Old Armenian nasal verbs : archaisms and innovations

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CHAPTER 3. CONCLUSIONS

Section 3.1. The evolution of the Proto-Armenian nasal classes

§ 3.1.1. The traces of the IPFV **n(e)u*-stem

The following Proto-Armenian nasal classes with the IPFV **n(e)u*-stem can be reconstructed based on the Old Armenian evidence: a) IPFV **-n(e)u-* : PFV -Ø- or PFV **-s-*; b) IPFV **-nu-* : PFV -Ø- or **-s-* with roots in the *e*-grade; c) IPFV **-n(e)u-* : PFV **-eh₁-* or **-eh₁-s-*.

While the class (a) is inherited from core PIE, the classes (b) and (c) can represent dealectal PIE innovations shared by the Greek and Armenian branches. It is possible that the classes (b) and (c) could mark the transitive and intransitive members of transitivity pairs, respectively. This assumption is supported by the fact that the class (c) included only intransitive agentive and non-agentive verbs in Proto-Armenian.

The Ancient Greek continuants of the class (b) often co-occure with the infixed verbs of other branches (see § 2.1.2-3.1). It can be explained by the substitution pattern that was used to replace the infixed stem by a stem with more transparent morphological boundaries. Arm. *ənt'eṙnum* 'read aloud' and, perhaps, Arm. *lnum* also fit into that substitution pattern. Note that, like many Ancient Greek νῡ-verbs with roots in the full grade and PFV **s*-stems, *ənt'eṙnum* has a root in a velar.

According to a widespread opinion, the PIE nasal stems marked the derived causative or the transitive member of transitivity pairs. The Hittite *nu*-causatives and residual traces of causative nasal verbs in other branches seem to support this view. Yet, nasal verbs can express the transitivity alternations by voice endings in many Indo-European branches, including Indo-Iranian, Greek, and Armenian. From this perspective, the ambitransitive argument structure of *lnum* tr., intr. 'fill up' and *xnum* tr., intr. 'close' can be an archaism.

Another instance of the PIE ambitransitive **n(e)u*-verbs is reflected in Arm. *yaṙnem* intr. 'arise'. This verb goes back to the intransitive forms of the PIE nasal motion verb (cf. Gk. ὄρνυμαι, Skt. *ṛṇváti* intr. 'come to motion'), the transitive alternation of which was expressed by the active forms of the same verb (cf. Gk. ὄρνῡμι, Skt. *ṛṇóti* tr. 'set in motion').

The Proto-Armenian *n(e)u*-class contained two ditransitive verbs with the inherited nasal stems and the active/reflexive alternation — *aṙnum* 'take' and *zgenum* 'clothe oneself'. Although *aṙnum* 'take' continues the inherited core PIE **n(e)u*-stem, its reflexive semantics ('receive so. for oneself' → 'take so.') brings it closer to Gk. mp. ἄρνυμαι as opposed to YAv. act. *frārənao-* tr. 'offer (homage)'. One can assume that Proto-Armenian generalised the stem of mediopassive forms which marked the reflexive alternation of the

underlying ditransitive verb. Thus, along with the most archaic nasal stems, *arṙnum* reflects an inner-Armenian innovation. Another salient example of a lexicalised mediopassive form of a nasal verb is Arm. *zgenum* 'clothe oneself', aligned with Gk. mp. ἔννυμαι 'clothe oneself' as opposed to Gk. act. ἔννυμι 'clothe someone', both from dial. PIE ambitransitive verb act. **ues-nu-* tr. 'put clothes on smb.', mp. **ues-nu-* intr. 'dress oneself'. In this case, an inner-Armenian innovation is based on the dial. PIE **nu*-class with roots in the *e*-grade, itself a shared Greek-Armenian innovation.

A gradual cline towards the intransitive syntax of the Proto-Armenian **nu*-verbs shows itself in the moderate productivity of the class (c), which contains some secondary intransitive verbs (e.g. *kʻałcʻnum* 'be hungry', *heťjnum* 'suffocate', etc.) and words of unknown origin, possibly, non-IE (e.g. *pšnum* 'see').

When compared to dial. PIE **nHe/o*-verbs reflected as predominantly telic and largely non-durative Old Armenian verbs, the aspectual profile of dial. PIE **nu*-verbs seems to be less restrictive. One third of Old Armenian *n*(*u*)-verbs, treated in Section 2.1 are atelic, and only three verbs are non-durative with their IPFV *n*(*u*)-stem expressing only secondary aspectual meanings. The increase in the number of atelic verbs went hand in hand with the spread of the intransitive syntax (cf. *cʻasnum* intr. 'be angry', *kʻałcʻnum* intr. 'be hungry', *zbałnum* intr. 'be occupied'), and can be considered an inner-Armenian innovation. The spread of PArm. **nu*-verbs with the PFV **i*-stem introduced the nasal suffix to the morphology associated with the stative/inchoative alternation ('be/become X'), and hence to the domain of verbs with the [– dynamic] aspectual feature, thus accomplishing the change of the original transitivising function of the core PIE **n*(*e*)*u*-suffix to its opposite. The few Old Armenian stative *nu*-verbs either allow for an agentive interpretation (cf. *cʻasnum*, *zbałnum*) or denote temporary states (*kʻałcʻnum*) as opposed to durable and permanent states such as *gitem* 'know' and *karem* 'be able'. These kind of statives represent a transition stage between the dynamic and stative verbs.

The most recent layer of morphological innovations related to the PArm. **nu*-class results from the contamination between the *n*(*u*)- and *čʻ*(*i*)-stem that shared the PFV **i*-stem. Here belong three verbs with the anticausative and reciprocal meanings.

The atelic *nu*-verbs had the pivotal IPFV stem that conditioned the root shape, cf. *uṙ-n-um* 'puff up', aor. *uṙ-e-ay* (the same change did not happen to *yaṙ-n-em*, aor. *yar-e-ay*, with the lexicalised [– durative] aspectual feature), *zbałnum* 'be occupied', past ptc. *zbał-eal*, and, perhaps, also *ǰeṙ-num* 'heat up', aor. *ǰeṙ-ay*. The root levelling pattern is relatively recent since it postdates the sound changes **rn* > **ṙn* and **ln* > **tn*.

In other verbs, the lexicalised [– durative] aspectual feature conditioned the root levelling based on the PFV stem, cf. *ənkenum* with **in* > **en* on the analogy of the aorist (here may also belong the verbs *yenum* 'lean' and *zgenum* 'clothe oneself' with the

[± durative] aspectual feature). The same levelling pattern applied to the phasal verb *sksnum* 'begin', the root shape of which most probably goes back to the PFV **s*-stem.

§ 3.1.2. The traces of the **n(e)h₂*-stem

Within the Arm. *n*(*a*)-class, *banam* and *stanam* can continue the inherited nasal stems. The protoform of *banam*, be it **bʰh₂-n(e)h₂-* or **bʰh₂-(e)n-* (whence secondary PGk. **pʰan-ie/o-*), may be a Greek-Armenian innovation created to derive an ambitransitive dynamic verb 'make/be(come) visible' from the underlying stative verb PIE **bʰeh₂-* 'shine', cf. the dynamic verb **ues-nu-* 'clothe so./oneself' derived in the common ancestor of the Greek and Armenian branches from the stative PIE **ues-* 'be clothed'. PIE **sth₂-n(e)h₂-* or **sth₂-(e)n-* 'posit; allot' attested in the Armenian and Italic branches reflects the PIE transitive derivative of PIE **steh₂-* intr. 'stand up' (IPFV **sti-steh₂-*).[234] The reflexive alternation of the nasal verb was lexicalised in Proto-Armenian alone similar lines to *aṙnum* 'take' and *zgenum* 'clothe oneself' from the PArm. **n(e)u*-class.

In view of this evidence, the ambitransitive argument structure and dynamicity of *luanam*, *spaṙnam*, and *tʿanam* can be analysed as an archaism.

The PIE **n(e)h₂*-class remained productive in Proto-Armenian, as one can see from *baṙnam*, *daṙnam*, and *spaṙnam*. Like PIE **n(e)h₂*-verbs, these three verbs reflect the zero grade of the root. The nasal stem of *baṙnam*, *daṙnam*, and *spaṙnam* must be older than the **rjn*-cluster simplification and the ensuing sound change **rn* > *ṙn*. By contrast, *oṙnam*, with its root in the *o*-grade, is a recent inner-Armenian formation.

Old Armenian inchoative *an*(*a*)-verbs represent another possible instantiation of the PIE **n(e)h₂*-class. At least in part of these verbs, the nasal stem can be derived from **-n̥h₂-*, an allomorph of the PIE **n(e)h₂*-suffix. The zero-grade of the suffix was typical for mediopassive forms. One can tentatively assume that some ambitransitive **n(e)h₂*-verbs expressed the anticausative/causative alternation and changed the equipollent transitivity marking pattern to the causative one. This resulted in the lexicalisation of the intransitive members of transitivity pairs. The same kind of change is found in the Proto-Armenian denominal **ā-ie/o*-verbs and it is similar to the lexicalised reflexives of the **na-* and **nu-* classes (cf. *aṙnum*, *stanam*, *zgenum*). These inner-Armenian innovations must then be considered an independent parallel to the inchoative denominal **n(e)h₂*-verbs that underly the Germanic 4th weak class.

[234] The reconstructions **bʰh₂-(e)n-* and **sth₂-(e)n-* rely on the hypothesis that the PIE infixed stems continue the pre-PIE type with the IPFV **(e)n*-suffix (see Section 1.2). According to that view, nasal stems with bi-consonant roots like PIE **bʰh₂-(e)n-* did not turn into the infixed stem.

After the IPFV *an*(*a*)-stem had established itlsef in Proto-Armenian, it recharacterised some of the inherited PArm. **a*-stems. The spread of the IPFV *an*(*a*)-stem was conditioned by the [+ telic] and [+ dynamic] aspectual features associated with PArm. **an*-verbs as opposed to atelic and often stative **a*-verbs like *mnam* 'remain', *cʻankam* 'desire', etc.

The PFV stems *ba-cʻ-*, *sta-cʻ-*, and *tʻa-cʻ-* go back to the PIE PFV athematic root stems **b^{h}(e)h$_{2}$-*, **st(e)h$_{2}$-*, and **t(e)h$_{2}$-* or else to the secondary Proto-Armenian PFV **s*-stems **b^{h}eh$_{2}$-s-*, **steh$_{2}$-s-*, and **teh$_{2}$-s-*. The latter formal possibility remains without a comparative support.

The root vocalism of PFV *barj-* and *darj-* points to the direction of the root levelling going from the IPFV stem to the PFV one in *baṙnam* and *daṙnam*. The later pres. *spaṙn-am* and aor. *spaṙn-acʻ-i* show the same direction. These three *n*(*a*)-verbs have unspecified durativity and telicity parameters and it is not obvious whether or not the observed levelling pattern correlates with specific lexical aspectual features.

§ 3.1.3. The traces of the **nHe/o*-stem

The Ancient Greek verbs in -νε/ο- and -ανε/ο-, as well as the Old Armenian verbs in *-ne/i-* and *-ane/i-* most probably go back to the thematicised nasal suffix **-nHe/o-* and its allomorph **-^{ə}nHe/o-*. The **nHe/o*-verbs typically had a thematic PFV root stem and tended to replace the IPFV stem of the infixed verbs (see § 2.5.2-3.2). Thus, the PIE infixed stem could change to the **nHe/o*-stem or the **nu*-stem in dialectal PIE or early Proto-Armenian. While the nasal suffix was added to the IPFV infixed stem in Proto-Greek, it was added to the PFV stem in Proto-Armenian.

The dialectal PIE spread of the **nHe/o*-suffix was not limited to the replacement of the infixed stem. In Ancient Greek, the use of the nasal suffix extended to the formation of secondary imperfectives from various primary IPFV stems, cf. ἵζω 'make sit' → ἱζάνομαι, οἰδέω 'swell' → οἰδάνω, etc. A similar process can be postulated for some of the Old Armenian *an*(*e*/*i*)-verbs, cf. *aganim* 'spend (the night)', *harcʻanem* 'ask', *iǰanem* 'go down'. One wonders whether or not the **nHe/o*-suffix could form secondary imperfectives already in dialectal PIE, cf. Hom. κευθάνω and Arm. *suzanem* 'hide'.

The **nHe/o*-suffix analogically extended to verbs with the PFV root or **s*-stems in Proto-Armenian. The decay of productivity can be dated to the period before the influx of Urartian and Iranian loanwords (*xacanem* 'bite' is the only potential archaic Iranian loanword of this kind). In some cases, secondary PArm. **an*-stems can be identified in verbs with roots in a consonant of a lower sonority than *n*, e.g. *aganim* 'put on (clothes)' from PIE **h$_{2}$eu-* (cf. § 2.5.1-2.2).

In many cases, it is impossible to identify the source of the root shape of a secondary nasal stem with certainty. In § 2.5.2, some additional arguments have been put forward based on the analysis of the lexical aspectual features of *an*(*e*/*i*)-verbs.

In particular, the sound changes discussed in § 1.4.2 suggest the sigmatic origin of the non-etymological root-final dental affricates in nasal verbs. The lexicalised [– durative] aspectual feature supports the hypothesis that the root shape comes from the PFV stem in *kcanem*, *lucʻanem*, *meřanim*, *sksanim*, *spʻacanim*, *zercan-e*/*i-m*, and *xacanem*. No *an*(*e*/*i*)-verbs have been found with roots in an affricate and the lexicalised [– telic] aspectual feature. Thus, the hypothesis that such Old Armenian nasal continue the IPFV **ie*/*o*-stem remaines without neither formal nor functional justification. All the *an*(*e*/*i*)-verbs with the lexicalised [– telic] aspectual feature have a root shape that can be explained from the older IPFV stem, e.g. *aganim* 'spend the night' < **h₂eu-e*/*o-*, *ǰeranim* 'have a fever' < **gʷʰer-e*/*o-*. Both of the outlined models of the IPFV stem renovation remained in use in the course of the pre-written stage of the language, cf. Arm. IPFV *ołoł-e-* → IPFV *ołoł-an-e-* 'inundate' and PFV *ənt'erc'-* → IPFV *ənt'erc'-ane-* 'read'.

Nasal verbs with the unspecified [± telic] and [± durative] parameters escape the aforementioned disambiguation procedure. Altogether, it should be noted that at least 20 verbs of the *an*(*e*/*i*)-class have been identified with the lexicalised [– durative] aspectual feature as opposed to only 7 verbs with the lexicalised [– telic] aspectual feature. This points to an overall cline towards the actional class of ACHIEVEMENTS in the *an*(*e*/*i*)-class and circumstantially supports the hypothesis of the sigmatic origin of roots in affricates within this particular verbal class.

The Old Armenian *an*(*e*/*i*)-verbs provide evidence that their dialectal PIE prototype was unspecified for agentivity and transitivity. The equipollent transitivity marking pattern is the majority type in the *n*(*e*/*i*)- and *an*(*e*/*i*)-verbs, which are predominantly ambitransitive. If the formal match between Gk. κευθάνω tr. 'hide', κεύθομαι intr. 'hide oneself' and Arm. *suzanem* tr. 'conceal' results from the shared nasal stem and not parallel innovatins, the reconstruction of the ambitransitive argument structure receives an etymological support.

Such verbs commonly do not have derived causatives. The equipollent pattern and the constraint on the derivation of causatives can be tentatively postulated for the dial. PIE **nHe*/*o*-class.

In some cases, the intransitive non-agentive verbs of this class can be explained as the result of the lexicalisation of the intransitive member of a transitivity pair in Proto-Armenian. For example, *pʻlanim* may continue the PIE nasal verb with the anticausative meaning 'be lost, destroyed' (cf. Gk. ἀπόλλυμαι, PGrm. **fallan-*) and the causative meaning 'destroy' (cf. Gk. ἀπόλλυμι, Lat. *aboleō*). Like Proto-Germanic, Proto-Amenian could have

lexicalised the anticausative counterpart of the original transitivity pair. The lexicalised transitive member of a transitivity pair is represented by *luc'anem* 'kindle'.

The root shape of some Old Armenian *an*(*e*/*i*)-verbs can be explained by the PFV **s*-stem. Given that the Ancient Greek ανε/ο-verbs do not have sigmatic aorists, such *an*(*e*/*i*)-verbs can be explained by the inner-Armenian spread of the PFV **s*-suffix. Unlike Ancient Greek, where the sigmatic aorist predominantly characterised transitive verbs, the PArm. PFV **s*-stem can be postulated for transitive (e.g. *luc'anem* 'kindle', *mucanem* 'bring to') and intransitive verbs (e.g. *meṙanim* 'die'). By contrast to its cognate *mtanem* intr. 'enter', *mucanem* reflects the root full grade, which could have been responsible for the marking of transitivity prior to the inner-Armenian spread of the PFV **s*-suffix to the inherited root stems. Thus, *mucanem* cannot be considered a strong argument in favour of the transitive value of the PArm. PFV **s*-suffix as a match to Greek.

The agentive intransitive verbs could also be part of this class (*anc'anem* 'pass by', etc.). The antiquity of that functional type is supported by Arm. *linim* intr. 'become', which can be derived from the PIE nasal verb with the agentive intransitive meaning 'lean' (cf. Lat. *dēclīnō*, Av. *nisrinaoiti*, Gk. κλῑ́νω, etc.).

Section 3.2. Nasal verbs and the position of the Armenian branch in the Indo-European language family

The Old Armenian nasal verbs contain a very limited amount of isoglosses that could point to the closer affinity of the Armenian branch to other branches. In order to evaluate the available isoglosses, it is essential to keep in mind that exclusive correspondences shared by two branches have different values for proving their closer relationship.

Exclusive matches between verbal classes or separate tense-aspect stems count among the strongest arguments. In the case of Ancient Greek and Old Armenian, here may belong the nasal classes characterised by the **nu*-stem with the full-grade of roots and the **nHe/o*-stem (§§ 2.1.2-3.2, 2.5.2-3.1). In particular, these verbal classes set the Greek and Armenian branches apart from the Indo-Iranian branch. Although the verbal suffix **-eh$_1$-* can be securely reconstructed for PIE, its resultative perfect (and intransitive preterite) value in Ancient Greek and Old Armenian may represent a shared innovation (§ 2.1.2-3.3).

Gk. aor. ἐγένετο and Arm. aor. *cnaw* continue the PFV root stem with the full grade and mediopassive endings (§ 2.5.1-2.12). This combination of features, irregular in the PIE verbal morphology, can be explained by a shared innovation. Here can also belong the equation of Arm. aor. *arari* and Gk. aor. ἀραρεῖν (§ 2.3.1-1.1). While the reduplicated aorist was an established PIE morphological type, the aorist with a full reduplication of the root was not, which makes the lexical match between the cited forms a strong isogloss. Another example of this kind, albeit less secure, is the **k*-perfect, that may be tentatively suggested for Gk. perf. πέφῡκα 'grow' and Arm. *busanim* if from dial. PIE **b^{h}e-b^{h}uH-k-* (§ 2.5.1-2.11).

The Old Armenian intransitive denominal *an(a)*-verbs and the Germanic inchoative nasal verbs probably continue the same PIE morphological type. However, their proto-type **n(e)h$_2$*-class, that produced denominal verbs in other branches including Tocharian, was unspecified for transitivity. The intransitive meaning of the Armenian and Germanic denominal nasal verbs most likely represents independent innovations (§ 2.4.2-3.1).

The relevance of the lexical match combined with matching grammatical morphemes decreases with the increase in the productivity of the grammatical morphemes. For examples, while the reduplicated perfect, taken as an inflectional category, unambiguously sets the Indo-Iranian and Greek verbal systems apart from the Anatolian one, the *lexical match* between Skt. conj. *búbodhati* 'should have noticed' and Gk. πέπυσμαι 'have recognised', derived from the same PIE root **b^{h}eud^h-*, is not very significant as a witness of the close affinity between the two branches because the perfect tense forms could have been built independently in these branches according to productive grammatical rules. When applied rigorously, this methodological principle casts doubt on the possibility to assuredly reconstruct any PIE tense-aspect stem to a specific root, when forms of daughter languages represent morphological types that could have remained productive in the

prehistory of branches involved in the comparison. Altogether, according to the same principle, none of the reconstructions based on the productive morphological types can be assuredly excluded either. Thus, based on Skt. *búbodhati* and Gk. πέπυσμαι one may reconstruct **b^he-b^h(o)ud^h- even though it will remain fundamentally hypothetical.

From this perspective, if one assumes a moderately productive **nu*-stem to roots in the *e*-grade for the common stage of the Greek and Armenian branches, the significance of the lexico-morphological match between Gk. ἔννυμαι and Arm. *zgenum* will decrease, even though the reconstruction **ues-nu-* will remain a plausible option (§ 2.1.1-2.6). Altogether, given that the assumed productivity of such a stem is lower than that of the PIE reduplicated perfect, the plausibility of a common source of Gk. ἔννυμαι and Arm. *zgenum* is higher than that of Skt. *búbodhati* and Gk. πέπυσμαι in the above-cited example. If, one the contrary, one rejects the productivity of the **nu*-stem with roots in the *e*-grade at the Greek-Armenian stage, Gk. ἔννυμαι and Arm. *zgenum* turn into a strong lexico-morphological isogloss. If one chooses to derive Gk. ἔννυμαι and Arm. *zgenum* from PIE stative **ues-* after the ablaut ceased to operate, the isogloss remains strong by virtue of its restrictive chronology and the match of the nasal suffix added to the lexicalised full grade of the root. Alternatively, one can argue that Gk. ἔννυμαι and Arm. *zgenum* were independently derived from the PFV stem with the *e*-grade. This approach requires proving that this productive derivational pattern was an independent innovation in each branch. Unless such proof is found, the principle of economy makes this approach superfluous. The same considerations apply to the relevance of the **k*-perfect as a shared morphological type next to the lexical match between πέφῡκα 'grow' and *busanim*, and the mediopassive aorist with the full grade next to the lexical match between ἐγένετο and Arm. *cnaw*.

A more complex type of isogloss involves several morphologically opposed verbal classes. In Ancient Greek, the νυ-verbs typically take the sigmatic aorists while the ανε/ο-verbs typically take the thematic aorists. Armenian aorists of the *an*(*e*/*i*)-verbs like *gti* 'found' and *lk'i* 'left' unambiguously go back to thematic stems (§§ 2.5.1-2.18, 2.5.1-2.28). Altogether there are possible traces of the sigmatic stems in the *n*(*u*)-class including aor. *ənt'erc'ay* 'read' (§ 2.1.1-2.2). While each reconstructed sigmatic stem can reflect a Proto-Armenian innovation, as part of a paradigmatic class they may be compared to the respective Ancient Greek class. Neither of the Old Armenian *an*(*e*/*i*)-verbs contain assured traces of the inherited sigmatic stem and a comparable paradigmatic class is missing in Ancient Greek. The plausible continuants of the Proto-Armenian transitive sigmatic stems like *luc'i* 'kindled' and *muci* 'brought in' (§§ 2.5.1-2.30, 2.5.1-2.34) represent a relatively weak isogloss with the predominantly transitive sigmatic stems in Ancient Greek since Old Armenian bears evidence of the secondary spread of sigmatic stems to the inherited root stems of transitive and intransitive Proto-Armenian **ane*-verbs (§ 2.5.2-3.2.2). An

assumption of the markedly transitive PFV sigmatic stems of the Greek νυ-class and the Old Armenian *nu*-class seem to be more motivated (§ 2.1.2-3.2). Thus, the sigmatic proto-type of Arm. *muci* could be a productive replacement of the athematic root stem (cf. **mer-* → **mer-s-* > *meṙ-ay* 'died') or result from the inner-Armenian analogy to the oppositional transitive sigmatic stems of the **n(e)u*-class. The elimination of the lengthened grade from the active voice of the sigmatic aorist perhaps also happened independently in Proto-Greek and Proto-Armenian, where Osthoff's law did not operate.

The significance of the lexical match increases when one observes a semantic change that sets a pair of cognates apart from other cognates. This type of isogloss can be illustrated by Gk. ἄρνυμαι and Arm. *aṙnum*, which go back to a lexicalised reflexive/passive alternation of the underlying extended transitive verb that can be reconstructed based on the Indo-Iranian cognates (see § 2.1.1.-1.1). Here may also belong the case of Gk. φαίνω 'make visible' and Arm. *banam* 'open' that can be explained by a shared nasal stem changing the argument structure of the underling intransitive PIE verb **b^{h}eh$_{2}$-* 'shine' (§ 2.4.1-2.2).

The case of Gk. κευθάνω and Arm. *suzanem* 'hide' is more complicated (§ 2.5.1-2.45). The root **ḱeud^{h}-* has a post-PIE **T...D^{h}* consonant structure and could be formed at any time after the split of core PIE. Given that it is attested only in Greek and Armenian, it may well have been formed in the common ancestor of these two branches. The suffixes *-ανε/ο-* and *-ane-* remained moderately productive in the respective branches, which decreases the significance of a lexico-morphological match between Gk. κευθάνω and Arm. *suzanem*. An independent formation of these two nasal stems can be envisaged, given that secondary *an-e/i-*stems were derived from roots in the full grade in Old Armenian (e.g. *lizanem*; § 2.5.1-3.9), and secondary ανε/ο-stems were derived from IPFV stems in Greek (e.g. ἴζω → ἱζάνω), which makes the derivation from the well attested κεύθω a pausible possibility. Altogether, the fact that secondary nasal stems were derived from only a very limited number of thematic stems in Ancient Greek increases the significance of the lexical match between Gk. κευθάνω and Arm. *suzanem*.

Cases, when a non-exclusive lexical match is accompanied by an exclusive match of productive morphological forms represent the least significant type of isogloss. Here belong cases such as Gk. aor. δίε and Arm. aor. *erkeay* 'became afraid' if from **dui-e/o-* (§ 2.6.1-1.1), Gk. aor. δέκτο 'received' and Arm. aor. *tesi* 'saw' (< *'perceived') (§ 2.5.1-2.47), Gk. aor. ἔπτατο 'flew' and Arm. *ənt'ac'ay* 'run' (? § 2.4.1-2.5), Gk. aor. ἀρόμην or ἠράμην 'gained' and Arm. *aṙi* 'took' (§ 2.1.1-1.1), Gk. aor. εἶσα 'made to sit' and Arm. aor. *hecay* 'saddled, rode' (given that the sigmatic stem lexicalised with the reflexive meaning derived from the underlying transitive verb in Proto-Armenian), Gk. aor. ἔπηξα 'fixed' and Arm. aor. *sp'acay* 'put on' (§ 2.5.1-2.43), Gk. aor. ἔπλησα, Skt. aor. *aprās*, and Arm. *lc'i* (if from **pleh$_{1}$-s-* and not **pleh$_{1}$-*; § 2.1.1-2.3), etc. The same holds true of the potential exclusive match

between OCS 1 sg. *-dĕxŭ* and Arm. *edi* (if the latter is to be derived from PIE **$d^{h}ēh_{1}$-s-*/*$d^{h}eh_{1}$-s-* and not from the root stem; § 2.3.1-1.2).

The least significant are matching roots, which can represent archaic continuants of the PIE lexical items. Thus, Arm. *hasanem* next to Gk. ἥκω may point to PIE **seh$_{1}$ḱ-* 'reach, arrive' that did not survive in other branches (§ 2.5.1-2.21). In the same way, an etymological match between Arm. *gercanem* 'shave' and Toch. B *wərk-* 'shear' does not prove a close affinity of the two branches (§ 2.5.1-3.6).

Although the aforementioned matches between Ancient Greek and Old Armenian are of unequal quality, they significantly outnumber exclusive isoglosses shared by Old Armenian with other ancient Indo-European languages. Some of the correspondances between the Old Armenian nasal verbs and nasal verbs of other branches must be considered as dubious. For example, *lizanem* 'lick' is, perhaps, an inner-Armenian derivative from the thematicised root stem **leiǵ^{h}-e/o-* and, as such, must be compared to Gk. λείχω rather than to Lat. *lingō* and PGrm. **luk(k)ōn* (§ 2.5.1-3.9). Similarly, Lith. *jauk-ìn-ti* 'tame' (next to *jù-n-kti* 'get used to') can hardly be directly compared to Arm. *us-an-im* 'learn' (§ 2.5.1-2.50).

How much of the Greek-Armenian isoglosses could develop due to language contact and how much are inherited from the exclusive ancestor of the two branches is impossible to establish. However, in order to disprove the hypothesis of the Greek-Armenian subgroup of the language family one has to find, in particular, decisive arguments against the above-mentioned structural similarities between the Greek and Armenian nasal classes and embedded lexical matches.