

A New Look at Old Armenisms in Kartvelian

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Abstract The present paper is concerned with the most ancient layer of Armenian loanwords (armenisms) in the Kartvelian languages. Due to the relatively conservative historical phonology of Kartvelian, compared to Armenian, it appears that more archaic forms have occasionally been preserved. These forms can be identified on the basis of the comparative method. Here, six of the previously proposed armenisms and one new proposal, a word for ‘crane’, are discussed. It is proposed that this stratum of loans probably dates to the latter half of the 2nd millennium BC and prior to the breakup of Proto-Georgian-Zan.

Keywords Armenian. Georgian. Kartvelian. Indo-European. Historical linguistics. Language contact. Loanwords.

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1 Introduction

The study of early contacts between Armenian and the Kartvelian languages is fundamentally concerned with two domains: structural (i.e. phonological, morphological, and syntactic) isoglosses and lexical borrowings. The former field was pioneered by Gerhard Deeters in a double publication (Deeters 1926; 1927) showing that several traits which distinguish Armenian from other Indo-European (IE) languages were also found in the Kartvelian languages. Deeters, and later scholars following him, explained this by the fairly simple hypothesis that Kartvelian constitutes a significant part of the Armenian substrate. That is, when Proto-Armenian (PA) speakers migrated into their historical territory in the South Caucasian highlands, their language was taken over by many formerly Kartvelian-speaking groups whose native language(s) left a significant mark on Armenian before being passed on to the following generations.

If this scenario is true, it is conspicuous how relatively few Kartvelian loanwords can be identified in Armenian. Hübschmann (1897, 396), who notably accepts only one “kaukasisch” loanword in his corpus,¹ comments upon this fact by stating that the Armenians were in this relation “stets mehr die Gebenden als die Empfangenden” (always donors rather than recipients), being endowed with “höherer Intelligenz und Kultur” (a higher intelligence and [form of] culture). As outdated as this phrasing appears in our time, the supposition that Armenian, at the time of its prehistoric expansion in Eastern Anatolia and the South Caucasus, was conceived of as a language of higher status, a superstrate, may in essence be true.² However, as was shown in several early works of N. Marr, and by Vogt (1938), a small layer of loanwords from the Zan languages (Megrelian and Laz) can be identified even in the earliest Armenian sources. A few of these are actually attested while others can be reconstructed by comparison with Georgian forms.³

Armenian loanwords, or armenisms, in Georgian are particularly common in the literary era. A wealth of examples may be found

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1 That word is *k'ac* բաժ ‘bitch’, which is not Kartvelian but probably Nakh-Daghestanian, cf. e.g. Lak *k:ač:i* ‘bitch’.

2 Of course, this statement can only apply to the relation between Armenian and its neighbouring languages to the north. As for the later contact with especially Middle Iranian and Syriac, Armenian was almost exclusively the recipient language.

3 Note, for instance, Arm. *čanč* ճանճ ‘fly’ (*i*-stem) ← Meg. *čanji*, Laz *mčaji* ‘fly’. The Georgian cognate is *mčeri* მჭერი ‘insect’ pointing to a Proto-Kartvelian **(m)čer-* ‘insect’ (Vogt 1938, 332-3; Ačaryan 1971-79, 3: 184; Gippert 2005, 154-5).

throughout the etymological dictionary of Ačaryan (1971-79). At a preliterary stage, Armenian has in some cases passed on loans from Parthian and Middle Persian to Georgian (see Gippert 1993; an overview is found on pages 348-9). The passage of loans in this direction has a longer history, however, because a small number of particularly archaic loanwords from Armenian to Kartvelian may be identified on the basis of the comparative method. These loanwords are the topic of this article, in which six previously identified Kartvelian armenisms will be discussed and a new one will be proposed.

2 Material in the Previous Literature

Especially in Georgian, one may identify several words that appear to reflect older, more conservative forms of corresponding Armenian words. These can conveniently be referred to as Proto-Armenian forms.⁴ For a significant part of the examples that have been adduced in the literature thus far, the only potential archaic trait is the preservation of the *o of the final syllable in thematic nouns, e.g. Old Ge. *m-delo*- მდელი- 'grass, herb' ← PA **delo*-, cf. Arm. *deł* դեղ (*o*-stem) 'herb, medicine' (Ačaryan 1971-79, 1: 649; Gippert 2005, 152 fn. 59).⁵ Yet, not all examples of this kind are necessarily indicative of early loans.⁶ Additionally, a part of these words have no (certain) etymology on the Armenian side, making it impossible to confirm if the direction of borrowing was really from Armenian.

The scope of this paper is therefore limited to words that show additional archaic traits in their phonological makeup. These reflect intermediate stages between reconstructed Proto-Indo-European (PIE) words and their attested Armenian reflexes. A priori, one may also expect that the Kartvelian languages borrowed words which were entirely lost or morphologically reshaped in Armenian before the literary transmission. For such an example, see section 4. Potentially, this material can provide valuable information about the relative time

⁴ This use of the term Proto-Armenian, which is fairly common in the literature, obviously differs from a strict definition of the term as the latest common ancestor of all Armenian dialects.

⁵ The Armenian word is probably cognate with Gk. *ῥάλλω* θάλλω 'bloom, become green, thrive' and internally Arm. *dalar* դալար 'green, fresh' (Martirosyan 2010, 231-2; Kölligan 2020, 218).

⁶ Granted that *o*-stem inflection in Georgian certainly suggests that the word in question is non-Kartvelian (cf. Gippert 2005, 152), some cases are still more likely to be later than the Armenian apocope. For example, as pointed out by an anonymous reviewer of the present paper, a word like Ge. *šoro* სორო 'hole, den', compared to Arm. *sor* սոր (*o*-stem) 'id.' (Ačaryan 1971-79, 4: 246; Jahowkyan 1987, 590), is not attested before the 17th century, in a Georgian translation of the *Fables* by Vardan Aygekc'i, which suggests that it was borrowed very late.

of borrowing. The relatively high degree of phonological conservatism exhibited by the Kartvelian languages (especially Georgian and Zan) is a significant advantage for this purpose. In some ways, the situation can be compared to that of the early Germanic loans in Finnic (Djahukian 2003, 191).⁷

The fact that some of these forms are found only in Georgian does not mean that they were necessarily borrowed only after Georgian had split from its closest relatives, Megrelian and Laz. Since Georgian is the only Kartvelian language with a longstanding literary tradition, beginning more than a millennium before Megrelian, Laz and Svan were recorded, there is ample time for the latter languages to have lost particular lexical items. In the following, three fairly certain and three less certain comparisons from among a set of the most compelling early armenisms will be discussed. Very doubtful or entirely rejected comparisons are left outside the scope of this paper.

2.1 ‘Ford’

Ge. *poni* ფედი ‘ford’ ← PA **p^hon-V-* (or **fon-V-*) < PIE **pontH-*, cf. Arm. հոււ հown (*i*-stem) ‘ford’ (Čubinašvili 1887, 112; Ačarjan 1971-79, 3: 123; Vogt 1938, 331; Bielmeier 1994, 430; Gippert 2005, 151; Martirosyan 2010, 422-6).

The immediate IE proto-form **pontH-* probably represents an analogical remodelling after the PIE mobile paradigm **pónt-VH-* ~ **pnt-H-*, clearly reflected in Avestan *paṇtā*, GEN *paθō* ‘road’, cf. also Skt. *pánthā-* ‘road’, Lat. *pons, pontis* ‘bridge’ (Olsen 1999, 194-5; Martirosyan 2010, 426). Apparently, this borrowing took place before the lenition of initial **p^h-* (from PIE **p-*) to Arm. *h-* and before the raising of **on* > *un*. The Georgian form is synchronically a consonant stem *pon-*, but it cannot be excluded that *-i* was originally part of the Armenian input form.

2.2 ‘Stream’

Ge. *ru* რუ, Old Ge. *ruy* რუი ‘small stream, channel’ ← PA **r̥u(i)V-* < PIE **sru-to/i-*, cf. Arm. *arow* առու (*i-*, *o-* or *a-*stem) ‘brook, channel’ (Ačarjan 1971-79, 1: 265).

As in the example of ‘ford’, the IE pedigree of this word is well established, cf. Skt. *srutá-* ‘stream, river’, Gk. *rutós* ῥυτός (adj.) ‘flow-

⁷ As a prime example of such loans, cf. Finnish *kuningas*, Estonian *kuningas*, Votic *kunikaz* ‘king’ (etc.) < Proto-Finnic **kuningas*, conserving to an almost perfect extent the Proto-Germanic form **kuningaz* ‘king’, as opposed to its direct descendants like Old English *cyning*, Old High German *kuning* or Old Norse *konungr*.

ing', Swiss German *strod* 'jet, gulp' < Proto-Germanic **struþa-* (on the Armenian word see most recently Martirosyan 2010, 115).⁸

Old Georgian -y represents the marker of the NOM.SG and can thus not help determine whether the reflex of the PIE intervocalic **-t-* had been lost entirely at this point. It appears, however, that the addition of the prothetic vowel *a-* before initial **r-* had not yet taken place.⁹ On the other hand, it remains possible to assume that the prothetic vowel at this point had a rather weak articulation and was simply lost in the borrowing process.

2.3 'Wine'

Ge. *χvino* ջջօճԹ, Meg./Laz *χvini*, Svan *χvinel*, *χvinal* 'wine' ← PA **χ^wino-* (?) < **χiHno-*, cf. Arm. *gini* գինի (*wo/ea*-stem) 'wine' (Klaproth 1823, 106; Pedersen 1906, 458; Ačaryan 1971-79, 1: 558-9; Martirosyan 2010, 214-15; Gorton 2017, 22; Lipp 2019, 204).

This is probably the most famous, but also most controversial, of the commonly cited old armenisms in Kartvelian. The various IE forms for 'wine' may be quite solidly traced to an original *n*-stem **uēih₁-ōn*, GEN **uīh₁-n-ós*, derived from the root **uēih₁-* 'to wind, turn, twist', cf. Hittite *uījan-*,¹⁰ Gk. *oīnos* οἶνος, Albanian (Gheg) *venë*, and Lat. *vīnum*, Umbrian *vinu*, all meaning 'wine' (Beekes 1987; Gorton 2017; Lipp 2019).

The comparison seems to pose a chronological problem, however. Arm. *gini* should be mechanically reconstructed as **ue/oiHnijo-*,¹¹ developing first to **χ^wēnio-* > **gēni*, later affected by the vowel reduction **ē > i* in unstressed syllables. At the same time, an example

⁸ In some works (e.g. Klimov, Xalilov 2003, 207-8), Ge. *ru* is considered a loan from Persian *rōd* 'river' (cf. Old Persian *rauta-* 'river'), but the loss of *-d* and subsequent transfer to a vocalic stem class would be unexplained; the Persian word would rather have been reflected as ***rodi*.

⁹ Note that the process of prothesis appears to have ended at some point during the influx of Parthian/Middle Persian loanwords, at least in the position before *r*; cf. *arat* առատ 'abundant' ← Parthian/Middle Persian *rād* vs *ročik* ռոճիկ 'salary, nourishment', cf. Middle Persian *rōzīg*.

¹⁰ See Kloekhorst 2008, 1012 for a recent treatment of the Anatolian material.

¹¹ Morphologically explained as a thematisation of the oblique stem **uiHn-* with secondary full grade or *o*-grade (as in Greek and Albanian **uoin-o/eh₂-*). The Armenian form also shows the productive suffix *-i*, OBL. *-wo/-ea-* (< **-ijo-*), but this could easily have been added at a relatively late stage. Cf. the semantically related *awli* աւլի 'strong alcoholic drink' < *awl-i* < **alut-ijo-*, cf. Old English *ealob* 'ale' and Old Russian *olъ* 'fermented liquor', Lith. *alūs* 'beer' (the Balto-Slavic words may be Germanic loans). Old Ge. *ludi* ლუდი (Rača, Tušeti *aludi*) 'beer' has no special relation to the Armenian word but must have been borrowed from an Alanic form **ælut*, cf. Oss. *ælut-on* 'a mythic drink said to allay hunger forever', which, in turn, is most likely a Germanic loan (Abaev 1958, 130; Thordarson 2011, 234).

like Arm. *višap* վիշապ ‘dragon’ along with Ge. *vešāpi* ვეშაპი ‘dragon’ ← Middle Iranian **μēšāp-* appears to show that this vowel reduction took place only after **μ* had changed into **g* (Hübschmann 1897, 397; Ravnæs 1991, 85 fn. 1). This problem may theoretically be overcome by the simple assumption that during the introduction of a phoneme /v/ in loanwords, the phoneme /ɣ^w/ was still preserved for some time. On the other hand, the fact that the reduction **ē* to *i* is evidently late coupled with the fact that no Kartvelian language preserves a reflection of the sequence **-iḡo-* is a more serious problem, which makes it unlikely that the input was a direct ancestor of Arm. *gini*. A solution is proposed by Gippert (1994, 120) who suggests that the parallel formation **μih₁no-* (cf. Lat. *vīnum*, Umbrian *vinu*), or even an ablauting paradigm, was preserved into Proto-Armenian but lost before the literary transmission. Such a form, with the PA development to **γ^wino-* would serve as a perfect input for the Kartvelian forms. Note that the apparent alternation between *wo*-stem (INSTR.SG *ginwov*) and *ea*-stem (INSTR.SG *gineaw*) in the Armenian Bible points to the existence of an old neuter form (Olsen 1999, 439-40).

All Kartvelian forms can be reconstructed as Proto-Kartvelian **γwin(o)-* (Fähnrich 2007, 486). This may lead to the objection that such an early loan from Proto-Armenian is inherently unlikely (cf. Ravnæs 1991, 85 fn. 1). However, the formational bases of all the Kartvelian forms are also identical (*γvin-*) while the discrepancy between the Georgian vocalic stem, the consonant stems in Megrelian/Laz and the diminutive formation in Svan could suggest that this word spread across the Kartvelian language area at a later point. Note especially the solitary, mixed declension in Old Georgian: NOM. SG *γwno-y* ვუნოყ, GEN.SG *γwn-isa* ვუნისა (Fähnrich 1982, 43), apparently betraying the competition between consonantal and vocalic stems. Neri (cited in Lipp 2019, 204) proposes that this situation reflects different adaptations to the Armenian **iḡo*-stem, though we may also assume that it reflects the fact that within Armenian itself, there was competition between such forms as **γ^wēniḡo-* and **γ^wino-*.

While the suggestion of an internal Kartvelian derivation from **γun-* ‘to wind (etc.)’, advocated by Fähnrich (2002, 35-6; 2007, 486) may seem attractive in and of itself, and would form a perfect semantic parallel to the PIE formation, the hypothesis of a Proto-Armenian borrowing into Kartvelian is arguably more parsimonious. The following item might offer additional, formal support for the assumption that Arm. **γ^w* from PIE **μ* could have been borrowed as Kartvelian **γ^w*, although its veracity is less certain. The fact that the first evidence for wine production is found in the Transcaucasian area is of little relevance here. In fact, wine production took place several millennia before the time we may assume Proto-Kartvelian to have broken up and does not provide circumstantial evidence for a supposition that Kartvelian languages had an impetus to derive their own word for it.

2.4 ‘Juniper’

Ge. *γvia* ჯვია, Old Ge. *γw(v)ay* ჯვ(ვ)ად; Svan *γwiw* ‘juniper’ ← PA **γ^wi(θ)a-*, cf. Arm. *gi* գի (*o*-stem) ‘juniper’ (Ačarʿyan 1971-79, 1: 554; Martirosyan 2010, 212).

The Armenian form could derive from PIE **ǵiHt-* (cf. Gk. *ἰτέα* ἰτέα ‘willow’, Old High German *wīda* ‘willow’, Lat. *vītis* ‘vine’). This example would provide support for the assumption, made for the previous item, that Kartvelian *γw* can reflect Proto-Armenian **γ^w* < **ǵ*, but it suffers from a few caveats. The cognacy of the Armenian word with the other Indo-European forms is somewhat doubtful. The required semantic shift from ‘willow’ (or some other tree?) to ‘juniper’ is not entirely trivial since these trees are very dissimilar. Secondly, the origin of the intervocalic *-w-* seen in the Old Georgian and Svan forms would not be clear. Perhaps it may somehow reflect PA **-θ-* (< **-t-*) or have been introduced as a hiatus breaker. Finally, the Georgian stem-final *-a* does not match the Armenian *o*-stem. These issues do not seem large enough to warrant a wholesale rejection of the etymology, however, considering the close similarity between the Armenian and Kartvelian forms.

2.5 ‘Kidney’

Ge. *tirkmeli* თირკმელი, Old Ge. *tirkumel-ni* თირკუმელნი (coll.) ‘kidney’ ← PA **t^hrikmen-* (?), cf. Arm. *erikamn* երիկամն, often plurale tantum *erikamownk’* երիկամունք (ACC.PL *-owns*, GEN-DAT-ABL.PL *-anc’*) ‘kidney, entrails’ (Vogt 1938, 332; Gippert 2005, 150).

This ingenious proposal does require a few *ad hoc* assumptions to fall entirely into place. The Georgian form apparently shows a metathesis of the first syllable (**t^hrik^o* > *tirk^o*) and a change of the stem final **-n-* > *-l-*, perhaps due to influence of other Old Ge. stems in *-el-* and/or dissimilation against the previous *-m-* (Gippert 2005, 150). The *-u-* of the Old Georgian form appears to be epenthetic, although Gippert (2005, 150) proposes that it shows the reflex of a PA labiovelar **k^w*. The dating of this borrowing before the loss of **t^h* (< **t*) before initial resonant (cf. Arm. *erek’* երեք ‘3’ < **trejēs*) is consistent with the example of *poni* ‘ford’, showing the preservation of **p^h* (< **p*).

More serious is the problem that the Indo-European background of the Armenian word is quite obscure (cf. Ačarʿyan 1971-79, 2: 56; Olsen 1999, 940). Vogt’s own comparison with Lat. *trīcae* ‘trifles’, presupposing a root **treig^{w-}*, is arbitrary from a semantic viewpoint, and a relation with Lat. *torqueō* ‘to twist’ is formally impossible. Vogt also compares Gk. *trépō* τρέπω ‘to turn’ which is now generally reconstructed as **trep-* (Rix et al. 2001, 650). The possibility that the

word shows a suffix traceable to **-mōn*, NOM.PL **-mones* etc.¹² (cf. Ols-
en 1999, 503, 614) does, however, allow for the suspicion that it has
an Indo-European pedigree.

2.6 ‘Mushroom’

Ge. *soḳo* სოკო, Meg./Laz *soḳo*, Svan *soḳû* ‘mushroom’ ← PA **sonkV(n)*
(?), cf. Arm. *sownk(n)* or *sowng(n)* սոսկ(ս) ‘mushroom’ (Ačāryan
1971-79, 4: 252).

This final example is also the least likely, but it appears worth con-
sidering, especially because the *o*-vocalism of the Kartvelian form
fits with the chronology of *poni* ‘ford’. We may thus assume that the
borrowing took place before the Armenian change of **on > un*. The
loss of the nasal in all Kartvelian forms is unexplained, however. The
dialectal Arm. (Ararat) *sokon*, possibly a back-loan, might allow for
the speculation that such a form once existed in Kartvelian (Ačāryan
1971-79, 4: 252), which may pave the road for explaining the loss of
the first *-n-* through dissimilation against the latter.

Martirosyan (2010, 587) notes the fact that the word is found in all
Kartvelian languages. This does not appear to be a serious problem
for a loan hypothesis, however, since the forms are identical (cf. also
‘wine’) and may have spread at a later point in time. Similar words
appear also in Nakh-Daghestanian, some of which may have been
borrowed from Kartvelian (e.g. Akhvakh *šeḳu* ‘mushroom, tinder’,
Avar *s:ak* ‘tinder’, Godoberi *seḳu* ‘mushroom’). Finally, the situation
is complicated by the fact that the Armenian word itself appears not
to be inherited from PIE, but a *Wanderwort* or substrate word akin
to Gk. *spóngos* σπόγγος, *sp^hongos* σφόγγος ‘sponge’ and Lat. *fungus*
‘mushroom’ (Frisk 1970, 770; Martirosyan 2010, 587).

3 Chronology

Having discussed six potential old armenisms in Kartvelian, a perti-
nent question concerns the dating of these loans. It can be observed
that when the first of these loanwords entered the Kartvelian lan-
guages, the following sound changes had not been completed:

1. the loss of final syllables;
2. the change of **γ^w > g*;

¹² In order to arrive at the correct Georgian outcome, it is necessary to assume the
existence of forms in **-men-*, which would entail that the transfer to the declension class
characterised by *-an, -ownk’* is secondary in *erikamn*. This is an additional assumption
that might jeopardise the etymology at hand.

3. the change of $*p^h$ - > h - and perhaps $*t^hr$ - > Vr -;
4. the raising of $*oN$ > uN (thus probably also $*eN$ > iN).

At the very least, this establishes them as older than the first Iranian and Greek loanwords, to which none of these sound laws are applied anymore. The next layer of historic loans to which they can be compared are a small set of words borrowed from Urartian (and perhaps Hurrian) into Armenian (see Diakonoff 1985; Greppin 1991). Unfortunately, these can produce only the slimmest of evidence for the chronology of the sound changes listed above:

1. Arm. *p'ox* փոխ 'loan', cf. Hurrian *puḫ*- 'to exchange'. Although ultimately from Akkadian *pūhu*, *pāhu* 'exchange', the *o*-vocalism points to Hurrian or Urartian mediation (Diakonoff 1985, 599), which is also more likely for geographic reasons.
2. Arm. *don* դոն 'a kind of bread' (found in *Yaysmawowrk*' and dialects), cf. Hittite *t/duni* 'a kind of bread (in the shape of a footstool?)' (a Hurrian word, see Richter 2012, 470), which in Urartian may have corresponded to $*donə$. For an elaborate discussion, see Martirosyan (2010, 241-3), who favours a native derivation from $*d^hoHneh_2$ - (following Ačaryan 1971-79, 1: 679), but his proposed assimilation of $*u$ > o before $*a$ does not find clear parallels.
3. *Kotom* Կոտոմ (toponym) ← Urartian *Qutumu*-.
4. *Van* Վան (toponym) ← Urartian *Biaine-lə*.¹³
5. *Ĵawaxk'* Ջաւախք (toponym) ← Urartian *Zabaḫae*.

At face value, this material shows that the sound laws mentioned above had stopped operating when these Hurro-Urartian forms entered Armenian. We may therefore tentatively assume that the first loans from Proto-Armenian into Kartvelian took place before the first loans from Hurro-Urartian into Armenian. The fall of Urartu in the 7th century BC gives a reasonable *terminus ante quem* for the latter event, but the time frame is admittedly vague because it is impossible to exclude that some speakers of Urartian lingered after the fall of the empire.

After all, it is probable that the first identifiable Armenian-Kartvelian contacts can be pushed back to the latter half of the 2nd millennium BC. This might mean that a word like *poni* 'ford' was not loaned into Georgian proper, but into the Georgian-Zan proto-language, later disappearing from the Zan languages. This assumption can best

¹³ As previously mentioned, the fact that Armenian probably had a phoneme /v/ at this point does not necessarily entail that the phoneme /ɣ^v/ had disappeared (cf. also Diakonoff 1985, 601), but the latter two examples might serve here as circumstantial evidence.

be corroborated by the existence of a loanword which is reconstructible to Georgian-Zan. In the following paragraph, the existence of exactly such an example will be postulated.

4 A New Proposal. ‘Crane’

As an addition to the material adduced above, a new etymology is proposed here.¹⁴ The groundwork has already been laid by Klimov (1986; 1994), who adduced a number of potential loanwords from Indo-European, some more compelling than others, into individual Kartvelian languages as well as their reconstructed ancestor clades Proto-Georgian-Zan and Proto-Kartvelian. Klimov rarely attempts to narrow down the potential sources of these loanwords. In the following example, the sound laws which must be assumed to produce the right outcome appear very likely to be specifically Armenian. Even if this observation turns out to be a mirage, it will hopefully stimulate the search for further material of this nature.

The Proto-Georgian-Zan form **čero-* ‘crane’ can be reconstructed on the basis of Ge. *čero* ‘crane’ and Meg. *čaro* ‘a fishing bird’, the latter found in the dictionary of Orbeliani (1685-1716/1949, 885) and perhaps in the surname *Čaraia* (cf. Klimov 1998, 309). Klimov (1986, 198; 1994, 162-3) and Rogava (1988) consider this to be a loanword from an Indo-European language or directly from PIE, but neither of them attempts to determine the exact source of the borrowing.

For the PIE word for the crane, Kortlandt (1985, 120; 2018) reconstructs a mobile paradigm **đerh₂-ōu*, **đerh₂-u-* which may account for Lat. *grūs* ‘crane’, and the Balto-Slavic forms: Lithuanian *gėrvė*, Latvian *dzērve*, Old Prussian *gerwe* and Serbo-Croatian *žērāv*. It may be assumed that in these forms, **đer-* was depalatalised to **gr-* (cf. Kortlandt 1978), after which the velar variant spread to the entire paradigm (Derksen 2015, 173). Scholars who oppose the idea of a Balto-Slavic depalatalisation have reconstructed the root as **ger(h₂-)*, but this reconstruction cannot straightforwardly account for the Iranian forms, viz. Oss. (Iron) *zyrnæg*, *zærnyg* ‘crane’ and Pashto *zāna-* ‘crane’, which Gašiorowski (2013, 56) is forced to explain through contamination with the word for ‘sing’ (e.g. Oss. *zar-*).

Arm. *krownk* կռռկ ‘crane’ has been explained as attesting a remnant of the depalatalised oblique stem and the *n*-suffix attested in the Iranian forms besides Gk. *géranos* γέρανος, *gérēn* γέρην, Old English *cran*, etc. Its exact development is unclear, however and the lack of metathesis in the cluster **gr-* is most puzzling. Onomatopoeic influ-

¹⁴ After the submission of the first draft of this paper, an anonymous reviewer pointed out that Viredaz (2019, 9) has independently advanced the same proposal.

ence may have played a role in the development of the word (see Martirosyan 2010, 377 with literature), and so may the obscure form *grē* զրէ or *greay* զրեայ ‘crane’ (*hapax*, Grigor Magistros), potentially an Iranian loanword (Greppin 1978, 103).

At any rate, nothing excludes the assumption that the old nominative survived long into the pre-literary period. Applying the usual sound laws to **ǵerh₂ōu* vel sim., we would end up with **ceru*. This form happens to be almost identical to the reconstructed Proto-Georgian-Zan form. Other (known) Indo-European sources can be excluded because the reflection of PIE **ǵ* as a voiceless affricate is uniquely Armenian.

Unlike in the previously adduced words with a wider distribution in Kartvelian, we here find particular sound changes in the Megrelian form (**č > č̣, *e > a*), confirming that the word existed at the Proto-Georgian-Zan clade. If its origin is Proto-Armenian, it would tie in with the chronology proposed above and support the supposition that linguistic contact between Armenian and Kartvelian must have taken place at this point in time.

Abbreviations

ABL	ablative
ACC	accusative
Arm.	Armenian
DAT	dative
Ge.	Georgian
GEN	genitive
Gk.	Greek
IE	Indo-European
INSTR	instrumental
Lat.	Latin
Meg.	Megrelian
NOM	nominative
OBL	oblique
Oss.	Ossetic
PA	Proto-Armenian
PIE	Proto-Indo-European
PL	plural
SG	singular
Skt.	Sanskrit

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