werc*, Gr. *ἔργον*, etc.).

erg, *o*-stem ‘song; poem; playing (music); scoffing song’ (cf. *ergem* ‘to sing; to play a musical instrument’) < **h₁erk^w-o-*: Skt. thematic noun *arká-* m. ‘ray, light, shine; song, magic song’; cf. PIE **h₁erk^w-/*h₁rk^w-*: Hitt. *ārku-^{zi}*, *arku-* ‘to chant, intone’; Skt. root noun *īc-* f. ‘song of praise, poem, stanza, verse’, *árcati* ‘to sing; to praise; to shine’, Toch. A *yärk*, B *yarke* ‘worship, reverence’, probably also OIr. *erc* ‘sky’.

(68) Armenian *a*-stems

am, *a*-stem ‘year, age’ < **s(e)m-eh₂-*: Skt. *sámā-* ‘year, season’, cf. YAv. *ham-*, OIr. *sam*, etc. ‘summer’.

hoviw, *a*-stem ‘shepherd’ < **h₃eui-peh₂-* (cf. Skt. *go-pā-* m. ‘herdsman’ < ‘*cowherd’, *avi-pālā-* ‘shepherd’) = PIE **h₃eui-* ‘sheep’ (CLuw. *hāui-*, Skt. *ávi-*, Lat. *ovis*, etc.) + **peh₂(s)-* ‘to protect, pasture’ (OCS *pasti* ‘to pasture’, Lat. *pāscō* ‘to pasture’, Hitt. *pašš-* ‘to protect’, etc.)

(69) Armenian *n*-stems

anun, gen. *anuan* ‘name’, dial. **anum* < PIE **Hneh₃-mn*, obl. **Hn(e)h₃-men-*: Hitt. *lāman* n., HLuw. *átaman-* n., Lyc. *alāman-*, Skt. *nāman-* n., Pers. *nām*, Gr. *ὄνομα*, *-ατος* n., Lat. *nōmen*, *-inis* n., Goth. *namo*, OCS *imę*, etc.

arñ ‘wild ram’ (acc.pl. *z-arñ-s*) < PIE **h₁rs-en-* ‘male, male animal (bull, stallion, ram)’: Gr. *ἄρσῆν*, *-ενος*, Att. *ἄρρῆν* adj. ‘male’, Av. *aršan-* m. ‘man, male’, OPers. *aršan-* ‘male, hero, bull’, cf. Skt. *ṛṣabhá-* m. ‘bull’.

garñ, *in/an*-stem: gen. *garin*, instr. *garām-b*, nom.pl. *garin-k’*, gen.dat.pl. *garān-c’* ‘lamb’ < PIE **uṛh₁ēn*, gen. **uṛh₁no-*: Skt. *úran-*, nom. *úrā*, acc. *úraṇam* m. ‘lamb’, NPers. *barra* ‘lamb’ < PIr. **varn-aka-*, Gr. *ἀρήν* m., *φαρήν* ‘lamb’, *πολύ-ρρην-ες* ‘possessing many lambs’ < IE **-urh₁n-*, etc.

(70) Armenian *l-* and *r-*stems

astl, gen. *astel*, instr. *astel-b* ‘star’ < PIE **h₂ster-* ‘star’: Hitt. *haster(a)-*, nom. *hasterza* c., Gr. *ἀστήρ*, *-έρος*, pl. *ἀστέρες* m. (also old coll. *ἄστρο*), Skt. nom.pl. *tārah*, instr. *stṛ-bhiḥ*, Av. *star-* m., Lat. *stella* f. ‘star’, Goth. *stairno*, etc.

dustr, gen. *dster*, gen.pl. *dster-c’* or *dster-a-c’*, instr.pl. *dster-aw-k’* ‘daughter’ < PIE **d^hugh₂-tēr* ‘daughter’: Skt. *duhitár-*, Gr. *θυγάτηρ*, Lith. *duktė*, etc.

(71) Relics of the PIE neuter in Armenian

- PIE heteroclitic **(u)r/n-* declension: nom. **péh₂ur*, gen. **ph₂uén-s* n. ‘fire’: Hitt. *paḥḥur*, gen. *paḥḥuenas*, Gr. *πῦρ*, *πῦρός*, OHG *fuir*, Goth. *fon* < **pūōn*. The old nominative in **-r*: Armenian *hur* ‘fire’, thematicized (gen. *hr-o-y*, instr. *hr-o-v*), but also an archaic instrumental *hur-b*.
- Next to this: PIE oblique stem **ph₂u(e)n-* > Armenian **hun-* in *hn-oc’* ‘oven, furnace’.
- Further development of the *-(u)r/n-* paradigm in Armenian: *asr*, gen. *asu* ‘wool, fleece’, *barjr*, gen.sg. *barj-u*, gen.pl. *barjan-c’* ‘high’, etc.
- Arm. *artasu-k’*, *a*-stem (gen.pl. *artasu-a-c’*) ‘tear’ from **dráku-*: Gr. *δάκρυ* n., OHG *zahar* (beside *trahan*), etc. The Armenian plural stem **artasu-a-* may reflect an old neuter plural **dráku-h₂*.

4. Archaisms and innovations of the Armenian verbal system

(71) Present indicative paradigm of PIE **b^her-* ‘to bring, bear’. Note the loss of intervocalic **-t-* in 3sg. **b^hér-e-ti* > Arm. **bereg(i)* > *berē*.

| | Proto-IE | Armenian | Sanskrit | Greek | Gothic | OCS |
|-----|---|---------------------------|--------------------|-------------------|----------------|---------------|
| 1sg | <i>*b^hér-o-h₂</i> | <i>berem</i> | <i>bhárāmi</i> | <i>φέρω</i> | <i>baira</i> | <i>berǫ</i> |
| 2sg | <i>*b^hér-e-si</i> | <i>beres</i> | <i>bhárasi</i> | <i>φέρεις</i> | <i>bairis</i> | <i>beresi</i> |
| 3sg | <i>*b^hér-e-ti</i> | <i>berē</i> | <i>bhárati</i> | <i>φέρει</i> | <i>bairiþ</i> | <i>beretǫ</i> |
| 1pl | <i>*b^hér-o-me-</i> | <i>beremk^ʿ</i> | <i>bhárāmas(i)</i> | <i>φέρομεν</i> | <i>bairam</i> | <i>beremǫ</i> |
| 2pl | <i>*b^hér-e-te(-)</i> | <i>berēk^ʿ</i> | <i>bháratha</i> | <i>φέρετε</i> | <i>bairiþ</i> | <i>berete</i> |
| 3pl | <i>*b^hér-o-nti</i> | <i>beren</i> | <i>bháranti</i> | <i>φέρουσι(v)</i> | <i>bairand</i> | <i>berǫtǫ</i> |

(72) Present indicative paradigm of PIE **h₁es-* ‘to be’.

| | Proto-IE | Arm. | Hitt. | Skt. | Greek | Latin | Gothic | OCS |
|-----|-----------------------------|------------------------|---------------|--------------|------------------|--------------|--------------|--------------|
| 1sg | <i>*h₁és-mi</i> | <i>em</i> | <i>ēšmi</i> | <i>ásmi</i> | <i>εἰμί</i> | <i>sum</i> | <i>im</i> | <i>jesmǫ</i> |
| 2sg | <i>*h₁és-si</i> | <i>es</i> | <i>ēšši</i> | <i>ási</i> | <i>εἶ / ἐσσί</i> | <i>es</i> | <i>is</i> | <i>jesi</i> |
| 3sg | <i>*h₁és-ti</i> | <i>ē</i> | <i>ēšzi</i> | <i>ásti</i> | <i>ἐστί(v)</i> | <i>est</i> | <i>ist</i> | <i>jestǫ</i> |
| 1pl | <i>*h₁s-mé-</i> | <i>emk^ʿ</i> | | <i>smás</i> | <i>ἐσμέν</i> | <i>sumus</i> | <i>sijum</i> | <i>jesmǫ</i> |
| 2pl | <i>*h₁s-té-</i> | <i>ēk^ʿ</i> | | <i>sthá</i> | <i>ἐστέ</i> | <i>estis</i> | <i>sijup</i> | <i>jeste</i> |
| 3pl | <i>*h₁s-énti</i> | <i>en</i> | <i>ašanzi</i> | <i>sánti</i> | <i>εἰσί(v)</i> | <i>sunt</i> | <i>sind</i> | <i>ǫtǫ</i> |

(73-74) Nasal presents: *lk^ʿanem*

**l(e)ik^w-* ‘to leave’: Arm. *lk^ʿanem*, 3sg.aor. *e-lik^ʿ* ‘to leave’, Skt. *rec-*, pres. *riṇákti*, Gr. *λείπω*, *λιμπάνω*, Lat. *linquō*, *liquī*. PIE nasal-infixed present **li-n-k^w-* was remodeled to **lik^w-ŋ-* > Arm. pres. *lk^ʿanem*.

| | PIE | Greek | Armenian |
|------------------------|------------------------------|---------------------------------|---------------------------|
| Present | <i>*li-n-k^w-</i> | <i>λιμπάνω</i> vs. <i>λείπω</i> | <i>lk^ʿanem</i> |
| Thematic aorist | <i>*é-lik^w-et</i> | <i>ἔλιπε</i> | <i>e-lik^ʿ</i> |
| Imperative | <i>*lík^we</i> | <i>λίπε</i> | <i>lik^ʿ</i> |

(75) **b^heg-* ‘to break’, nasal pres. **b^h-n-eg-*: Arm. *bekanem*, 3sg.aor. *e-bek*, Skt. *bhañj-*, *bhanákti* ‘to break’

**h₂er-* ‘to fix, put together’: Arm. *ařnem*, 3sg.aor. *ar-ar* ‘to make’: Gr. *ἀραρίσκω*, aor. *ἤραρον* ‘to fit, equip’, etc.

**d^heh₁-* ‘to put’: Arm. *dnem*, 1sg.aor. *e-di*, impv. *di-r*, Skt. *dhā-*, Gr. *τίθημι*, etc. Arm. *dnem* = **di-* + pres. suffix **ne-* seen in e.g. *ař-ne-m* vs. aor. *ar-ar-* ‘to make’. The 3sg.aor. *e-d* derive from **é-d^heh₁-t*: Skt. *ádhāt*.

**prk̄-ske/o-* (*sk*-present) ‘to ask’: Arm. *harc’anem*, 3sg.aor. *e-harc’*, Ved. *prcchāmi*, Lat. *poscō*. Arm. 3sg.aor. *e-harc’* < them. impf. **e-prk̄-sk̄-et*: Skt. *āprcchat*; Arm. impv. *harc’* vs. Skt. *prcchā*.

(76) **h₂r-nu-*: Arm. *aṛnum*, 1sg.aor. *aṛ-i*, 3sg.aor. *aṛ* ‘to gain, obtain, win, take, grasp’, Gr. *ἀρνυμαι*, aor. *ἀρόμεν* ‘to win, gain’, probably also Av. *əṛənauu-* ‘to grant, allot, provide’.

**pleh₁-*: Arm. *lnum* or *lnanim* 3sg.aor. *e-lic’* ‘to fill, be filled’ (cf. *li* ‘full’, *li-r*, *i*-stem ‘plenitude’), Gr. *πίμπλημι*, *-αμαι* ‘to fill’, *πλήρης* ‘full’, *πλέως*, Lat. *plēre* ‘to fill’, Skt. *par¹* ‘to fill’, pres. *pīparti*, **pīprati*, etc. For the aorist *e-li-c’* < **e-plē-ske*, with **-ske/o-* added to the old root aorist **plē-(s)-*, cf. Ved. *āprās*, Gr. *ἐπλησε*.

**ues-nu-*: Arm. *z-genum*, 3sg.aor. *zge-c’-a-w* ‘to put on clothes’, Gr. *ἐννομι* ‘to clothe’; cf. Hitt. *ueš-* ‘to be dressed’, Skt. *vāste* ‘to be clothed, wear’, etc. Note Arm. *z-gest*, *u*-stem, *i*-stem, *o*-stem ‘dress, garment, clothes’ from **ues-ti-*: Lat. *vestis*, *is* f. ‘garments, clothing; clothes; cloth’, Goth. *wasti* ‘garment, dress’.

**g^{wh}er-* ‘warm’: Arm. *jeṛnum* or *jeṛanim*, 1sg.aor. *jeṛ-a-y* ‘to be/become warm, burn’ < **g^{wh}er-nu-*, cf. **g^{wh}hr-n(e)u-*: Skt. *ghṛṇóti* ‘to glow, light’, etc. Arm. aor. *jeṛ-a-* from sigm. aor, **g^{wh}er-s-*.

(77) Aorist

| | <i>mnam</i> ‘to stay, wait’ | <i>sirem</i> ‘to love’ | <i>nayim</i> ‘to look at’ | <i>t’otum</i> ‘to let, permit’ |
|-----------|--------------------------------|------------------------------|------------------------------|-----------------------------------|
| Sg | mnac’i | sirec’i | nayec’ay | t’oti |
| | mnac’er | sirec’er | nayec’ar | t’oter |
| | mnac’ | sireac’ | nayec’aw | (e)t’ot |
| Pl | mnac’ak’ | sirec’ak’ | nayec’ak’ | t’otak’ |
| | mnac’ē/ik’ | sirec’ē/ik’ | nayec’ayk’, -aruk’ | t’otē/ik’ |
| | mnac’in | sirec’in | nayec’an | t’otin |
| | | | | |
| Sg | <i>moṛanam</i> ‘to forget’ | <i>anc’anem</i> ‘to pass’ | <i>cnanim</i> ‘to beget’ | <i>jeṛnum</i> ‘to get warm’ |
| | moṛac’ay | anc’i | cnay | jeṛay |
| | moṛac’ar | anc’er | cnar | jeṛar |
| | moṛac’aw | (ē)anc’ | cnaw | jeṛaw |
| Pl | moṛac’ak’ | anc’ak’ | cnak’ | jeṛak’ |
| | moṛac’ayk’, -aruk’ | anc’ē/ik’ | cnayk’, -aruk’ | jeṛayk’, -aruk’ |
| | moṛac’an | anc’in | cnan | jeṛan |

(78-79) Aspects of historical phonology and morphology

Intriguing cases where phonological, morphological and/or word-formative issues seem to be interwoven. A typical example is **the initial y-**:

- **prefix y-** from PIE **h₁en-* ‘in’: *y(-h)atanem* vs. *hatanem* ‘to cut’ (cf. Lat. *in-cīdō* ‘to cut into, engrave’ from *caedō* ‘to hew, cut’); **h₁en-h₃org^hi-* ‘testicled, uncastrated, male (ram or buck)’ > Arm. **y-orj**, *i*-stem ‘male sheep, ram’ and Gr. *ἔν-ορχίς* ‘provided with testicles’, cf. *ἔν-ορχ-ος*, *ἔν-ορχ-ης* also ‘buck’;
- **phonological explanation:** *yisun* ‘fifty’ vs. *hing* ‘five’; probably: PIE **penk^wēkomth₂* ‘fifty’ > PArm. **hingisun* : **(h)i(η)isun* > **(h)i-isun* > **i-y-isun* (*y-* is perhaps a glide);
- **morphological explanation:** *y-arñem* (aor. stem *y-ari*, imper. *ari*) ‘to rise, arise, wake, resurrect’, < PIE **h₃r-i-* ‘to rise’: Hitt. *arai-¹* / *ari-* ‘to rise, arise, lift; to raise’, Lat. *orior*, *-irī*, *ortus* ‘to rise’, Skt. *ar-* ‘to set in motion, move; to arouse, excite’, Gr. *ὄρνυμι*. Armenian **y-ar-i-* and impv. **ari* derive from **h₃r-i-*; **y-ar-* (vs. imperative **ar-*) is probably from redupl. pres. **Hi-H(e)r-* > PArm. **Hīyar-* > **(i)yar-*, cf. Skt. *īyarti* (next to *ar-*).

5. Onomastics

(80) Place names

An Indo-European etymology of an Armenian toponym can be considered more or less reliable if it meets at least three or four of the following requirements:

- (1) the toponym is reliably attested in Classical Armenian and/or foreign sources;
- (2) its antiquity is guaranteed by attestations from cuneiform sources of the first half of the first millennium BC;
- (3) it contains an Armenian appellative of Indo-European origin;
- (4) it contains an unattested appellative that can be phonologically derived from an Indo-European etymon;
- (5) the semantics of the appellative is compatible with the concrete type of a given toponym;
- (6) the semantic basis is confirmed by other data, e.g. by other names of the place;
- (7) the IE etymon is found in toponyms in other IE languages.

(81) A few possible examples:

- *Koṭb* (cf. Urart. *Qulbi-tarrini*) from PIE **g^wolb^ho-* ‘womb’: Skt. *gárbha-*, Av. *garəβa-* ‘womb’, cf. Gr. *δελφύς*, *δολφός* ‘womb’, *Δελφοί*.
- *Gis*, gen. *Gis-o-y* (a village in Uti-k[‘]), from PIE **u(e/o)ik-*: Skt. *vis-* ‘settlement’, MPers. *vis* ‘manor-house, village’, OCS *vbьbь*. For the semantics, cf. *Agarak*. Note also Urart. ^{URU}*Uiše* and ^{URU}*Uiši(ni)*.
- *Ĵerm*, the Bohtan-su; *Ĵerm* ‘warm(th)’ derives from PIE **g^{wh}ermo-*, cf. *Γερμ-* < Thracian **germo-*, Dacian *Germi-sara* (both with thermal springs).
- *Sim* (a famous mountain in Sasun) < PIE **k^{ie}h₁mo-*, cf. Skt. *śyāmá-* ‘black, dark’, *Śyāmā* name of a river, Av. *Siiāmaka-* name of a mountain, Lith.

šēmas ‘blue-grey’. Mountains are frequently named ‘dark’ or ‘black’. Note the other name of Sim, namely *Sev-sar*, lit. “Black-mountain”.

(82) Place names in the 3rd and 1st millennia BC

The toponymical studies concerning these periods are mainly based on superficial similarities and lack thorough etymological treatment.

► V. Xaç‘atryan 2012

- ^{URU}*Aparhula* comp. of Armenian *apar/ṛ* ‘rock’ and *xul* ‘deaf’;
- ^{URU}*Alatarma/e* vs. Arm. *alk* ‘depth, abyss’ and *tarm* ‘group’;
- ^{URU}*Mararḥa* vs. Arm. *mar* ‘master’ (only in *Čarəntir*, and is an Aramaic or Syriac borrowing) and Hitt. *arḥa* ‘border’;
- ^{URU}*Mezzari* vs. Arm. *mec* ‘great’ and *ari* ‘valiant, brave’

► Karagyozyan 1998:

- ^{KUR}*Uṭeruḥi* > *Gugar-k*’;
- ^{KUR}*Aṭezaine* > *Arkaz*’;
- ^{URU}*Hundur* > *Č‘awndur*’;
- *Vaç‘ur* from *Bexur*, reflecting Indo-Eur. **ues-r̥* ‘spring (season)’

(83) Personal names

The most remarkable achievement in this field is Ačaṙyan’s dictionary of personal names (5 vols, 1942-62).

(84) Armenian anthroponyms with underlying native (Indo-European) appellatives include:

- *Arew* m. ‘Sun’,
- *Dustr* f. ‘daughter’ (cf. *Duxt/t‘ar*, Iranian),
- *Eznik* m. (*ezn* ‘ox, bullock’),
- *Elbayr(ik)* m. ‘brother’,
- *Ənjak/k*‘ m. (*inj* ‘panther, leopard’),
- *Koriwn* m. ‘cub, whelp’,
- *Hawuk* m. (*haw* ‘bird, rooster’, cf. also *haw* ‘grandfather’),
- *Lusik* m., later f. (*loys* ‘light’),
- *Mrjıwnik* m. (*mrjıwn* ‘ant’).

(85) Theoretically, these names may originate directly from Indo-European, although this is hard to prove. The probability increases if the Armenian name:

- derives from an Indo-European etymon that underlies anthroponyms also in cognate languages, e.g.:
Arjuk m., a hypocoristic form of *arj* ‘bear’, cf. Lat. *Ursula* ‘little bear’, note also Arm. *Aršak* m., an Iranian loanword;
Arew m. from *arew* ‘sun’, cf. Skt. *ravi-* m. ‘sun’, which is also found as a masculine anthroponym.

- is synchronically opaque, e.g. *Hawroy*, probably from IE **ph₂tro-* (cf. Arm. *hayr* ‘father’, gen. *hawr*), compare Greek anthroponyms with *πατρο-*;
- is attested in ancient sources of the Urartian and earlier periods, e.g. *Aram* (cf. Skt. *Rāma-*) vs. Urartian *Aramu* / *Arame/a*.

(86) Mythological lexicon

Native Armenian theonyms replaced by those of Iranian origin. The Iranian divinities do not always fully match their Armenian namesakes functionally.

- Pre-Christian Armenian state pantheon: mainly theonyms of Iranian origin: *Aramazd*, *Vahagn*, *Mihr*, *Tir*, *Anahit*, perhaps also *Nanē*.
- The only deity of the state pantheon with a native Armenian name is *Astl-ik* (*astl* ‘star’ from PIE **h₂ster-* ‘star’).

(87) A few examples of native Armenian mythonyms, possibly inherited from PIE:

- *Ayg* ‘Dawn Goddess’ (Van, Moks etc. *ɛk* ‘in wedding ritual songs) from PIE ‘Dawn Goddess’ (Skt. *uśás-*, Gr. *Ἑως*, Lat. *aurōra*, etc. all deified); **h₂(e)us(s)i* > **aw(h)jo-* > *ayg* ‘dawn’.
- *Andndayin Ōj*, the Abyssal Serpent, cf. Skt. *Áhi- Budhnyà-*; the Armenian Abyssal tree (*andndayin car*) and the Rigvedic Cosmic tree (RV 1.24.7) are located in ‘bottomless space, abyss’, Arm. *an-dund* and Skt. *a-budhná-* from **ṛ-b^hud^hno-*.
- *Arew*, gen. *Areg-* ‘Sun God’ (Movsēs Xorenac‘i 2.8 and folkloric texts); Arm. *arew/g-* ‘sun’ and Skt. *ravi-* m. ‘sun, sun-god’ (Upaniṣad+) derive from **h₂reu-i-*, an Armeno-Aryan poetical or sacred (marked) designation of ‘sun’ replacing the PIE profane (unmarked) word for ‘sun’, **seh₂ul-*.

Supplement

(88) Armenian dialects

The foundations of Armenian dialectology were laid by Hrač‘ya Ačařyan: *Armenian dialectology* (1911, cf. 1909), *Armenian dialectological dictionary* (1913).

(89) Dialectal words: old or new?

► Archaisms: methodology

- Arm. dial. *anum* vs. ClArm *anun* ‘name’ from **anuwn* < PIE **h₃neh₃-mn* ‘name’ has been treated as a reflection of older **anumn*. Methodologically more cogent: *-m-* from oblique **anVman-*, cf. *paštawn* vs. gen. *pašt-aman* ‘service’.

► Internal treatment comes first

- Larabał *rek‘nak* (vs. Classical *aregahn* ‘sun’) has been treated as an archaic reflex of the IE proto-form allegedly with an initial **r-*. In fact, *rek‘nak* is a marginal form; note *řrik‘nak*, *řřihynak*, *əřék‘nak*, *əřihynak*. Regular reduction of the initial pretonic syllable in polysyllabic words in Larabał: *a(r)celi* ‘razor’ > *cĭli*, *asaranoc* ‘oil-mill’ > *səranoc*’.

(90) Reading

- | | |
|----------------------------------|-------------------------------------|
| 1. Դու կաս եւ մնաս: | <i>Du kas ew mnas.</i> |
| 2. Աստուած կայ եւ մնայ յաւիտեան: | <i>Astuac kay ew mnay yawitean</i> |
| 3. Արամ ծնանի զԱրայն Գեղեցիկ: | <i>Aram cnani zArayn Gelec'ik.</i> |
| 4. Գամ եւ ամնում զձեզ ամ իս: | <i>Gam ew arnum zjez ar is.</i> |
| 5. Եւ զնաց Տուբիա կնաւ իւրով: | <i>Ew gnac' Tubia knaw iwrov.</i> |
| 6. Հայեցաւ նա ի բարձանց: | <i>Hayec'aw na i barjanc'.</i> |
| 7. Դու արարեր զերկինս և զերկիր: | <i>Du ararer zerkins ew zerkir.</i> |
| 8. Եւ ամ ի պտղոյ նորա եւ եկեր: | <i>Ew ar i ptloy nora ew eker.</i> |
| 9. Նա եբեր նմա զինի: | <i>Na eber nma gini.</i> |
| 10. Եւ զարձախն իմ եբեր | <i>Ew zarcat'n im eber.</i> |

Glossary

(for personal pronouns, see the table below)

ar prep. 'at, near, next to, by, before'

arnum 'to receive, take, take away, ravish, rob'

astuac 'God'

arcac, *o*-stem 'silver; money, wealth'

barjr, gen.sg. *barj-u*, gen.pl. *barjanc* 'high, elevated; height, elevation'

berem 'to bring'

gam 'to come'

gelec'ik 'pretty, handsome'

gini 'wine'

gnam 'to go, depart, repair'

e-, augment: 3sg.aorist

erkin, *i*-stem 'sky, heaven'

erkir, *a*-stem 'earth; land'

ew, conj. 'and; also'

hayim 'to look'

iwr 'his own, etc.' (refl. pron.)

kam 'to be, exist; to stand, remain; to stop, stay, wait'

kin, gen. *knoj*, instr. *knaw* or *kanamb* 'woman; wife'

mnam 'to saty, wait'

yawitean 'eternally, perpetually; eternity, perpetuity'

-n definite article 'the'

ptul, *o*-stem 'fruit'

utem, 1sg.aor. *keray* 'to eat'

Personal pronouns

| | | | | |
|-----------|------------|----------------------|----------------------|-------------------------|
| Sg | N | <i>es</i> ‘you’ | <i>du</i> ‘you’ | <i>na</i> ‘he, she, it’ |
| | Acc | <i>(z)is</i> | <i>(z)k’ez</i> | <i>(z)na</i> |
| | G | <i>im</i> | <i>k’o</i> | <i>nora</i> |
| | D | <i>inj</i> | <i>k’ez</i> | <i>nma</i> |
| | Abl | <i>yinēn</i> | <i>i k’ēn</i> | <i>i nmanē</i> |
| | I | <i>inew</i> | <i>k’ew</i> | <i>novaw</i> |
| Pl | N | <i>mek’</i> | <i>duk’</i> | <i>nok’a</i> |
| | Acc | <i>(z)mez</i> | <i>(z)jez</i> | <i>(z)nosa</i> |
| | G | <i>mer</i> | <i>jer</i> | <i>noc’a</i> |
| | D | <i>mez</i> | <i>jez</i> | <i>noc’a</i> |
| | Abl | <i>i mēnj</i> | <i>i jēnj</i> | <i>i noc’anē</i> |
| | I | <i>mewk’, meawk’</i> | <i>jewk’, jeawk’</i> | <i>nok’awk’</i> |

I thank you for your attention!

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