HUNGARIAN ASSYRIOLOGICAL REVIEW



VOLUME 3 | ISSUE 1 | 2022

https://harjournal.com/



HUNGARIAN ASSYRIOLOGICAL REVIEW

ON THE COVER:
Gudea's head "Grande tête à turban" Louvre AO 13.
Photo: Gábor Kalla.

HUNGARIAN ASSYRIOLOGICAL REVIEW

VOLUME 3, ISSUE 1
2022

Institute of Archaeological Sciences
Institute of Ancient and Classical Studies
Eötvös Loránd University
Budapest



HUNGARIAN ASSYRIOLOGICAL REVIEW

HAR – Hungarian Assyriological Review

Journal of the Institute of Archaeological Sciences and the Institute of Ancient and Classical Studies (Department of Assyriology and Hebrew Studies), Eötvös Loránd University, Budapest, Hungary.

HAR is a peer-reviewed electronic journal (HU ISSN 2732-2610) published in two issues per year. The journal covers the philology and the archaeology of the Ancient Near East, publishing research articles, brief notes, and field reports.

Papers in HAR are published under the platinum open access model, which means permanent and free access in downloadable format (pdf) for readers and no publication fees for authors. The issues can be both downloaded for free and ordered as printed volumes at own cost.

For article submission guidelines, see https://harjournal.com/author-guidelines/

Editor-in-chief *(szerkesztésért felelős személy)*:
Gábor Kalla, *Eötvös Loránd University, Budapest*

Associate editors:
Zsombor J. Földi, *Ludwig-Maximilians-Universität, München*
Zsolt Simon, *Hungarian Research Centre for Linguistics, Budapest*

Editorial board:
Tamás Dezső, *Eötvös Loránd University, Budapest*
Gábor Zólyomi, *Eötvös Loránd University, Budapest*

Journal manager and technical editor:
Attila Király (attila.kiraly@harjournal.com)

Publisher *(kiadó és kiadásért felelős személy)*:
Gábor Kalla, *Eötvös Loránd University, Budapest*

Registered office *(a kiadó székhelye)*:
Institute of Archaeological Sciences, Múzeum krt. 4/B., 1088 Budapest, Hungary

Email address:
info@harjournal.com

Design and typesetting:
Attila Király (attila@litikum.hu)
using Noto font family by Google Inc., under the terms of the SIL Open Font License.

CONTENTS

Hungarian Assyriological Review

volume 3, issue 1, 2022

The wording of Inana's 'blessing', and the characterisation of the gardener in *Inana and Šukaletuda* 9
Anna Krisztina Pintér

Originators in the Old Babylonian Sumerian literary tradition 25
Szilvia Sövegjártó

Luwische Städte- und Länderglyphen (Hieroglyphic Luwian city and country glyphs) 49
Diether Schürr

The Hurro-Urartian loan contacts of Armenian: A revision 63
Zsolt Simon

Hungarian Assyriological Review author guidelines 91

HAR - HUNGARIAN ASSYRIOLOGICAL REVIEW • VOLUME 3 (2022) • 63–89
HU ISSN 2732-2610 • https://harjournal.com

The Hurro-Urartian loan contacts of Armenian: A revision

Zsolt Simon*

* – Hungarian Research Centre for Linguistics. Email: zsltsimon@gmail.com

Abstract: The present paper critically revises the Hurro-Urartian loanwords of Armenian as well as the alleged Armenian loans in Urartian. It argues that while the existence of the Hurro-Urartian loanword layer in Armenian is undeniable, the number of the certain cases is much smaller than previously assumed. Furthermore, none of the proposed Armenian loans in Urartian can be maintained on linguistic grounds.

Keywords: Hurrian, Urartian, Armenian, Akkadian, loanwords

Cite as Simon, Zs. 2022: The Hurro-Urartian loan contacts of Armenian: A revision. *Hungarian Assyriological Review* 3: 63–89. https://doi.org/10.52093/hara-202201-00029-000

This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

There is general agreement that Armenian borrowed several words from Urartian and Hurrian.[1] Nevertheless, a new, critical overview of this hypothesis is required by two circumstances. On the one hand, the precise list of these borrowings was always contested, and on the other, the developments in the research on these languages after the establishment of this theory (in Western scholarship) in the ’80s and ’90s should also be included. The Hurrian-Urartian loan contacts of Armenian are further complicated by the similarly old hypothesis of Armenian loans in Urartian. Therefore, this paper provides a critical overview of all these proposals in order to establish a list of certain, problematic and wrong etymologies that can serve as bases for future sociolinguistic and (pre)historical interpretations. The paper will first discuss the Armenian loans from Urartian (§1), then those from Hurrian (§2), closing with the Urartian loans from Armenian (§3).[2] Akkadian loans without proposed Urartian or Hurrian transmission are not taken into account,

[1] See, in general, Diakonoff 1971, 83–86; 1985; Greppin 1982a, 67–68, 71–72; 1982b; 1982c; 1990, 204; 1990–1991; 1991a; 1991b, 204; 1995, 314–315; 1996; 2006; 2008b; 2008c; 2011; Yakubovich 2016a, 180–182; 2016b, 157–158; Petit 2019, 182–183 (very cautiously); EDAIL, *passim* (most of these works contain ample references to literature published in languages that are not used in Indo-European and Ancient Near Eastern studies [Armenian, Rumanian, Russian], and that are thus omitted here, cf. also the references in Schmitt 1972 [1974], 22, 40–42; detailed references to Western literature can be found in several entries of the BGH as well). This is also acknowledged in the handbooks of Indo-European studies (see, e.g., Fortson 2010, 382; Olsen – Thorsø 2022, 209), including Clackson 2017, 1123 (who is not especially familiar with the Ancient Near Eastern connections of Armenian, see the criticism in Simon 2021b, 284). He also remarks that “many” of the proposals of Diakonoff 1985; Greppin 1991a and 2010 are either based on unattested words or semantically or phonologically problematic, without specifying any details; note that Greppin 2010 does not contain Hurro-Urartian etymologies. The research seems to have started with Msériantz 1904, which was based on a talk in 1902 (Greppin 1982b, 142; 1982c, 117; 1990–1991, 17; 2008c, 134).

[2] The lists below are alphabetically ordered according to the Armenian words and, for the sake of simplicity, in Latin alphabetical order (letters with diacritics follow the ones without and note the spelling ‹ow› for [u]). The spelling of the Urartian and Hurrian words is adjusted to current practices, except when the original spelling of the quoted authors had consequences for the etymology.

as there are several other ways these Akkadian words could have entered Proto-Armenian (such as direct contacts with Neo-Assyrian as well as Neo- and Late Babylonian).[3] Alleged loans without any supportive linguistic material are also excluded.[4] Finally, this analysis does not include Armenian words that are assumed to be loans from the Northeastern Caucasian language family via its (Hurro-)Urartian branch,[5] for the simple reason that despite the efforts of Diakonoff and Starostin,[6] Hurro-Urartian is not a demonstrated member of this language family.[7]

1. Armenian loans from Urartian

The first subsection (§1.1) discusses those proposals that are based on an attested Urartian word. The second subsection (§1.2) is devoted to loans from reconstructed Urartian words.[8]

1.1. Armenian loans from attested Urartian words

1.1.1. *arciw* 'eagle' ← *Arṣibə* 'the name of King Minua's horse'[9]

Although this etymology is formally possible, the Armenian word has a well-established Indo-European etymology (**h₂ŕĝipi̯ó-* 'eagle', cf. Vedic *ŕjipyá-* 'moving straight upwards [an epithet of eagles, etc.]; eagle', Avestan *ərəzifiiō.parəna-* 'eagle-feathered', etc.).[10] It is superior to the Urartian etymology, which is based on a word of practically unknown meaning (even if 'eagle' is definitely a possibility). Although Greppin claimed that the Indo-European etymology was "doubtful for phonological reasons",[11] he did not specify why this should be so, and it does not seem to be the case. Cf. also under §3.6.

---

[3] Djahukian 1982, 5. Further suggestions and possibilities include Aramaic and Persian (Diakonoff 1984, 107; 1985, 597; Greppin 1982c, 119 n. 7; 1991a, 723 n. 25). The problem of Akkadian loanwords in Armenian obviously requires a separate investigation.

[4] See the cases in EDAIL, 9, 347, 410, 531, 616.

[5] See the material in Greppin 1995, 314; 1996, 42–44; 2006, 198–200; 2008b, 82–84; 2008c, 135; 2011, 294–295.

[6] Diakonoff – Starostin 1986. See also the refs. in BGH, xxxii–xxxiv.

[7] See esp. the criticism in Smeets 1989. Furthermore, there is absolutely no evidence for Greppin's repeated claim (2006, 197–198; 2008b, 82; 2008c, 294) that Urartian is Proto-Lezgian. Note that Greppin gave up his ideas about the Northeastern Caucasian kinship of Hurro-Urartian in Greppin 2010. There is, of course, the theoretical possibility that these words were transmitted via a Hurro-Urartian dialect (cf. Greppin 2010), but this requires specific case-by-case demonstrations, which are missing.

[8] It is worth keeping in mind the following rules affecting many proposals below (which will not be repeated in each case) when the regularity of an Urartian borrowing must be judged (on the Urartian phoneme system, see Wilhelm 2004b, 121–122; Salvini – Wegner 2014, 14–16; Salvini 2018, 483–485; Hazenbos 2021, 169): 1) The Urartian ‹š› is in fact [s] and therefore, it is substituted with the Armenian *s*. 2) The Urartian ‹ṣ› is [tˢ] *vel sim.* and therefore, a substitution with the Armenian ‹c› [tˢ] is regular. 3) The substitution of the Urartian and Hurrian ‹ḫ› with the Armenian *x* is regular. 4) It is still unclear whether the Urartian ‹u› was phonetically only [u] or [o] as well. Nevertheless, Armenian renderings of Urartian toponyms show a twofold representation (see the list of Diakonoff 1985, 601, although this obviously requires a more detailed investigation): partly as [o] (*Quṭume* → *Kotom*, *Ṣupa* → *Copʿ(-kʿ)*, *Ṭušpa* → *Tosp*) and partly as [u] (*Ṣuluque* → *Cłowk*, *Ṭuaraṣini* → *Towaraca-*). In other words, the rendering of the Urartian ‹u› by the Armenian [o] is possible.

[9] Diakonoff 1984, 185 n. 22; 1985, 602 (here admitting the possibility of Indo-European origin); Greppin 1991a, 725–726; for more refs. see EDAIL, 139–140. On the Urartian name, see Salvini 2018, 438.

[10] See most recently EDAIL, 139 with ample refs.

[11] Greppin 1991a, 725 n. 51. Diakonoff 1985, 602 proposed that the Indo-Iranian word could have been borrowed from a Caucasian language, but this is not formally possible (setting aside the historical and geographical problems of such an etymology).

1.1.2. *bowrgn* ‘tower’ ← “*burgana*” ‘id.’[12]

This etymology has two problems: the semantics and the form. On the semantic side, the meaning of the Urartian word is famously unclear,[13] but it is a building (É), ‘built’ (*šidišt-*), and ‘planted, set up’ (*teruni-*), associated with the establishment of new gardens and vineyards and distinguished from fortresses. Yakubovich cautiously (“perhaps”) suggested that the phrase *burganani* ^{GIŠ}*zari* “refers to a sort of walled garden that is similar to the Achaemenid παράδεισος”.[14] While the Achaemenid allusion is not necessarily correct, it is remarkable that the word *burganani* almost always appears next to *zari*[15] and based on a context that recounts the setting up of new installations as well as on the following word, *šuḫə*, *burganani* is a qualifying adjective of *zari*, not another installation (it may also be supported morphologically since there seems to be an adjectival suffix *-nə*[16]). In two cases, a *burganani* was built (CTU A 2-1: 1, 2), but this could be understood as *pars pro toto*. Most interesting are the two remaining cases (CTU A 3-1: 29, 90): vineyards and orchards (*zari*) were always listed separately, and here the *burganani* was added. Nevertheless, this is the act of planting a vineyard, followed by installing an orchard and a *burganani*, and closed by a following ritual in the case that a vineyard is laid out (lines 27–31, 85–94). This leaves the impression that both the orchard and the *burganani* are parts of a vineyard. It still does not tell us what a *burganani* is, but a wall (either supportive or encircling) is entirely fitting. Whether *burganani* is a yet unidentified installation (from the type of an orchard or vineyard), a simple adjective qualifying an orchard, or the walled support or encirclement of an orchard, none of these things is a really fitting source for the Armenian word.

On the formal side, as was made clear above, the word is attested as *burganani* and not *burgana*, which does not lead to *bowrgn*. That said, *burganani* is probably a derivation from **burgana* (cf. above). More problematic is that the widespread reading *burganani* is conventional. The word can equally be read as *purganani*, losing its appeal for any connection to *bowrgn*. However, no matter which reading is chosen, *p*/*burgana* would have led to †*p*/*brgan* in Armenian[17] from the point of view of vocalism. Finally, the Armenian consonant shift mediae > tenues affected the earliest Old Iranian loanwords[18] and it should therefore have affected the Urartian loans as well. In other words, we should have †*prkan* as the Armenian form. Whatever the meaning of the Urartian word is, then, there are two formal arguments that independently exclude this etymology.

Moreover, the Armenian word has an obvious Indo-European etymology (**b*^{h}*r̥ĝ*^{h}- ‘high’, cf. e.g., Gothic *baurgs* ‘town, tower’ and Greek πύργος ‘tower’ as a Lydian loan[19]), with the restriction that

---

12 Adontz 1938, 465 (assuming a meaning ‘château-fort, palais’ for the Urartian word); Diakonoff 1971, 84; Greppin 1996, 43; Yakubovich 2016a, 182 (admitting the possibility of an inverse borrowing); 2016b, 158 (the Armenian word as ‘fortress’, the direction of the borrowing is not clear); for further refs. see EDAIL, 246.

13 Salvini 2018, 384–385 with refs. to earlier suggestions (‘Weidebezirk, Hürde?’, “uno stabilimento dove si raccolgono gli animali destinati al sacrificio”), add now ‘pen?’ in eCUT.

14 Yakubovich 2016b, 158.

15 In 13 cases (two are reconstructed based on formulaic phrases) out of 18 attestations (the context of one of the cases without *zari* is broken).

16 Wilhelm 2004b, 125 and Salvini – Wegner 2014, 21.

17 Diakonoff 1985, 602.

18 Ravnæs 2005, 196 and Clackson 2017, 1120, both with refs. Some scholars reject that the so-called Armenian consonant shift happened after the earliest Old Iranian loans (e.g., Gippert 2005, 155; Schmitt 2007, 56), which would call into question whether it affected the borrowings from Urartian. The solution to their criticism is that this consonant shift consisted of two chronologically different steps (tenues > tenues aspiratae and mediae > tenues), with the appearance of the earliest Old Iranian loans between these two steps (Ravnæs 2005, 197–198). This still leaves the relative date of the change tenues > tenues aspiratae open, but the Armenian rendering of Urartian toponyms and the case of *p*^{c}*oxem* show that it happened after the Urartian loans, see §1.1.9.

19 See the convincing analysis of Obrador-Cursach 2019–2020.

the irregularities are perfectly paralleled by *dowrgn* 'potter's wheel', and thus both words are loans from a still unidentified Indo-European language to Armenian.[20] Cf. also §3.8.

1.1.3. *caṙ* 'tree' ← *ṣari* 'orchard'[21]

The Urartian word is usually booked as *zari*, though *ṣari* is an equally possible reading (but see §3.15 for an argument that the reading *zari* is more probable). The problem is twofold: first, the required semantic change is dubious. Second, the Urartian form does not explain the Armenian *-ṙ-* (which goes back to **sr*, **rs* or **rH* or to foreign (*)-*rr*-[22]), and thus, the etymology is not formally possible.[23] Moreover, the Armenian word has an Indo-European etymology: **ĝerso-* (> Greek γέρρον 'different objects from wickerwork', Old Norse *kjarr* 'shrubs').[24] While Greppin ignored this etymology, Diakonoff argued that its semantics were similarly as weak as those of the Urartian loan etymology[25] (nevertheless, he considered the Urartian derivation doubtful). However, the semantic change 'brushwood' → 'tree' is not unparalleled.[26] See also §3.16.

1.1.4. *cov* 'sea' ← *ṣuə* 'lake'[27]

While the proposal is formally regular (under the entirely possible condition that the Urartian word had a glide [w] between its vowels, as pointed out by Diakonoff), the Armenian word has a convincing Indo-European etymology from **ĝobʰ-u-* (cf. Irish *gó* 'sea', Old Icelandic *kaf* 'sea', Lydian *kofu-* 'water').[28] Although Greppin claimed that the Armenian word had no satisfactory etymology,[29] he did not specify why this etymology was not satisfactory. See also §3.13.

1.1.5. *es* 'I' ← *iešə* 'id. (erg.)'[30]

This explanation left the different *Anlaut* unexplained. While the Armenian form is indeed irregular, most scholars assume a sandhi variant.[31]

---

20 Olsen 1999, 950–951; EDAIL, 245–246 (both with refs.); Olsen – Thorsø 2022, 209.

21 Diakonoff 1971, 85 ("unsicher"); 1985, 600; Greppin 1980, 205; 1982a, 72; 1982c, 117; 1991a, 726; 1991b, 204; 2008c, 135; 2011, 295; cf. also Yakubovich 2016b, 158 (only as "comparandum"). Greppin sometimes assumed (1991a, 726; 2011, 295) that the Urartian word additionally means 'tree', which would help the etymology, but Diakonoff *apud* Greppin 1991a, 728 rightly pointed out that the Urartian word means only 'garden, orchard', see also Salvini 2018, 426.

22 Macak 2017, 1040, 1061.

23 Diakonoff 1982, 16 proposed that it is a loan from Hurrian **sarrə*. While this reconstruction could be supported (see §3.15), it does not explain the initial consonant of the Armenian word.

24 See, e.g., EDG, 268. The word was not included in EDAIL, but EDAIL is not comprehensive, see the criticism in Schmitt 2012, 125.

25 Diakonoff 1985, 600. Olsen 1999, 936 also treated it as a word of unknown origin, as this Indo-European derivation was unconvincing for her, although she did not disclose, why.

26 Hackstein 2021, 185 with refs.

27 Msériantz 1904, 129; Diakonoff 1971, 85; 1984, 186 n. 28; 1985, 600; Greppin 1980, 205; 1982a, 72; 1982c, 117; 1991a, 726; 2006, 196; 2008b, 80; 2008c, 135; 2011, 295. On the Urartian word, see Salvini 2018, 411.

28 Poetto 1979 and EDAIL, 141 with refs. While referring to this, Olsen 1999, 943 booked the word as of unknown origin, without further explanation. Alternatively, Kölligan 2019, 155–165 explains it from a compound **dieu̯-o-bʰh₂-u-* 'himmelsfarben, himmelsgleich'. Note that the derivation of Lyd. *kofu-* from Proto-Anatolian **h₂eb-* 'running water, river' promoted by Yakubovich 2017 (ignoring Poetto 1979 and EDAIL) requires the change PIE **h₂-* > Lyd. *k-* which is still *sub iudice*.

29 Greppin 1991a, 726 n. 58.

30 See the refs. in EDAIL, 257. On the Urartian pronoun, see Wilhelm 2004b, 128; Salvini – Wegner 2014, 34; Salvini 2018, 492; Hazenbos 2021, 171.

31 See the refs. in EDAIL, 257, add also Olsen 2017a, 438; 2017b, 1089.

1.1.6. *kord* ‘fallow, unploughed (land, ground)’ ← *quldinə* ‘deserted’[32]

While the Armenian word has no accepted Indo-European etymology,[33] and *quldinə* may be based on **quldi* (see above), the derivation from the Urartian word is not formally possible because of its unexplained *l* → *r* change and because the post-Urartian Armenian consonant shift tenues > tenues aspiratae would have led to †*kᶜort* (on the date of the shift see §1.1.9; the *q* → *k* substitution would be regular).

1.1.7. *oł̌ǰ* ‘sound, whole’ ← *ulgu* ‘life’[34]

Setting aside the semantic problem (to which add that “*ulgu*” is in fact attested only in its derivative *ulguše* ‘life’[35] and thus, its basic meaning is not clear), the proposal does not fit phonologically, as the Urartian word is exclusively spelt with ‹gu› (39×),[36] and therefore, the phonetic interpretation [-ly-] required by the Armenian word is not possible.[37] Besides, the Armenian word has a solid Indo-European etymology (Proto-Armenian *∗olyo-* < PIE **(s)olyo-* ‘whole’).[38] See also §3.15.

1.1.8. *ōriord* ‘virgin, young girl’ ← a compound of Urart. *euri* ‘lord’ and Arm. **ord-* ‘offspring, son/daughter’[39]

The required semantic change, ‘*lord’s daughter > virgin, young girl’ is remarkable, but not impossible. More problematic is the formal side, which requires an Armenian *e* > *a* change (whereby **awri-* regularly leads to *ōri-*). Martirosyan referred to a rule **e* > Arm. *a* before a syllable containing *-u-*, but the existence of this rule is heavily debated as there are no certain examples, only a counter-example.[40] Moreover, Martirosyan himself proposed an alternative, Indo-European etymology, which fits both semantically and formally.[41]

[32] EDAIL, 375 with refs. On the Urartian word, see Salvini 2018, 408.

[33] See Olsen 1999, 953 and the discussion in EDAIL, 375–376. That said, to my mind, Martirosyan’s proposal (EDAIL, 375 n. 73) from PIE **gʰordʰ-* (cf. e.g., Lith. *gařdas* ‘enclosure, pen’) with an earlier meaning ‘*(enclosed) pasture-land, pen’ provides a fitting solution.

[34] Greppin 1982a, 72; 1982b, 149.

[35] Salvini 2018, 422.

[36] Based on eCUT (only non-restored cases).

[37] As is well-known, there are cases with *g/ø/i*-interchange, but it does not mean that ‹gu› always meant [ju]. This is not only *a priori* improbable (since ‹gu› is not needed for spelling [ju]) but also practically not the case (admitted by Diakonoff [1971, 50 n. 49] himself), and in this specific case this can safely be discarded due to the high number of attestations. Note also that the phonetic interpretation of the *g/ø/i*-interchange is uncertain (see, e.g., Wilhelm 2004b, 120 [“voiced fricative”]; Salvini – Wegner 2014, 7, 16 [“ein sehr schwach lautender Konsonant”, [y]]; Hazenbos 2021, 169 [y]).

[38] Olsen 1999, 26 and EDAIL, 531, both with discussion and refs.

[39] EDAIL, 157 with refs., see already Diakonoff 1971, 42 n. 35 (with question mark), 67, 84, 172 adding *awrear* “‘(vollfreier) Mann, Hausherr’”, both with Urartian suffixes: “*-u/ordā*” and “*-are*” (but allowing the possibility of Indo-European origin). Setting aside that *-ear* is a regular Armenian (originally) collective suffix (Olsen 1999, 389) and the Armenian word means ‘disgrace, insult’ (EDAIL, 156), the assumption of the Urartian suffix “*-u/ordā*” is based on two hapax words of unknown meaning (^{LÚ}*ú-ru-ur-da-a* [CTU A 9-3 vii 11] and $^{LÚ.GIŠ}$*gàr-ru-ur-da-a* [CTU CT Tk-01 r 9], hence not included in the glossary of Salvini 2018) and the suffix “*-are*” is based on *patarə* ‘city’ and *ḫarari* of unknown meaning (Salvini 2018, 406, 389, resp.). Therefore, their existence remains doubtful and even if they exist, their meanings are completely obscure. Accordingly, they are not included in contemporary overviews of Urartian nominal derivational morphology, cf. Wilhelm 2004b, 125–126; Salvini – Wegner 2014, 19–22; Salvini 2018, 486–488; Hazenbos 2021, 170. On the Urartian word *euri*, see Salvini 2018, 388.

[40] See his compact overview in EDAIL, 705.

[41] A connection with two words from the closely related, so-called Balkan Indo-European languages: Ancient Macedonian ἀκρέα ‘daughter’ and Phrygian ἄκριστιν ‘cook, female slave (who grinds corn / prepares meal for offering cakes)’ (Hesychius 2550 and 2576), from ‘*young girl’ (EDAIL, 157 n. 31, cf. also 36; the attempt by Obrador-Cursach 2020, 414–415 to explain away the Phrygian word as the “local variant” of a reconstructed Greek *ἄχρηστις ‘useless’ is completely arbitrary). What remains is the part °*ord-*, which could be the productive Armenian denominal adjective suffix *-ord-* (on its various meanings,

1.1.9. *pełem* ‘dig, excavate’ ← *pilə* ‘canal’[42]

According to Diakonoff, this suggestion should be rejected on phonological grounds, but he did not specify his problems with it.[43] The situation is as follows: First, the sound change *il* > *eł* is regular.[44] Second, the case of the toponym *Ṣupa* → Arm. *Cop^{c}*(*-k^{c}*) implies that Urartian ‹p› appears in Armenian as *p^{c}*, which is also supported by the case of *p^{c}oxem* from *puḫ-* (see the next entry).[45] Nevertheless, Armenian loans from Old Iranian kept their initial [p] (see, e.g., *partēz* ‘garden’, cf. Avestan *pairidaēza-*, cf. also §1.1.2). Since the Urartian and the Achaemenid periods were not very far apart,[46] one may assume that the Urartian language survived until the Achaemenid period (we simply do not know when it died out[47]). Thus, *pełem* could be a late Urartian loan, contemporaneous to the Old Iranian loans. Another option could be that the Urartian word was transmitted into Armenian via Old Persian, which would also explain the initial consonant. In other words, no final decision can be made in this case.[48]

1.1.10. *p^{c}oxem* ‘to exchange’ ← *puḫ-* ‘to (ex)change, alter’[49]

Yakubovich convincingly argued for the given meaning of the Urartian verb (the ultimate source of which is Akkadian *pūḫu*(*m*) ‘exchange, substitute’), providing a formally fitting source for the Armenian verb.

1.1.11. *san* ‘kettle, pot’ ← *šani* ‘vessel, pot’[50]

A semantically and formally fitting case.[51]

see Olsen 1999, 527–532, who already proposed this suffix in this word, albeit from a different root, 531). More recently, Kölligan 2019, 100–104 explained the Armenian word from **apriḭo-portā*/*ī* ‘Eberjunges’, as a poetic reference to the ‘Tochter des Fürsten’, which is semantically inferior.

42 Msériantz 1904, 128–129; Greppin 1982b, 145 (here as *pałem*); 1982c, 117; 1991a, 726; 2006, 196; 2008b, 80; 2008c, 134. On the Urartian word, see Salvini 2018, 406.

43 Diakonoff *apud* Greppin 1991a, 728.

44 See Martirosyan 2017, 296.

45 Note that the toponym *Tosp* from Urartian *Ṭušpa* regularly does not show this change, since the sound law tenues > tenues aspiratae did not affect the cluster [sp] (e.g., Kim 2016, 152).

46 The last attested Urartian king, Sarduri IV, was once mentioned between 646–642 BC (Fuchs 2012, 138, 158 [Tabelle 09.05]), but the famously unintelligible and therefore intensely debated toponym in the Nabonidus Chronicle (BM 35382 ii 16) may refer to an Urartian king as late as 547 BC, see most recently Rollinger – Kellner 2019, esp. 170–171. They argue for a disintegrated and fragmented Urartian kingdom, but the passage (ii 16–17) clearly speaks about a single country (*ana* ^{KUR}…) and its single king (*šarra-šu*).

47 Palmer 1990, 74–76 with n. 14 refers to a monk, John the Urṭian, about the turn of the 4th c. AD in Anzitene, who was fluent in the language of the Urṭians, which Palmer identifies with Urartian (“probably”, followed by Radner 2006, 148 n. 14).

48 Although Kimball 1999, 265, 450 suggested an Indo-European etymology for this Armenian verb (connecting with Hittite *palša-* ‘road, path; time (occasion)’ and Old Irish *belach* ‘cleft, passage, way’), it was rightly pointed out by Kloekhorst 2008, 622 and Olander 2020 [2022], 190 that this etymology is semantically weak.

49 Yakubovich 2016a, 181. On the Urartian word, see also Salvini 2018, 407. For the earlier derivation from Akkadian via Hurrian *puḫ*(*ugari*) ‘loan (noun)’) see already Diakonoff 1971, 86; 1982, 17; 1985, 599; Greppin 1982b, 145 (from the underlying verb); Thorsø 2022, 105 (not referring to Yakubovich’s analysis). Greppin rejected it later (1991a, 724 n. 25), since “it is an odd word to borrow when the inventory of loanwords is otherwise so precise”, which is, of course, a *non sequitur*. Diakonoff *apud* Greppin 1991a, 727 even objected that this reasoning is “curious”, as this is precisely a typical loan word from a semantical point of view.

50 Greppin 1991a, 726; 2006, 196; 2008b, 80; 2011, 293; Yakubovich 2016a, 181; 2016b, 158; Clackson 2017, 1123 (“plausible”). On the Urartian word, see Salvini 2018, 411 (accepting the Armenian borrowing).

51 Nevertheless, Olsen 1999, 957 still lists it as a word of unknown origin, without arguments or references.

1.1.12. *sowr* ‘sharp; sword, dagger’ ← *šurə* ‘spear; weapon’[52]

Although the proposal is formally possible,[53] the semantics are not fitting and the Armenian word is usually explained from PIE **ḱoh$_3$ro-* (from **ḱeh$_3$-* ‘schärfen’).[54] See also §3.12.

1.1.13. *owłi* ‘way, road’ ← *ul-* ‘go’[55]

This proposal was rejected by Greppin as root etymology.[56] However, this is not an issue in itself. More problematic is that the Armenian word cannot be separated from *owł* ‘stairs, bridge, way or passage’, of which it can be a regular derivative.[57]

1.1.14. *owłt* ‘camel’ ← *ulṭu* ‘id.’[58]

Although formally speaking this would be a perfectly fitting etymology, the Urartian word does not actually exist: it is a hapax in CTU A 8-3 iv 6 (an inscription of Argišti I) and cannot be read properly, only as ^{GU4}x-ṭu-ni^{MEŠ}.[59] Moreover, as the determinative shows, we are dealing with a type of ox (more precisely, with an animal that was classified as such by the ancient scribes),[60] and not with a camel, which is consistently written as ^{ANŠE}A.AB.BA[61] (i.e., it was classified as a type of donkey, not ox).

1.1.15. *xałoł* ‘grape’ ← *ḫaluli* ‘vine, grape’[62]

This is a formally and semantically fitting etymology.[63]

---

52 Diakonoff 1971, 85 (allowing the possibility of Indo-European origin, with the Urartian meaning ‘weapon’); 1984, 186 n. 28 (‘weapon’); Greppin 1982a, 72 (‘weapon’); 1991a, 726 (‘sword’); 2008c, 135 (‘spear’); 2011, 293 (‘arms, spear’); Yakubovich 2016b, 158; Clackson 2017, 1123 (“plausible”, the Urartian word means ‘weapon’). On meaning of the Urartian word, see Salvini 2018, 415–416 with refs.

53 According to Diakonoff *apud* Greppin 1991a, 728, this etymology is “somewhat insecure”, because the Hurrian form is *šauri*, and hence Urartian “should be read” as /sōri/. Setting aside the validity of this claim, this is not a problem at all, given that Armenian *u* can continue **ō* (Macak 2017, 1066).

54 Olsen 1999, 55 with refs. and LIV^2, 319–320 (Kümmel). It is not included in EDAIL, but this dictionary is not comprehensive, as per above.

55 See the literature in Greppin 1991a, 723 n. 25. On the Urartian word, see Salvini 2018, 422.

56 Greppin 1991a, 723 n. 25.

57 Olsen 1999, 442 with refs.

58 Diakonoff 1971, 85; 1985, 600; Greppin 1980, 205; 1982a, 72; 1982c, 117; 1990, 204; 1991a, 726; 1991b, 204; 2008c, 134; Djahukian 1982, 11; Yakubovich 2016a, 181; Clackson 2017, 1123 (“most likely source”).

59 Salvini 2008, 339.

60 Salvini 2008, 340 suggested ‘buffalo’.

61 Salvini 2018, 443, cf. also eCUT.

62 Salvini 1990, 246 n. 12; Girbal 2004, 59 (both with refs.); Greppin 2008a, 47 n. 6. For the earlier derivation from Hurrian (*ḫaluli* ‘a fruit’, BGH, 122 with refs.) see also Diakonoff 1985, 600 and Olsen 1999, 936 with ref. On the Urartian word, see Salvini 2018, 389 with refs. The comparison by Diakonoff 1971, 84–85 with Arm. *hał-ord* ‘partaker, participant, companion’ (the etymology of which is uncertain, Olsen 1999, 531) was based on the now outdated meaning of the Urartian word (‘Kultfestmahl’) and was not formally possible either.

63 Finally, EDAIL, 684 claims that Urartian *ḫubi* ‘valley? territory?’ (on the Urartian word, see Salvini 2018, 390) is “somehow related with Arm. *hovit* ‘valley’” (of unknown origin, Olsen 1999, 943), without providing any details. The formal and semantic closeness is undoubtedly remarkable, but it is difficult to find a regular solution. An Armenian loan from Urartian cannot explain the initial consonant instead of **x* and the final consonant. An Urartian loan from Armenian cannot explain the lack of the final consonant. Therefore, a third, common source is the most probable, but all details remain unclear.

1.2. Armenian loans from reconstructed Urartian words

1.2.1-2. *ałx* ‘household, household property’ ← “Hurro-Urartian **all-ae-ḫḫə*” & *ałaxin* ‘female servant’ ← Hurr. “*al*(*l*)*a*(*e*)*ḫḫe*/*inne* ‘keeper (male or female of that which pertains to the lord of the house/family’ i.e., of household (or temple) stores, mostly of food”[64]

Despite his own labels, Diakonoff argued that the borrowing may be from Urartian or from a closely related dialect, since “Hurro-Urartian *-ae-* has a tendency to develop to *-ē-*, *-e-* in Hurrian, but to *-ā*(-) in Urartian”.[65] His proposal was rejected by Greppin due to the unclear meaning of *allaḫḫe*/*innum*.[66] In his response, Diakonoff clarified his morphological analysis (*allae*/*i-* ‘lady (of the house), queen’, *-aḫḫe-* ‘possessive-relative suffix’, *-enni*/*inni* ‘adjective suffix’ and *allae*/*i-ḫḫe* as a “trivial possessive relative adjective form”) and attributed the semantic difference to “the social evolution of the Armenian people (from extended family dwelling or tower to one-family, one-storey adobe house!)”.[67]

Although they were treated together, it is worth separating the etymologies due to some philological problems. The base word is Hurrian *alla* ‘lady’ (and not *alla=i*, which is a derived, honorific form),[68] which, independently from the suffixes, does not lead to *ałx*, since the loss of the second *-a-* cannot be explained, not to mention that *ałx* means ‘ring, lock, bar; possessions, baggage, train; tribe, entourage’.[69] Therefore, this etymology must be excluded.

The meaning, the Hurrian origin, and Diakonoff’s morphological analysis of *allaḫḫe*/*innum* are uncertain.[70] The term identifies a sort of official connected with grain, perhaps a miller,[71] and is therefore definitely not the precursor of *ałaxin*, even if this though would be possible formally. Nevertheless, **allaḫḫinni* ‘belonging to the lady’, a semantically fitting precursor to ‘female servant’, would be a regular form in Hurrian (which does not require any Urartian transmission). The word *ałaxin* does have Indo-European etymologies, but these show formal and semantic problems.[72]

1.2.3. *caṙay* ‘servant’ ← **ṣar*(*r*)*ā*, cf. Hurr. “*sarre* < **ṣarra-ae* ‘live booty, captives’”[73]

This proposal was rejected by Greppin because of “unresolved phonological problems”, but he did not specify them.[74] The Hurrian word *šarri* indeed means ‘booty’ or ‘prisoner of war’,[75] which is not inconducive to the meaning ‘servant’. However, the initial consonant and the *Auslaut -ay*

---

64 Diakonoff 1971, 84–85 (*ałx* ← Urartian **alāḫə* / Hurr. **all-aḫḫe*; *ałaxin* ← Hurr. *allāḫḫinne* “‘eine Person, die in der Hauswirtschaft beschäftigt ist, und zwar mit Korn und Eßwaren; Müller(in)’” < **allā-ḫḫ*(*e*)*-inne* “‘der/die zur Hausgemeinschaft Gehörende’”); 1984, 186 n. 28; 1985, 598; cf. also EDAIL, 25, with refs.

65 Diakonoff 1985, 598.

66 Greppin 1991a, 724 n. 25.

67 Diakonoff *apud* Greppin 1991a, 728.

68 De Martino – Giorgieri 2008, 65–67 and BGH, 12.

69 Olsen 1999, 954 and EDAIL, 25, see there that the word is of unknown origin.

70 On Diakonoff’s derivation see the scepticism of Trémouille 2005, 311 and de Martino – Giorgieri 2008, 67.

71 BGH, 14 with refs.

72 For Indo-European possibilities, see Olsen 1999, 470 (from a verb ‘to grind, crush’ or ‘to nourish’ [there is a semantic parallel for the latter, but it is formally problematic, see EDAIL, 25]).

73 Diakonoff 1971, 85 (Urartian **ṣarae*, cf. Hurrian **sarrae* > *sarre* ‘booty’); 1984, 186 n. 27 (Urartian **sarrā*, cf. Hurrian *sarre* ‘living booty’ < **sarr-ae*); 1985, 598; Greppin 1982b, 145, but cf. below.

74 Greppin 1991a, 724 n. 25. In his response, Diakonoff *apud* Greppin 1991a, 727 only repeated his claim.

75 BGH, 357.

(which may be a suffix denoting persons[76] or a substitution of *-ā* in the case of Syriac loans[77]) are irregular, and thus, this etymology cannot be upheld.[78]

1.2.4. *darbin* 'blacksmith' ← **dabrini*, cf. Hurr. *tabre/inni* 'metal founder'[79]

According to Yakubovich, this hypothesis "appears to be the only plausible way of linking the two nouns", as the alternatives (chance resemblance or a Hurrian loan from Armenian) are unlikely.[80] However, the questions are rather if we have to link these nouns and if we can do this at all, especially since we have serious problems on the formal side:

First, since initial stops are devoiced in Hurrian and the word is not attested in Urartian, we do not know if the underlying root was /dab-/ (which is required by this etymology) or /tab-/ (which excludes this etymology).

Second, this etymology requires that the Armenian metathesis **-br-* > *-rb-* happened before the Armenian change **b* > *w* /V_; otherwise the result would have been †*dawrin* (the change **b* > *w* /V_ happened in Armenian after the Urartian loans, see the toponym *Zabaḫa* → *J̌avax-*). The word *sowrb* 'pure, clean; holy', which originally contained the cluster **-br-* in every etymological proposal, could decide the issue. While this seems to be an inherited word (**skub*^{h}*ró-*), and would therefore solve the problem, it is an Iranian loanword according to the other group of scholars.[81] That would mean that this word cannot be used as an argument (I could not find other examples related to this problem). It is also noteworthy that the structurally analogical case of *arawr* 'plough' < *aratr*°[82] argues that the lenition preceded the metathesis.[83]

Whatever the solution of the previous two problems should be, even if the Urartian form were **dabrini*° and the lenition did not precede the metathesis, the expected form is †*tarpin* due to the Armenian consonant shift (cf. §1.1.2). Therefore, this is a formally impossible proposal. Note also that Martirosyan provided a regular solution (**dabr-*(*s*)*na-*) to the problems of the traditional connection of *darbin* with Latin *faber* 'craftsman, artisan, smith'.[84]

1.2.5. *don* 'a kind of bread' ← **donə*[85]

Thorsø reconstructed the Urartian word on the basis of Hitt. *tūni-* 'a kind of bread', allegedly of Hurrian origin. The Hurrian origin, however, is based on the assumption that this Hittite word and the Hurrian cult term *tuni* 'footstool *vel sim.*' (that may appear in the form of cultic pastry) are identical. Nevertheless, these are two different words.[86] This does not exclude a Hurrian origin of the Hittite word (which has no known etymology[87]) and therefore, an Urartian cognate.

[76] EDAIL, 662.

[77] See most recently Kitazumi – Rudolf 2021, 197–198.

[78] The Armenian word has no generally accepted etymology (Olsen 1999, 946 with ref. to an Indo-European proposal).

[79] Yakubovich *apud* Blažek 2008, 79 n. 2; 2009, 266–269; 2016a, 182. On the Hurrian word, see BGH, 440.

[80] Yakubovich 2016a, 182.

[81] See most recently the discussion in Simon 2013, 125–126.

[82] EDAIL, 128–129.

[83] For the same conclusion with another case of **-tr-* see Ravnæs 2005, 199.

[84] EDAIL, 235–236 with refs. For a critical discussion of the debated Indo-European etymologies see here and esp. Yakubovich 2009, 266–267.

[85] Thorsø 2022, 105. Martirosyan's alternative (EDAIL, 242–243), an Armenian borrowing from Hittite *tūni-* 'a kind of bread' (cf. below) is not possible due to the different initial consonant and the different vocalism (cf. below).

[86] HEG T, D, 437–438, on the Hurrian word see also BGH, 470.

[87] HEG T, D, 437–438. Martirosyan proposed that the Hittite word is a loan from Armenian (EDAIL, 242–243), but this is not possible due to the different vocalism.

Nevertheless, it assumes that **d-* was the original initial consonant and that Urartian [o] corresponds to Hurrian [u] (the [u] is assured due to the spellings with ‹ú›[88]) – both are possible assumptions, but none of them can be proved at the moment. However, this derivation must be excluded, since a Hurrian/Urartian **t/donə* should have resulted in Armenian †*tᶜ/ton* due to the consonant shift (cf. §1.1.2).

1.2.6. *towpᶜ* ‘case, box, chest, censer’ ← **dupa*

The origin of the Armenian word is unknown and Martirosyan suggested that it is a borrowing from Hittite *tuppa-* ‘chest, basket’.[89] Simon pointed out that this is not possible phonologically; nevertheless, considering the formal and semantic closeness, he did not reject the connection either but speculated whether *pᶜ* can reflect an intervocalic geminate *-pp-*.[90] However, there is a formally regular possibility instead: the Hittite word and its Luwian equivalent (both are of unknown etymology[91]) are loans from Hurrian **tuppa-*, the Urartian cognate of which could regularly be **dupa,* and **dupa* would regularly lead to *towpᶜ* with the Armenian consonant shift (cf. §1.1.2). The problem is that we cannot be sure that the original initial stop was voiced and in general, there is no hint of a Hurrian origin.

1.2.7. *xarxarem* ‘to destroy’ ← **ḫarḫar-* ‘to be destroyed (*ḫarḫarš-* ‘to destroy’)[92]

The semantic difference was explained by Diakonoff with the assumption that there could have been an Urartian dialect in which the difference in transitivity was expressed by “personal morphs” as more common and not by a suffix, as he understood the segment *°š°* to be.[93] Later, he even claimed that this was the original form.[94] Greppin rightly pointed out that *ḫarḫarš-* would have led to *-ṙ-* in the Armenian form and, therefore, cautiously proposed a suffixless Hurrian form.[95] The problem with both interpretations is the same: °š° is not a suffix expressing transitivity and in fact, no such Urartian suffix has been identified yet.[96] That said, there is clear evidence for the existence of the root *ḫarḫar-* in the same meaning, not mentioned either by Diakonoff or Greppin: *ḫa-ar-ḫa-a-ru* ‘I destroyed’ (CTU A 8-3 vi 18)[97] and *ḫar-ḫa-ru-li* ‘(s)he might destroy’ (CTU A 10-6, 6’). While the morphological relationship between the two stems remains unclear and requires further research, a derivation of the Armenian word from the Urartian one is regular. Finally, it is remarkable that in the semantic sphere of destruction, Armenian has a series of reduplicated formations, such as *ǰaxǰaxem* ‘to destroy’, *kᶜrkᶜrem* ‘to destroy’, or *xołxołem* ‘to massacre’ next to *xarxarem*. Although sound symbolism seems to have a role and the reduplicated formation may be an Armenian innovation, since *xarxarem* is a loan, one may wonder whether this derivational pattern (perhaps together with the other words) is a borrowing and whether Urartian is the source.

88 HEG T, D, 437–438.

89 Martirosyan 2017, 300.

90 Simon 2021b, 287.

91 HEG T, D, 441–444.

92 Greppin 1982a, 72; 1982b, 149; 1982c, 117; 1991a, 726; 1995, 314; Diakonoff 1985, 600.

93 Diakonoff 1985, 600.

94 Diakonoff *apud* Greppin 1991a, 728.

95 Greppin 1991a, 725 n. 55.

96 For the known Urartian verbal suffixes, see Wilhelm 2004b, 129–130; Salvini – Wegner 2014, 45–47, Salvini 2018, 495.

97 Salvini’s claim (2018, 389) that this would “probabile” be an “abbr[eviazione]” of *ḫar-ḫa-ar-šú-bi* is completely *ad hoc*.

1.3. Interim results

An Urartian etymology is:

1. Formally not possible: *ałx*, *bowrgn*, *cař*, *cařay*, *darbin*, *don*, *es*, *kord*, *ołǰ*, *ōriord*, *owłt*;

2. Formally possible, but the word has a solid Indo-European or internal etymology: *arciw*, *cov*, *owłi*;

3. Problematic (an Urartian etymology cannot be entirely excluded, but formally [F] or semantically [S] not impeccable): *pełem* (F), *sowr* (S), *towpᶜ* (F) (note also that *sowr* has a formally and semantically solid Indo-European etymology);

4. Formally and semantically possible: *ałaxin* (Hurrian), *pᶜoxem*, *san*, *xałoł*, *xarxarem*.

2. Armenian loans from Hurro-Urartian languages (“Hurrian”)

Armenian words frequently show assonances with Hurrian words and thus, in these cases, we may be dealing with loanwords in Armenian. The question is from precisely which language they were borrowed. This question has a theoretical and a practical side. It was argued that the source language cannot be Hurrian itself on chronological and geographical grounds and, therefore, we must be dealing with Urartian loanwords that happened to be unattested due to the formulaic nature of the Urartian inscriptions.[98] This is doubtful since we cannot exclude the survival of a Hurrian dialect outside of the Urartian core territory, with which Proto-Armenians surely had contact. From a practical point of view, as Hurrian and Urartian are not identical languages, it would be easy to decide the issue if a loan showed a specifically Hurrian trait (e.g., the devoicing of an initial voiced stop). Unfortunately, the proposed loans are almost always uninformative from this point of view and, therefore, their cases cannot be decided. All in all, while it is clear that we are dealing with loanwords from the Hurro-Urartian language family, their exact source cannot be determined. Accordingly, we should talk about Hurro-Urartian loans in Armenian, and not Hurrian loans (hence the title of this section). Nevertheless, since it is in Hurrian that the following examples are attested, the term Hurrian will be used in this section, without implying any specific Hurro-Urartian language.

2.1. Armenian loans from attested Hurrian words

2.1.1. *agarak* ‘landed property, estate’ ← *awari* ‘field’[99]

The origin of the Armenian word is obscure.[100] Although the suffix *-ak* is etymologically Iranian, it became productive in Armenian,[101] which means that *agar-* could be of both Armenian and Iranian origin. While in the former case *agar-* could continue *awari*, this is not possible in the latter on phonological grounds. Moreover, it is possible in both cases that *agar-* ultimately goes

[98] Greppin 2006, 196 = 2008b, 79–80 (“Hurrian, of course, gave no vocabulary directly to Armenian”); 2008c, 138; 2010, 118 n. 1; 2011, 292 (modifying his earlier view [Greppin 1980, 204; 1982a, 67–68; 1982b, 143; 1991a, 721–722], according to which it is not possible to tell if we are dealing with only Urartian or with both Hurrian and Urartian as source languages; but see Greppin 1982c, 118, where he opted for both source languages); Yakubovich 2016a, 180–182, cf. also Kitazumi 2013, 512–513 with n. 8 (“aus einer mit dem Hurritischen nah verwandten Sprache”, “[E]s könnte also z.B. Urartäisch die Quellsprache sein, was jedoch reine Spekulation bleibt”).

[99] Greppin 1982a, 71; 1982b, 143–144; 1982c, 118; 1991a, 724; 2008c, 134. On the Hurrian word, see de Martino – Giorgieri 2008, 150–151 and BGH, 33–34.

[100] Olsen 1999, 246, 953 (here misprinted as *agařak*) and EDAIL, 5, both with refs.

[101] Olsen 1999, 240.

back to Sumerian *agar* (a-gar$_3$, agar$_4$) 'champ (inondé)'[102] via (an) unidentified language(s), as was already proposed.[103]

2.1.2. *ałiws* 'brick, tile' ← *alipši* 'clay brick'[104]

A formally and semantically impeccable etymology.

2.1.3. *art* 'cornfield, tilled field' ← Hurr. *arde/i*, Urart. *ardi* 'town'[105]

Setting aside the fact that it was not disclosed, why this should be a Hurrian and not a Urartian word, no such Urartian word is attested. Although a Hurrian derivation would be formally possible, Martirosyan rightly pointed out that it is semantically improbable and he provided a formally fitting solution to the issues with the traditional derivation from PIE *$*h_2eĝro$*- 'field'.[106]

2.1.4. *astem* 'to look for a bride, ask in marriage' ← *ašti* 'woman, wife'[107]

This is a formally possible etymology (the Armenian consonant shift did not affect the cluster *st*[108]). Nevertheless, Martirosyan proposed a formally equally possible Indo-European etymology, *$*ph_2\hat{k}teh_2$ 'betrothal, engagement; betrothed (girl)' (see Lat. *pacta* 'fiancée, bride' for the semantics and parallel derivation),[109] and thus, no decision can be made.

2.1.5. *kowt* 'grain' ← *kade* 'barley'[110]

According to Greppin, the *-u-* can go back to *-*ō*-, "which harmonizes better" with the Hurrian form.[111] This is correct, but it still does not solve the problem. Therefore, this etymology is not acceptable.

2.1.6. *maxr* 'resinous conifer, pine' ← *maḫri* 'a conifer'[112]

This etymology was rejected by Diakonoff, since he explained the word as being from Iranian (cf. Persian *marx* 'resinous wood').[113] However, Greppin rightly pointed out that *maxr* cannotoriginate from *marx*, while Persian *marx* can regularly go back to **maxr*.[114]

---

[102] Attinger 2021, 108.

[103] See the references in EDAIL, 5. The transmitting language could, of course, be Hurrian and thus, it would be a Hurrian loan in Armenian. Nevertheless, the presence of *awari* in Hurrian rather argues against a borrowing of *agar* of the same meaning from Sumerian, although by no means excludes it.

[104] Martirosyan *apud* Yakubovich 2016a, 181. On the Hurrian word, see de Martino – Giorgieri 2008, 64 and BGH, 17.

[105] Greppin 1991a, 724; 2008c, 134. On the Hurrian word, see de Martino – Giorgieri 2008, 103–104 and BGH, 49.

[106] EDAIL, 146.

[107] Greppin 1982a, 71; 1982b, 145; 1991a, 724; 2011, 293; Djahukian 1982, 11 (listing Akk. *aššatu* 'wife' as an alternative source); Diakonoff 1985, 598. On the meaning of the Armenian word (*contra* 'to reveal one's ancestry' in Greppin 1991a, 724; 2011, 293) see Greppin himself (1990–1991, 17–19) as well as EDAIL, 119, both with refs. On the Hurrian word, see de Martino – Giorgieri 2008, 136–140 and BGH, 59–60.

[108] Kim 2016, 152; Macak 2017, 1049.

[109] EDAIL, 119.

[110] Greppin 1982a, 71; 1982b, 144–145; 1991a, 725. On the Hurrian word, see BGH, 197.

[111] Greppin 1991a, 725 n. 38. Previously (Greppin 1982b, 145) he argued that the case of Arm. *Tork^c*/*Turk^c* 'a personal name' from the Hittite or Luwian name of the Storm-god (*Tarḫunt-*) offers a phonological parallel, but they have nothing to do with each other (Simon 2013, 99 n. 3), and even if it were a parallel, we are dealing here with a different language.

[112] Greppin 1982a, 71; 1982c, 117–118; 1991a, 725; 1991b, 206–207; 1995, 314. On the Hurrian word, see BGH, 238.

[113] Diakonoff 1985, 599 n. 16.

[114] Greppin 1991a, 725 n. 41.

2.1.7. *nēr* ‘sister-in-law’ ← *ner* ‘id.’[115]

While the suggestion is formally possible, the Hurrian word means ‘mother’[116] and therefore, the etymology is semantically very problematic. Moreover, the Armenian word has a convincing Indo-European etymology from **i̯enh₂tēr* ‘sister-in-law’.[117]

2.1.8. *pałatem* ‘to beg’ ← *pal-* ‘id.’[118]

This etymology was rejected by Greppin, because the Hurrian word does not exist (later, he rejected it for being a root etymology from Urartian (!) *pal-* ‘to ask’,[119] which does not exist, for the meaning of *pa-li-a-bi* in CTU CT Kb-7, Vo 2 is unknown). Setting aside the unexplained morphology (the Armenian verb is denominal from *pałat* ‘entreaty, supplication’), the Hurrian verb does in fact exist, but it means ‘to know’. Therefore, it indeed does not fit.[120]

2.1.9. *tarmaǰowr* ‘spring-water’ ← Hurr. *tarmani*, Urart. *tarmani* ‘source’[121]

Setting aside that it was not explained why this cannot be an Urartian loan, the Armenian word is a compound with *ǰowr* ‘water’ and it does not simply mean ‘spring-water’, but ‘mythological water which is followed by flocks of locust-chasing birds’.[122] This is unsurprising considering that *tarm* means ‘flock of birds’. According to Martirosyan, the Hurro-Urartian etymology is “uncertain”, since it would imply that the association of *tarmaǰowr* with *tarm* is folk-etymological.[123] Whatever the explanation of *tarmaǰowr* is, the Hurro-Urartian stem **tarma-* should show the Armenian consonant shift, i.e. the expected form should be †*tᶜarma*°.

2.1.10. *tᶜiw* ‘number’ ← *tiwe* ‘word, thing’[124]

While the etymology is formally possible, it was rightly rejected by Greppin because of the unexplained semantic difference.[125] Instead, Yakubovich claimed that the Armenian word originated in pre-literate Urartian **tiwi* ‘word *vel sim.*’,[126] but no supporting argument for this *ad hoc* idea was disclosed and the semantic difference was not explained either. Note that the Armenian word was provided an Indo-European etymology (a connection with Sanskrit *tavá-* ‘stark, kräftig’[127]), but this is semantically unconvincing.[128]

115 Greppin 1982b, 145, see also the refs. in EDAIL, 505.

116 BGH, 275.

117 For a detailed discussion see EDAIL, 503–505 and Viredaz 2020, 8–14.

118 Greppin 1982b, 145 (cf. also Greppin 1991a, 724 n. 25 and EDAIL, 550).

119 Greppin 1996, 40.

120 See the refs. in EDAIL, 550, on the meaning of the Hurrian verb, see BGH, 291 with refs.

121 Diakonoff 1971, 85; Greppin 1980, 205; 1982a, 71; 1982b, 145; 1991a, 725; 2006, 196 n. 2; 2008b, 79 n. 2; 2008c, 134. On the meaning of the Hurrian and Urartian words, see BGH, 446 and Salvini 2018, 417, resp.

122 EDAIL, 607.

123 EDAIL, 608 n. 128. Mahé 1990–1991, 27 assumes this folk-etymology. See also Greppin 1990–1991, 19.

124 Diakonoff 1985, 599. On the meaning of the Hurrian word, see BGH, 454–455.

125 Greppin 1991a, 724 n. 25.

126 Yakubovich 2016a, 182.

127 Olsen 1999, 23.

128 Despite the efforts of Kölligan 2019, 242 (‘stark, kräftig > *große Zahl, Menge > Zahl’).

2.1.11. *xnjor* ‘apple’ ← *ḫinzuri* ‘apple’[129]

An etymology that is both formally and semantically fitting.[130]

2.2. Armenian loans from reconstructed Hurrian words

2.2.1. *agowṙ* ‘baked brick’ ← Hurrian ← Akkadian *agurru* ‘id.’[131]

Diakonoff assumed Hurrian mediation because the Akkadian (and Aramaic) forms do not explain the *-ṙ-*, but did not specify why this mediating language should be Hurrian. Yakubovich claimed, however, that Hurrian did not impose itself as a mediator.[132] The Armenian word evidently goes back ultimately to the Akkadian word and, *contra* Diakonoff, Armenian *-ṙ-* can reflect (among others) foreign *-rr-* (see above). A direct borrowing from Akkadian would, however, only have been possible after the Armenian consonant shift, i.e. after the earliest Old Iranian loans (which of course allows a transmitting language, such as Old Persian, but there is no evidence for Hurrian). Although Greppin claimed that there is a “simpler choice”, Syriac *āgūrā*,[133] this would have led to ***agowray* (or, less probably, **agowr*),[134] not *agowṙ*. Either way, there is neither any hint nor any need for a Hurrian mediation.

2.2.2. *alander* ‘dessert’ ← Hurrian (→ Hitt. $^{\text{NINDA}}$(*a*)*lāttari* ‘a kind of bread’)[135]

The basis of Simon’s cautious proposal was the assumption that the Hittite word is a Hurrian *terminus technicus*. While this assumption is shared by other scholars as well,[136] this is not assured, since as Starke pointed out, the word can be an internal derivative of *ʻalattar* ‘fruit (?)’.[137] This word is, in turn, of unclear origin. It may be both foreign and inherited with the Luwian suffix *-ttar-*.[138] While a semantic change ‘fruit’ > ‘dessert’ is clearly possible, the formal side is not: even if *ʻalattar* is borrowed and one assumes a change *-nt-* > *-tt-* (frequently attested in the Anatolian milieu in borrowings and foreign transcriptions, though the details are completely obscure), the vocalism of the last syllable remains unexplained.

---

[129] Diakonoff 1971, 85; 1985, 600; Greppin 1980, 205; 1982a, 71; 1982c, 117; 1990, 204; 1991a, 724; 1991b, 207 n. 32; 1995, 314; 1996, 40; 2008c, 134; Djahukian 1990, 29; Girbal 2004, 59; Kitazumi 2013, 512–514; Yakubovich 2016a, 181 (on the Hurrian word, see BGH, 152). This is also the *Paradebeispiel* in Indo-European handbooks (Fortson 2010, 382; Clackson 2017, 1123; Olsen – Thorsø 2022, 209), although Clackson objects that the word is also attested in Aramaic as *ḥazzurā*. However, this word clearly does not lead to the Armenian form, as it does not explain *-n-* instead of *-a-*.

[130] Finally, EDAIL, 695, 761 n. 171 suggests that *tōsax* < *tawsax* ‘box-tree’ (in which *-ax* is a suffix) is “somehow related” to Hurrian *taškar-* ‘id.’ (on the Hurrian word, see BGH, 450). However, the formal differences are not explained (the proposed *tak^h*s*(*ar*)- is formally irregular and does not lead to *taws-*).

[131] Diakonoff 1971, 85; 1984, 186 n. 27 (“obviously”); 1985, 598 (“probably”).

[132] Yakubovich 2016a, 180–181.

[133] Greppin 1997, 249.

[134] Cf. most recently Kitazumi – Rudolf 2021, 197–198. It is noteworthy that this paper attempted to collect all Syriac loans of Armenian and did not include *agowṙ*.

[135] Simon 2013, 99, cautiously (“wenn überhaupt”).

[136] Hoffner 1974, 150; HED A & E/I, 32 and HW^2 A, 57 (cf. also Melchert forthcoming, s.v. [“profile of word argues for Hurrian source”] and HEG A-K, 15 “sicherlich fremder Herkunft”), but see the criticism in Starke 1990, 512.

[137] Starke 1990, 511–512 (followed by Tischler 1992, 534). See Melchert forthcoming, s.v. for the precise form, with refs. Not included in the eDiAna as of today (accessed 17 November 2022).

[138] Melchert forthcoming, s.v. Needless to say, it may be a loanword in Luwian itself. The ultimate origin of this word, especially in view of the partial loss of the initial *a-*, which was frequently addressed in the secondary literature, requires further research and has no bearing on the present case, see above.

2.2.3. *anag* 'tin' ← Hurr. **anagi* ← Akkadian *annaku* 'tin, lead'[139]

Diakonoff claimed that this word must be Hurrian and not Urartian due to its *-g-* from *-k-* ("nearly a certainty"). Yakubovich objected, however, that as Sanskrit *nāga-* 'lead, tin' is obviously cognate and also shows the voiced *-g-*, it is the Akkadian form that requires explanation, and that therefore, the Urartian solution could not be demonstrated.[140] The Sanskrit word, however, is not a direct borrowing from the source of the Akkadian word, as its initial vowel has been lost, which is irregular within Sanskrit. In other words, there was at least one intermediary language between the source language of the Akkadian word and Sanskrit. Therefore, it is not possible to (dis)prove that Sanskrit *-g-* continues a former **-g-*, since the **k* > *g* change could have happened in the intermediary language as well. Instead, the problem is that *anag* does not show the Armenian consonant shift (**anagi* would have been †*anak*, *annaku* > †*anak*^{c}) and, therefore, it could only have entered Armenian after the earliest Old Iranian loans (see the similar case of *agowṙ*). While the Hurrian mediation is still the best solution in phonological terms, it is contradicted by this chronology, since we have no evidence for Hurrian at that time.

2.2.4. *ananowx* 'mint' ← **ananuḫḫə/-uyə* (cf. Akk. *ananiḫu* 'a garden herb, perhaps mint' ← Hurr. **ananiḫḫə* and Hurr. *anane/išḫi*)[141]

The origin of the Armenian word is unknown,[142] but an ultimate connection with the Akkadian word is probable (if its meaning is indeed 'mint'), even if the last vowel remains unexplained. Nevertheless, there is no evidence for a Hurrian mediation, the "reconstructed" Hurrian forms are mere back-Hurrianizations of the Armenian and Akkadian words, especially since there is no hint that the only existing Hurrian comparandum, *anane*/*išhi*, a 'Heilsbegriff, auch Bezeichnung einer Beschwörung',[143] has anything to do with 'mint'.

2.2.5. *howłk* '*cart' (from *howłkahar* 'highwayman < *cart-striker') ← Hurrian (→ Hitt. *ḫuluganni-* 'wagon')[144]

As Rasmus Thorsø rightly pointed out to me, this is a phonologically irregular proposal (*ḫuluga-* would have given ***xłowk*).[145]

2.2.6. *kac*^{c}*in* 'axe' ← "North Hurrian" and Urart. **qaṣṣini-* ← "South Hurrian" **ḫaṣṣini* ← Akk. *ḫaṣṣinnu* 'axe'[146]

Diakonoff assumed this chain of mediation in order to explain the different initial consonant. His reasoning was that "common Hurro-Urartian **q* gave *ḫ* alternating with *k* in south Hurrian dialects". Setting aside the validity of the claim, it is a diachronic change and therefore it does not explain why a *ḫ* was substituted by *q* in a synchronic borrowing. While an ultimate connection between the Akkadian and Armenian words is plausible, the origin of the word is unclear.[147]

[139] Diakonoff 1971, 85–86 ("sicher"); 1985, 598–599; Djahukian 1990, 29; Olsen 1999, 949 ("perhaps"). Djahukian 1982, 11 lists both the Hurrian and Akkadian possibilities.

[140] Yakubovich 2016a, 181–182.

[141] Diakonoff 1985, 599.

[142] Olsen 1999, 935.

[143] BGH, 28 with refs.

[144] Simon 2013, 105 (cautiously).

[145] Pers. comm., 16 September 2022.

[146] Diakonoff 1982, 16.

[147] Olsen 1999, 955 with refs.

2.2.7. *knik^{c}* ‘seal’ ← Hurr. **kanikki* ← Akk. *kanīku* / **kanikku* ‘a sealed document’[148]

Diakonoff assumed Hurrian mediation based on the different Armenian reflexes of the stops, *k* and *k^{c}*. Nevertheless, Yakubovich claimed that Hurrian did not impose itself as a mediator.[149] Unfortunately, the Armenian stops cannot be reconciled with either Diakonoff’s Hurrian reconstruction or the expected Hurrian form (**kanīgi*), and, accordingly, there is currently no evidence for a Hurrian transmission.

2.2.8. *kotem* ‘cress’ ← an unspecified Hurro-Urartian word (cf. Akk. *kuddimmu* ‘water-cress’)[150]

The antiquity of this word is now confirmed by the Akkadian word, which was plausibly connected by Weitenberg,[151] but it does not explain the second vowel of *kotem*, and the assumption of a Hurro-Urartian transmission does not solve this issue. A common, third source (with **e*) could solve it, but there is no evidence that this source would be Hurro-Urartian.

2.2.9. *nowṙn* (gen. *nṙan*) ‘pomegranate’ ← cf. Hurr. “*nurandiye* ‘of pomegranate’”[152]

Diakonoff treated the Hurrian word as an internal derivation from a stem that served as the source of the Armenian word. However, the Hurrian stem is **nuran*(*di*)-, which does not lead to the Armenian word. The Armenian word is of unknown origin:[153] while an ultimate connection with Akkadian *nurmû*, *nurimdu* ‘pomegranate’ is plausible, all details remain unclear.

2.2.10. *salor* ‘plum’ ← Hurr. **šallorə* (→ Akk. *šallūru* ‘a fruit, perhaps plum’) or Urart. **šaluri* [salorə][154] or ← Urart. **šalūru* ‘medlar’ ← Ass. *šallūru*[155]

If the meaning of the Akkadian word is correct, the Armenian word can hardly be separated. Nevertheless, its *-o-* cannot continue *-u-* or *-ū-*.[156] Therefore, an intermediary language or a common, third source is required if this was the vowel in the Akkadian word. Hurrian and Urartian can be excluded as intermediary languages, since they had *-u-* and, therefore, would not have changed it into *-o-*. Hurrian could have been the common, third source, since it did have [o] (this is uncertain in the case of Urartian, as per above), but there is no evidence that this third common source was Hurrian.

2.2.11. *serkewil* ‘quince’ ← Hurr. (or “another extinct Caucasian language”) (→ Akk. *sapu/argillu*)[157] or ← Urart. **šarkapil* ← Ass. *sapu/argillu* ‘quince’[158]

The correct Assyrian forms for ‘quince’ are *supurgillu* (*supurkillu*, *supargillu*, and *šapargillu*),[159] but the metathesis of *p…rg* to **rg…p* (whence regularly *rk…w* in Armenian) is completely *ad hoc*, both in Akkadian and in Urartian. Therefore, this etymology should be excluded.

---

148 Diakonoff 1971, 86; 1982, 16; 1984, 186 n. 27; 1985, 599.

149 Yakubovich 2016a, 180–181.

150 See the refs. in Greppin 1992, 70 n. 21. On the form of the Armenian word, see Weitenberg 1985.

151 Weitenberg 1985, esp. 239–240 (with its precise meaning).

152 Diakonoff 1985, 599; Djahukian 1990, 29. On the Hurrian word, see BGH, 277.

153 Olsen 1999, 937.

154 Diakonoff 1982, 17; 1984, 186 n. 28 (with the Urartian option only); 1985, 599; Greppin 1991a, 725 (without the Urartian option, but see below).

155 Greppin 2011, 293.

156 Macak 2017, 1066.

157 Diakonoff 1985, 599.

158 Greppin 2011, 294 (misprinted as *sarkewil*).

159 CAD S, 396.

2.2.12. *towłt* ‘marsh-mallow’ ← **tulti* (→ Akk. *tuldu*, *tultu* ‘a medicinal plant’)[160]

Greppin rejected this etymology, claiming that the Hurrian word did not seem to exist.[161] Diakonoff responded that it could be found in AHw. That is correct, but no Hurrian origin is indicated there, on the contrary (“u[nbekannter] H[erkunft]”).[162] What is indicated there (and was already mentioned by Diakonoff[163]) is that this plant was glossed by the Mesopotamian scribes as the Subarean term for the (*a*)*ladiru*-plant. Unfortunately, in the meantime this turned out to be a false interpretation and translation of the passage, which in fact belongs to the Akkadian word meaning ‘worm, maggot’.[164]

2.2.13. *xor* ‘deep; deep, abyss’ ← “we cannot exclude Hurro-Urartian mediation” ← Akk. *ḫurru* ‘hole, ravine, cave’ or Aramaic **ḫurr-*[165]

Diakonoff entertained the possibility of Hurro-Urartian mediation, because it “would better explain the transformation of *u* to *o*”, but as we saw above (§2.2.10), this was not the case. Therefore, there is no evidence for Hurro-Urartian mediation. The word has no known etymology, but an Iranian origin is suspected on formal grounds (a direct Akkadian or Aramaic borrowing is contradicted by *-r-* instead of the expected *-ṙ-*, as per above, §2.2.1).[166]

2.3. Interim results

The first conclusion is that in one of the main groups in which a Hurrian word was reconstructed to explain the Armenian form, there is no need or evidence for such Hurrian reconstructions, even if they would be formally possible (*agowṙ*, *salor*, *xor*). The cases of the other main group are formally irregular, and thus not possible Hurrian reconstructions (*alander*, *ananowx*, *howłk*, *kacᶜin*, *knikᶜ*, *kotem*, *nowṙn*, *serkewil*, *towłt*). There is only a single case in which a reconstructed Hurrian form is regular and makes sense in explaining the Armenian word (*anag*), although we obviously cannot be sure that this word was really mediated by Hurrian and as we saw, there is a chronological problem with this proposal.

As for the cases from attested Hurrian words, a Hurrian etymology is:

1. Formally not possible: *kowt*; *tarmaǰowr*;

2. Formally possible, but it has an equally possible non-Hurrian etymology: *agarak*, *astem*;

3. Problematic (a Hurrian etymology cannot be entirely excluded, but formally or semantically not impeccable): *art* (S), *nēr* (S), *pałatem* (S & F), *tᶜiw* (S) (note also that *art* and *nēr* have formally and semantically fitting Indo-European etymology);

4. Formally and semantically possible: *ałiws*, *maxr*, *xnjor*.

[160] Greppin 1982b, 145; Diakonoff 1985, 599–600.

[161] Greppin 1991a, 724 n. 25.

[162] AHw, 1369.

[163] Diakonoff 1985, 599–600.

[164] CAD T, 467.

[165] Diakonoff 1982, 15 (spelling the Armenian word as *xoṙ*).

[166] Olsen 1999, 885.

3. Urartian loans from Armenian[167]

3.1. *abili-d(u)*- 'to connect, add' < *abili* 'more' + *d(u)*- 'to do', i.e., 'to do more' ← *aweli* 'more', *y-awel-um* 'to add'[168]

The correct Urartian form is *abilidu*- 'to gather, annex, add'[169] and its correct segmentation is *abilid-u*-, with the so-called class marker *-u*- indicating two valences and ergativity.[170] While *abilid*- can further be segmented as *abil-id*-, with the *-id*- verbal suffix, and the stem *abil*- can be compared with the Armenian word, which had the shape **abel*- (from **h*$_3$*b*^{h}*el*-) at that time,[171] this does not explain the vocalism of the second syllable. In addition, *abil*- can in fact be further segmented into a root *ab*- with the *-il*- verbal suffix.[172]

3.2. *andani* 'pasture (?), province (?), region (?)' ← *and* 'field'[173]

The Urartian word is a spatial adverb, used contrastively with *salmatḫə*. Although the precise meaning of this pair is unknown (possibilities include 'a destra … a sinistra', 'da una parte … dall'altra'),[174] it clearly has nothing to do with the Armenian word.

3.3. *aniar-duni* 'independent' ← *anyar* 'unrelated, separate'[175]

The meaning of the Urartian word is unknown, but it qualifies enemy kings.[176] Accordingly, its segmentation and connection with the Armenian word are gratuitous.

3.4. *armuzi* 'family (?), generation (?)' ← *arm*(*n*) 'root', *armat* 'root, tribe', (*z*)*arm* 'tribe, generation'[177]

Djahukian argued that the Urartian word has either an Urartian suffix *-uzi* or the Armenian suffix *-oc*^{c} in *-uzi*, but no such Urartian nominal suffix is known (only *-usə*)[178] and the meanings of the Armenian suffix (nomen loci and nomen instrumenti)[179] are not fitting. In general, the meaning of the Armenian words (*armn* 'root', *armat* 'root, stem' vs. 'stirpe, descendenza, semenza'[180]) is not fitting.

---

[167] This hypothesis, a critical investigation of which is an old desideratum, was presented in several works: Diakonoff 1985, 602–603; 1992; Djahukian 1992 (revised list with references to previous literature in Russian and Armenian); Petrosyan 2007; 2010 (with full previous bibliography); EDAIL, *passim*. According to Petit 2019, 183, the existence of such loanwords "would be very surprising considering the early date of the Urartian evidence". Nevertheless, the existence of such loanwords is entirely possible from a chronological point of view. Only for the sake of completeness, one should also mention Schmitt (2012, 126), who harshly rejected this hypothesis without providing a single argument ("die Annahme von armenischen Lehnwörtern im Urartäischen, die anläßlich dieses Wortes diskutiert wird, ist reine Spekulation und entbehrt jeder Grundlage").

[168] Djahukian 1992, 50, followed by Petrosyan 2010, 138 n. 3.

[169] Salvini 2018, 369.

[170] See, e.g., Wilhelm 2004b, 129; Salvini – Wegner 2014, 46; Salvini 2018, 493; Hazenbos 2021, 181.

[171] See, e.g., EDG, 1133; not included in EDAIL.

[172] Wilhelm 2004a, 115.

[173] Djahukian 1992, 51, with an Armenian suffix.

[174] Salvini 2018, 374–375, 409, with refs.

[175] Djahukian 1992, 51, followed by Petrosyan 2010, 138 n. 3.

[176] Salvini 2018, 375 with refs.

[177] Djahukian 1992, 51, followed by Petrosyan 2010, 138 n. 3 ("*armuzzi* 'family'").

[178] On the Urartian nominal suffixes, see Wilhelm 2004b, 125–126; Salvini – Wegner 2014, 19–22; Salvini 2018, 486–488; Hazenbos 2021, 170.

[179] Olsen 1999, 533.

[180] Salvini 2018, 376.

3.5. The verbal root of *arniuše* ‘deed’ ← *aṙnem* ‘to do, to make’[181]

While the explanation of *arniuše** ‘deed’ (attested only as *arni*(*u*)*šinili*, abs. pl.)[182] as a deverbal abstract from **arni-* seems entirely correct, it is unclear how it could represent the Armenian verb continuing **arnwe-* (the [i] of the Urartian word is assured due to its spellings).[183]

3.6. *arṣibi-* ‘the name of King Minua’s horse’ ← *arciwi* ‘eagle’[184]

This comparison is not possible phonologically, since *arṣibi-* did not have [w][185] and the Armenian form was presumably **arcipi* at that time, considering that the change **-p-* > *-w-* is post-Urartian, see the case of *ałiws* ← *alipši* above (§2.1.2, on the Indo-European etymology of the Armenian word see above, §1.1.1).

3.7. The verbal base of *bauše* ‘speech, order, thing’ ← *bam* ‘to speak’, *ban* ‘word, speech, thing’[186]

The derivation of *bauše* ‘parola, ordine’[187] as a deverbal abstract noun is regular, and formally speaking, the borrowing is entirely possible.[188] The real question is whether we can assume borrowing with a CV-structure (*ba-*) and with a meaning showing hints of sound symbolism.

3.8. *burgana*(*ni*) ‘fortress, castle; column’ (?) ← *bowrgn* ‘tower’[189]

As discussed in §1.1.2, *burganani* is a still unidentified installation (from the type of an orchard or vineyard) and/or a simple adjective, qualifying orchards and/or the walled support or encirclement of an orchard, and none of these really fits the Armenian word from a semantic point of view.

3.9. [ewi][190] / “*eue*, *e’a* (to read: *ewa*)” ‘and’[191] ← *ew* < **ewi* < **epi* ‘id.’

The correct form of the Urartian conjunction is [ewe] ‹e-ú-e, e-’a›.[192] A derivation from Arm. *ew* < **ewi* < **epi* is contradicted by the different final vowel and the different consonant, since the Armenian word was **epi* at that time, for **p* > Arm. *w* is post-Urartian (see under §3.6).

---

181 Djahukian 1992, 51, followed by Petrosyan 2010, 138 n. 3.

182 Salvini 2018, 377.

183 On the spelling, see eCUT; on the reconstruction LIV², 270 with n. 5.

184 Diakonoff 1985, 602; Djahukian 1992, 50; Petrosyan 2010, 134. Kölligan 2019, 63 allows both an Armenian and an Indo-Iranian origin of the Urartian word, Ritter 2006, 414–415 prefers the latter based on the regular Indo-European etymology of the Armenian word.

185 There is no evidence for the assumption that Urartian ‹b› had a value [w] or [v] as well. Setting aside that [w] could have been expressed regularly, there is no evidence for the claim of Diakonoff 1971, 45 n. 40 that the Urartian spelling “unterscheidet nicht zwischen *b* (bzw. *w*) und *v*” and that [v] was spelt with ‹*b*/*u*› (52). His single piece of evidence (Diakonoff 1971, 27–29) is the 1st person subject suffix of “fientive-transitive” verbs “*-be*, *-bé* im Auslaut, *-ú*(*-ú*)- im Inlaut”. But this is the confusion of two different suffixes, the 1st person ergative suffix *-bə* and the *-u-* class-marker of two valences and ergativity, which of course appear combined as well (Wilhelm 2004b, 129–131; Salvini – Wegner 2014, 46–49; Salvini 2018, 495–496).

186 Djahukian 1992, 51, followed by Petrosyan 2010, 138 n. 3.

187 Salvini 2018, 383.

188 On the PIE origin of the Armenian verb, see LIV², 69 and EDAIL, 165.

189 Diakonoff 1985, 602–603 (‘stela’ or ‘column’); Petrosyan 2010, 134; Kölligan 2019, 155 (“möglich”). Yakubovich 2016a, 182 allows this possibility, too.

190 Diakonoff 1992, 52.

191 Petrosyan 2010, 133–134.

192 Salvini 2018, 387.

3.10. ‹*mì-i*› ‘prohibitive particle’ ← *mi* ‘id.’[193]

This is a formally possible etymology; nevertheless, as it is known, there is a high chance for coincidence in the case of particles consisting of merely two phonemes[194] and therefore, without further evidence for Urartian loans from Armenian, this cannot be treated as a loan.

3.11. *qab/purza*(*ni*) ‘bridge’ ? ← *kamurǰ* ‘id.’[195]

The etymology is obviously not fitting due to the unexplained substitution *-m-* → *-b*/*p-*. The alleged earlier form of the Armenian word with **-w-*[196] does not fit either.

3.12. *šuri* ‘sharp (?)’, weapon (?)’ ← *sowr* ‘sharp, something very sharp, sword’[197]

The correct meaning of the Urartian word is ‘lancia; arma’,[198] while the Armenian word means specifically ‘sharp; sword, dagger’ and usually explained from PIE **ḱoh$_3$ro-*.[199] Therefore, the unfitting semantics and the unexplained final vowel (possible only if the Armenian word already ended in a consonant [and thus a vowel was required, since all Urartian nouns ended in a vowel],[200] but the loss of the final vowel is post-Urartian, see the geographical names above) exclude this etymology.

3.13. *ṣue* ‘lake, sea’ ← *cov* ‘sea’[201]

The Armenian word is of Indo-European origin (see above, §1.1.4) from PIE **ĝobʰ-u-*. Therefore, it cannot be the source of the Urartian word, since both the (**bʰ* >) **b* > *w* change and the loss of the final vowel (which would have led to the automatic addition of a vowel in Urartian, for every Urartian noun ended in a vowel, as noted above) are post-Urartian (type *Zabaḫa* → *J̌avax-*).

3.14. *ueli* ‘crowd, army’ ← Proto-Armenian **wel-i-* ‘crowd’ > *ge*(*w*)*ł* ‘village’[202]

The meaning of the Urartian word is not entirely clear, it may refer to ‘un corpo militare’, perhaps ‘truppa’,[203] which is not irreconcilable with the Armenian meaning. The problem is phonological: since the Armenian change **w* > **ɣw-* (> **gw* > *g*) precedes the Urartian loans (for Luwian *wāšu-* → Arm. *vaš* ‘good, bravo’ does not show this change), the contemporary Proto-Armenian form was **ɣwel- vel sim.*,[204] which does not lead to the Urartian word.

---

[193] Petit 2019, 183 (erroneously attributing this etymology to Diakonoff 1985). On the Urartian particle, see Wilhelm 2004b, 133; Salvini – Wegner 2014, 60; Salvini 2018, 402 with refs.).

[194] See, e.g., the discussion in Simon 2021a, 244 with examples and references.

[195] Petrosyan 2010, 135.

[196] The etymology of *kamurǰ* is unknown; the usual Indo-European attempt, a connection with Greek γέφῡρα ‘beam, bridge’, requires an earlier form with **-w-* (see the overview in EDAIL, 351). This, however, does not lead to the attested form.

[197] Djahukian 1992, 50, followed by Petrosyan 2010, 138 n. 3 with ‘edge, spearhead, weapon’ as the Urartian meaning.

[198] Salvini 2018, 415–416 with refs.

[199] Olsen 1999, 55 with refs., not included in EDAIL.

[200] Wilhelm 2004b, 126.

[201] Djahukian 1992, 51, with question mark.

[202] EDAIL, 219–220 with refs.

[203] Salvini 2018, 421 with ref.

[204] The result of the Armenian change **w* > *g* is not affected by the Armenian consonant shift (Ravnæs 2005, 198, 200) that happened after the first Old Iranian loans (see §1.1.2) and therefore, the changes **w* > **gw* > *g* postdate the Old Iranian loans. In order to accommodate the Luwian borrowing, an intermediary change **w* > **ɣw* > **gw* has to be assumed and that the Luwian word was borrowed after the change **w* > **ɣw*. This is fully in agreement with the Armenian – Proto-Kartvelian/Proto-Zan loan contacts involving **ɣw* leading to Arm. *g*, such as Arm. *gini* ‘wine’ ~ Proto-Kartvelian **ɣwin-* ‘wine’ and Arm. *gi* ‘juniper’ ~ Proto-Kartvelian **ɣwiw-* (cf. Fähnrich 2007, 486, on their precise relation [Proto-Zan borrowings in Armenian], see Simon 2022).

3.15. The stem of *ulguše* (“probable reading: *olyosə*”) ‘health, well-being, the being alive’ ← Proto-Armenian **olyo-* (> *ołǰ*) ‘whole, alive’[205]

As was pointed out above (§1.1.7), the root is **ulg*(*V*)-, not “*olyo-*”, since it is consistently spelt with ‹gu› and therefore, the etymology is formally impossible (note also the semantic difference between *ulguše* ‘life’[206] and Armenian ‘sound, whole, healthy’).

3.16. *zari* ‘garden’ ← *caṙ* ‘tree’[207]

As the Urartian spelling is ambiguous, *ṣari* is equally possible and thus, the consonantism would be regular. Nevertheless, the final vowel is problematic, since its loss is post-Urartian (as per above) and it remains unexplained how an *o*-stem (see above §1.1.13 on its PIE etymology) became an *i*-stem. Moreover, *zari* seems to have a Hurrian cognate, the Subarean word *sarme* ‘forest’.[208] Although Subarean does not automatically mean Hurrian,[209] *sarme* may be analyzed as *sar-* with the Hurrian nominal suffix *-m*(*m*)*e*.[210]

3.17. *zil*(*i*)*bi/e* ‘family, tribe’ ← *cᶜeł* ‘tribe, family’[211]

The precise meaning of *zil*(*i*)*be/i* is ‘progeny’,[212] but this is not necessarily incompatible with the Armenian word’s meaning. However, the first syllable is certainly *zi-* assured by the spelling, which is not compatible with *cᶜe°* (and the Urartian word may be an internal derivation from **zil*(*i*)- of unknown meaning[213]).

Interim results

The interim result is that fourteen out of seventeen proposals should be excluded on formal grounds. Two of the remaining three have a CV-structure, one of these is probably sound symbolic and the other one is a particle, which are even more problematic due to the lack of any assured Armenian loan in Urartian. The remaining case (*bowrgn*), while formally possible, does not really fit semantically. In other words, there are no assured Armenian loans in Urartian.

4. Conclusions

While Armenian undoubtedly has a loanword layer from the Hurro-Urartian languages, the critical revision above has revealed that the number of assured borrowings is far less than previously thought: Out of more than forty proposals, less than one-fifth, i.e. eight etymologies could be confirmed. That said, the Armenian lexicon famously contains a huge number of words of unknown etymology and, therefore, one can surely claim that with the advancement of our knowledge of the Hurro-Urartian languages as well as of the history of Armenian, more loans will be revealed. This might apply to the hypothesis of Armenian loans in Urartian as well, but with our current knowledge, no Armenian loan in Urartian can be confirmed, despite the frequent claims to the contrary.

---

[205] Diakonoff 1985, 603 (“to read /ulg-, ulq-, uly-, olg-, olq- or or oly-o-sə/”, [sic]); Petrosyan 2010, 134.

[206] Salvini 2018, 422.

[207] Djahukian 1992, 50, followed by Petrosyan 2010, 138 n. 3.

[208] See the refs. in BGH, 337; esp. CAD S, 178 and Hrůša 2010, 186–187, 294. Diakonoff *apud* Greppin 1991a, 728 added Akk. *ṣarṣar*(*t*)*u* ‘forest’, too.

[209] See esp. Bartash 2018, 267–268 and specifically Salvini 1979, 311.

[210] The meaning of which is, unfortunately, unknown (Giorgieri 2000, 201–202; Wegner 2007, 51; Wilhelm 2004a, 103).

[211] Djahukian 1992, 51, followed by Petrosyan 2010, 138 n. 3. On its PIE origin see Olsen 1999, 80 (not included in EDAIL).

[212] Salvini 2018, 426.

[213] Wilhelm 2004b, 125.

Acknowledgements

I am very grateful to H. Craig Melchert and Rasmus Thorsø for providing me with their work ahead of publication as well as Zsombor J. Földi and Tomoki Kitazumi for their critical remarks. Needless to say, I am alone responsible for the claims of this paper.

Bibliography

Adontz, N. 1938: Emprunts de haute époque en arménien. *Revue des études indo-européennes* 1, 457–467.

AHw = von Soden, W. ²1959–1981: *Akkadisches Handwörterbuch I-III*. Wiesbaden.

Attinger, P. 2021: *Glossaire sumérien–français principalement des textes littéraires paléobabyloniens*. Wiesbaden. https://doi.org/10.13173/9783447116169

Bartash, V. 2018: Going for the Subarean Brand: The Import of Labor in Early Babylonia. *Journal of Near Eastern Studies* 77, 263–278. https://doi.org/10.1086/699483

BGH = Richter, Th. 2012: *Bibliographisches Glossar des Hurritischen*. Wiesbaden.

Blažek, V. 2008: Celtic 'Smith' and His Colleagues. In: Lubotsky, A. – Schaeken, J. – Wiedenhof, J. (eds.): *Evidence and Counter-Evidence. Essays in Honour of Frederik Kortlandt I. Balto-Slavic and Indo-European Linguistics*. (Studies in Slavic and General Linguistics 32) Amsterdam – New York, 67–85. https://doi.org/10.1163/9789401206358_007

CAD = Gelb, I. J. et al. (eds.) 1956–2010: *The Assyrian Dictionary of The Oriental Institute of the University of Chicago*. Chicago.

Clackson, J. 2017: The lexicon of Armenian. In: Klein, J. – Joseph, B. – Fritz, M. (eds.): *Handbook of Comparative and Historical Indo-European Linguistics*. (Handbücher zur Sprach- und Kommunikationswissenschaft 41) Berlin – Boston, 1115–1132. https://doi.org/10.1515/9783110523874-019

de Martino, S. – Giorgieri, M. 2008: *Literatur zum hurritischen Lexikon* (*LHL*) *1. A*. (Eothen 1) Firenze.

Diakonoff, I. M. 1971: *Hurrisch und Urartäisch*. (Münchener Studien zur Sprachwissenschaft, Beiheft NF 6) München.

Diakonoff, I. M. 1982: Ancient Near Eastern Substrata in Armenian. *Annual of Armenian Linguistics* 3, 13–18.

Diakonoff, I. M. 1984: *The Pre-history of the Armenian People*. Delmar.

Diakonoff, I. M. 1985: Hurro-Urartian Borrowings in Old Armenian. *Journal of the American Oriental Society* 105, 597–603. https://doi.org/10.2307/602722

Diakonoff, I. M. 1992: First Evidence of the Proto-Armenian Language in Eastern Anatolia. *Annual of Armenian Linguistics* 13, 51–54.

Diakonoff, I. M. – Starostin, S. A. 1986: *Hurro-Urartian as an Eastern Caucasian Language*. (Münchener Studien zur Sprachwissenschaft, Beiheft NF 12) München.

Djahukian, G. B. 1982: Akkadian Loan Words in Armenian. *Annual of Armenian Linguistics* 3, 1–12.

Djahukian, G. B. 1990: Did Armenians Live in Asia Anterior Before the Twelfth Century B.C.? In: Markey, Th. L. – Greppin, J. A. C. (eds.): *When Worlds Collide. Indo-Europeans and Pre-Indo-Europeans*. Ann Arbor, 25–33.

Djahukian, G. B. 1992: Armenian Words and Proper Names in Urartian Inscriptions. In: Greppin, J. A. C. (ed.): *Proceedings of the Fourth International Conference on Armenian Linguistics. Cleveland State University. Cleveland, Ohio. September 14-18, 1991*. Delmar, 49–59.

eCUT = Christiansen, B. 2016–: *Electronic Corpus of Urartian Texts (eCUT) Project*. München. http://oracc.org/ecut/

EDAIL = Martirosyan, H. K. 2010: *Etymological Dictionary of the Armenian Inherited Lexicon*. (Leiden Indo-European Etymological Dictionary Series 8) Leiden – Boston. https://doi.org/10.1163/9789047426837

EDG = Beekes, R. 2010: *Etymological Dictionary of Greek*. (Leiden Indo-European Etymological Dictionary Series 10) Leiden – Boston.

eDiAna = Hackstein, O. – Miller, J. L. – Rieken, E. (eds.) (2016–): *Digital Philological-Etymological Dictionary of the Minor Ancient Anatolian Corpus Languages*. München – Marburg. https://www.ediana.gwi.uni-muenchen.de/

Fähnrich, H. 2007: *Kartwelisches Etymologisches Wörterbuch*. (Handbuch der Orientalistik VIII/18) Leiden – Boston. https://doi.org/10.1163/ej.9789004161092.i-874

Fortson, B. W. [2]2010: *Indo-European Language and Culture. An Introduction*. Oxford.

Fuchs, A. 2012: Urartu in der Zeit. In: Kroll, S. – Gruber, C. – Hellwag, U. – Roaf, M. – Zimansky, P. (eds.): *Biainili-Urartu. Tagungsbericht des Münchner Symposiums, 12.-14. Oktober 2007*. (Acta Iranica 51) Leuven, 135–161.

Giorgieri, M. 2000: Schizzo grammaticale della lingua hurrica. *La parola del passato* 55, 171–277.

Gippert, J. 2005: Das Armenische – eine indogermanische Sprache im kaukasischen Areal. In: Meiser, G. – Hackstein, O. (eds.): *Sprachkontakt und Sprachwandel. Akten der XI. Fachtagung der Indogermanischen Gesellschaft, 17.-23. September 2000, Halle an der Saale*. Wiesbaden, 139–160.

Girbal, Ch. 2004: Review of A. Çilingiroğlu – M. Salvini, Ayanis I. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 94, 157–160.

Greppin, J. A. C. 1980: "Hittite" Loan Words in Armenian. In: Mayrhofer, M. – Peters, M. – Pfeiffer, O. E. (eds.): *Lautgeschichte und Etymologie. Akten der VI. Fachtagung der Indogermanischen Gesellschaft, Wien, 24.-29. September 1978*. Wiesbaden, 203–207.

Greppin, J. A. C. 1982a: The Anatolian Substrata in Armenian. An Interim Report. *Annual of Armenian Linguistics* 3, 65–72.

Greppin, J. A. C. 1982b: Two Hurrian Words in Armenian. In: Samuelian, Th. J. (ed.): *Classical Armenian Culture. Influences and Creativity*. (University of Pennsylvania Armenian Texts and Studies 4) s. l., 142–150.

Greppin, J. A. C. 1982c: Two Points on Hurrian-Armenian Lexical Relationships. In: Dandamayev, M. A. – Gershevitch, I. – Klengel, H. – Komoróczy, G. – Larsen, M. T. – Postgate, J. N. (eds.): *Societies and Languages of the Ancient Near East. Studies in Honour of I. M. Diakonoff*. Warminster, 117–119.

Greppin, J. A. C. 1990: The Make-Up of the Armenian Unclassified Substratum. In: Markey, Th. L. – Greppin, J. A. C. (eds.): *When Worlds Collide. Indo-Europeans and Pre-Indo-Europeans*. Ann Arbor, 203–210.

Greppin, J. A. C. 1990–1991: The Etymology of Arm. *astem* and *tarm* and the Hurro-Urartian Hypothesis with a Bibliographical Excursion. *Revue des études arméniennes* 22, 17–21. https://doi.org/10.2143/REA.22.0.2017162

Greppin, J. A. C. 1991a: Some Effects of the Hurro-Urartian People and Their Languages upon the Earliest Armenians. *Journal of the American Oriental Society* 111, 720–730. https://doi.org/10.2307/603403

Greppin, J. A. C. 1991b: The Survival of Ancient Anatolian and Mesopotamian Vocabulary until the Present. *Journal of Near Eastern Studies* 50, 203–207. https://doi.org/10.1086/373501

Greppin, J. A. C. 1992: Mediterranean Botanical Loanwords in Classical Armenian. In: Greppin, J. A. C. (ed.): *Proceedings of the Fourth International Conference on Armenian Linguistics. Cleveland State University. Cleveland, Ohio. September 14-18, 1991*. Delmar, 61–75.

Greppin, J. A. C. 1995: Kuryłowicz and Hittite *ḫ*, and further extensions on to Armenian. In: Smoczyński, W. (ed.): *Kuryłowicz Memorial Volume I*. (Analecta Indoeuropaea Cracoviensia 2) Cracow, 313–315.

Greppin, J. A. C. 1996: New Data on the Hurro-Urartian Substratum in Armenian. *Historische Sprachforschung* 109, 40–44.

Greppin, J. A. C. 1997: Syriac Loanwords in Classical Armenian. In: Afsaruddin, A. – Zinser, A. H. M. (eds.): *Humanism, Culture, and Language in the Near East. Studies in Honor of Georg Krotkoff*. Winona Lake, 247–251. https://doi.org/10.5325/j.ctv1w36pkt.26

Greppin, J. A. C. 2006: Substratum in Armenian. *Aramazd* 1, 196–201.

Greppin, J. A. C. 2008a: Did the good wines come from Armenia? *Aramazd* 3, 47–52.

Greppin, J. A. C. 2008b: More Material on the Urartian Substratum in Armenian. *Journal of Indo-European Studies* 36, 79–87.

Greppin, J. A. C. 2008c: The Urartian Substratum in Armenian. *Bulletin of the Georgian National Academy of Sciences* 2, 134–137.

Greppin, J. A. C. 2010: Hurro-Urartian-North-East Caucasian-Armenian Linguistic Connections. *Aramazd* 5, 116–120.

Greppin, J. A. C. 2011: Urartian Sibilants in Armenian. *Historische Sprachforschung* 124, 292–296. https://doi.org/10.13109/hisp.2011.124.1.292

Hackstein, O. 2021: On Latin *arbor* and why *tree* is grammatically feminine in PIE. In: Fellner, H. A. – Malzahn, M. – Peyrot, M. (eds.): lyuke wmer ra. *Indo-European Studies in Honor of Georges-Jean Pinault*. Ann Arbor – New York, 183–204.

Hazenbos, J. [4]2021: Hurritisch und Urartäisch. In: Streck, M. P. (ed.): *Sprachen des Alten Orients*. Darmstadt, 166–191.

HED = Puhvel, J. 1984–: *Hittite Etymological Dictionary*. Berlin – New York.

HEG = Tischler, J. 1977–2016: *Hethitisches etymologisches Glossar I-IV*. (Innsbrucker Beiträge zur Sprachwissenschaft 20) Innsbruck.

Hoffner, H. A. 1974: *Alimenta Hethaeorum. Food Production in Hittite Asia Minor*. (American Oriental Series 55) New Haven.

Hrůša, I. 2010: *Die akkadische Synonymenliste* malku = šarru. *Eine Textedition mit Übersetzung und Kommentar*. (Alter Orient und Altes Testament 50) Münster.

HW[2] = Friedrich, J. et al. (eds.) 1975–: *Hethitisches Wörterbuch. Zweite, völlig neubearbeitete Auflage auf der Grundlage der edierten hethitischen Texte*. Heidelberg.

Kim, R. I. 2016: Studies in Armenian Historical Phonology I. Aspiration and Spirantization of PIE Voiceless Stops. In: Byrd, A. M. – DeLisi, J. – Wenthe, M. (eds.): Tavet Tat Satyam. *Studies in Honor of Jared S. Klein on the Occasion of His Seventieth Birthday*. Ann Arbor – New York, 151–167.

Kimball, S. E. 1999: *Hittite Historical Phonology*. (Innsbrucker Beiträge zur Sprachwissenschaft 95) Innsbruck.

Kitazumi, T. 2013: Zum Problem der Gleichung heth. *Hayaša* = arm. *hayk‘*. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 163, 511–517.

Kitazumi, T. – Rudolf, S. 2021: Die syrischen Lehnwörter im Armenischen – eine Revision. In: Jouravel, A. – Mathys, A. (eds.): *Wort- und Formenvielfalt. Festschrift für Christoph Koch zum 80. Geburtstag*. (Studies on Language and Culture in Central and Eastern Europe 37) Berlin, 185–206.

Kloekhorst, A. 2008: *Etymological dictionary of the Hittite inherited lexicon*. (Leiden Indo-European Etymological Dictionary Series 5) Leiden – Boston.

Kölligan, D. 2019: Erkinkᶜ ew erkir. *Studien zur historischen Grammatik des Klassisch-Armenischen*. (Studien zur historisch-vergleichenden Sprachwissenschaft 12) Hamburg.

LIV² = Rix, H. (ed.) ²2001: *Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstammbildungen*. Wiesbaden.

Macak, M. 2017: The phonology of Classical Armenian. In: Klein, J. – Joseph, B. – Fritz, M. (eds.): *Handbook of Comparative and Historical Indo-European Linguistics*. (Handbücher zur Sprach- und Kommunikationswissenschaft 41) Berlin – Boston, 1037–1079. https://doi.org/10.1515/9783110523874-016

Mahé, J.-P. 1990–1991: Remarques philologiques sur l'arménien *astem* «demander une femme en mariage» et *tarm* «bande (d'oiseaux)». *Revue des études arméniennes* 22, 23–28. https://doi.org/10.2143/REA.22.0.2017163

Martirosyan, H. 2017: Notes on Anatolian Loanwords in Armenian. In: Avetisyan, P. S. – Grekyan, Y. H. (eds.): *Bridging Times and Spaces. Papers in Ancient Near Eastern, Mediterranean and Armenian Studies Honouring Gregory E. Areshian on the occasion of his sixty-fifth birthday*. Oxford, 293–306. https://doi.org/10.2307/j.ctv170x3nm.25

Melchert, H. C. forthcoming: *A Dictionary of Cuneiform Luvian*. Ann Arbor – New York.

Msériantz, L. 1904: Les éléments ourartiques dans la langue arménienne. In: s. e. (ed.): *Verhandlungen des XIII. Internationalen Orientalisten-Kongresses. Hamburg September 1902*. Leiden, 128–129.

Obrador-Cursach, B. 2019–2020: Greek πύργος 'tower' as a possible Lydian borrowing. *News from the Lands of the Hittites* 3-4, 9–15.

Obrador-Cursach, B. 2020: *The Phrygian Language*. (Handbuch der Orientalistik I/139) Leiden – Boston. https://doi.org/10.1163/9789004419995

Olander, Th. 2020 [2022]: To **b* or not to **b*. Proto-Indo-European **b* in a phylogenetic perspective. *Historische Sprachforschung* 133, 182–208. https://doi.org/10.13109/hisp.2020.133.1.182

Olsen, B. A. 1999: *The Noun in Biblical Armenian. Origin and Word-Formation. With Special Emphasis on the Indo-European Heritage*. (Trends in Linguistics. Studies and Monographs 119) Berlin – New York. https://doi.org/10.1515/9783110801989

Olsen, B. A. 2017a: Armenian. In: Kapović, M. (ed.): *The Indo-European Languages*. Second edition. London – New York, 421–451.

Olsen, B. A. 2017b: The Morphology of Armenian. In: Klein, J. – Joseph, B. – Fritz, M. (eds.): *Handbook of Comparative and Historical Indo-European Linguistics*. (Handbücher zur Sprach- und Kommunikationswissenschaft 41) Berlin – Boston, 1080–1097. https://doi.org/10.1515/9783110523874-017

Olsen, B. A. – Thorsø, R. 2022: Armenian. In: Olander, Th. (ed.): *The Indo-European Language Family. A Phylogenetic Perspective*. Cambridge, 202–222. https://doi.org/10.1017/9781108758666.012

Palmer, A. 1990: *Monk and Mason on Tigris Frontier. The early history of Ṭur ᶜAbdin*. Cambridge.

Petit, D. 2019: Genetic and Areal Classification of Languages in Anatolia and Caucasus. In: Espagne, M. – Isaxanli, H. – Mustafayev, Sh. (eds.): *A Long-term History of Cross-cultural Transfers in the Caucasus*. (Khazar Journal of Humanities and Social Sciences Special Issue) Baku, 169–187.

Petrosyan, A. 2007: The Problem of Identification of the Proto-Armenians: A Critical Review. *Journal of the Society for Armenian Studies* 16, 25–66.

Petrosyan, A. 2010: The Armenian Elements in the Language and Onomastics of Urartu. *Aramazd* 5, 133–140.

Poetto, M. 1979: Lidio *kofu-*. *Incontri Linguistici* 5, 198–200.

Radner, K. 2006: Review of A.-M. Wittke, Mušker und Phryger. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 96, 144–149.

Ravnæs, E. 2005: The Relative Chronology of the Sound Changes from Proto-Indo-European to Classical Armenian. In: Haug, D. – Welo, E. (eds.): *Haptačahaptāitiš. Festschrift for Fridrik Thordarson. On the occasion of his 77th birthday*. (Instituttet for sammenlignende kulturforskning, Serie B. Skrifter 116) Oslo, 191–204.

Ritter, R.-P. 2006: Zur Frage der Reste indogermanischer Dichtersprache im Armenischen. In: Pinault, G.-J. – Petit, D. (eds.): *La langue poétique indo-européenne. Actes du Colloque de travail de la Société des Études Indo-européennes (Indogermanische Gesellschaft/Society for Indo-European Studies). Paris, 22-24 octobre 2003*. (Collection linguistique 91). Leuven – Paris, 413–417.

Rollinger, R. – Kellner, A. 2019: Once More on the Nabonidus Chronicle (BM 35382) and Cyrus' Campaign in 547 BC. *Ancient West & East* 18, 153–176.

Salvini, M. 1979: Confronti lessicali fra hurrico e urarteo. In: s. e.: *Florilegium anatolicum. Mélanges offerts à Emmanuel Laroche*. Paris, 305–314.

Salvini, M. 1990: Ein Beitrag zur hurritisch-urartäischen Morphologie. *Orientalia* 59, 243–250.

Salvini, M. 2008: *Corpus dei testi urartei I. Le iscrizioni su pietra e roccia. I testi*. (Documenta Asiana 8/1) Roma.

Salvini, M. 2018: *Corpus dei testi urartei V. Revisioni delle epigrafi e nuovi testi su pietra e roccia* (*CTU A*), *dizionario urarteo, schizzo grammaticale della lengua urartea*. (Documenta Asiana 8/5) Roma.

Salvini, M. – Wegner, I. 2014: *Einführung in die urartäische Sprache*. Wiesbaden.

Schmitt, R. 1972 [1974]: Die Erforschung des Klassisch-Armenischen seit Meillet (1936). *Kratylos* 17, 1–68.

Schmitt, R. ²2007: *Grammatik des Klassisch-Armenischen mit sprachvergleichenden Erläuterungen*. (Innsbrucker Beiträge zur Sprachwissenschaft 123) Innsbruck.

Schmitt, R. 2012: Review of EDAIL. *Orientalistische Literaturzeitung* 107, 123–127. https://doi.org/10.1524/olzg.2012.0017

Simon, Zs. 2013: Die These der hethitisch-luwischen Lehnwörter im Armenischen. Eine kritische Neubetrachtung. *International Journal of Diachronic Linguistics and Linguistic Reconstruction* 10, 97–135.

Simon, Zs. 2021a: The alleged Anatolian loanwords in Etruscan: A reconsideration. In: Giusfredi, F. – Simon, Zs. (eds.): *Studies in the languages and language contact in Pre-Hellenistic Anatolia*. (Barcino Monographica Orientalia 17 = Series Anatolica et Indogermanica 2) Barcelona, 227–253.

Simon, Zs. 2021b: Hittite and Luwian Loanwords in Armenian: An Update. *Hungarian Assyriological Review* 2, 283–294.

Simon, Zs. 2022: *Proto-Indo-European Loanwords in Proto-Kartvelian: A Reconsideration*. Unpublished talk held at the *Comparative Indo-European Linguistics Seminar*. Leiden University, 20 May 2022.

Smeets, R. 1989: On Hurro-Urartian as an Eastern Caucasian Language. *Bibliotheca Orientalis* 46, 259–279.

Starke, F. 1990: *Untersuchung zur Stammbildung des keilschrift-luwischen Nomens*. (Studien zu den Boğazköy-Texten 31) Wiesbaden.

Thorsø, R. 2022: A New Look at Old Armenisms in Kartvelian. *Armeniaca* 1, 97–110. https://doi.org/10.30687/arm/9372-8175/2022/01/006

Tischler, J. 1992: Review of Starke 1990. *Orientalistische Literaturzeitung* 87, 532–535.

Trémouille, M.-C. 2005: *Texte verschiedenen Inhalts*. (Corpus der hurritischen Sprachdenkmäler I/8) Roma.

Viredaz, R. 2020: Les traitments de la triphtongue *eay* en arménien. *Revue des études arméniennes* 39, 1–32.

Wegner, I. ²2007: *Hurritisch. Eine Einführung* / *Einführung in die hurritische Sprache*. Wiesbaden.

Weitenberg, J. J. S. 1985: Reconstructing Classical Armenian. The case of *kotem*(*n*). *Zeitschrift für vergleichende Sprachforschung* 98, 238–244.

Wilhelm, G. 2004a: Hurrian. In: Woodard, R. D. (ed.): *The Cambridge Encyclopedia of the World's Ancient Languages*. Cambridge, 95–118.

Wilhelm, G. 2004b: Urartian. In: Woodard, R. D. (ed.): *The Cambridge Encyclopedia of the World's Ancient Languages*. Cambridge, 119–137.

Yakubovich, I. 2009: Two Armenian Etymologies. In: Tatišvili, I. – Hvedelidze, M. – Gordeziani, L. (eds.): *Giorgi Melikishvili Memorial Volume*. (Caucasian and Near Eastern Studies 13) Tbilisi, 265–271.

Yakubovich, I. 2016a: Review of BGH. *Journal of the American Oriental Society* 136, 179–183.

Yakubovich, I. 2016b: Review of Salvini – Wegner 2014. *Bibliotheca Orientalis* 73, 155–159.

Yakubovich, I. 2017: Lydian *kof*(*i*)- 'water'. In: *eDiAna*. https://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=352