

Notes on some Pre-Greek words in relation to Euskaro-Caucasian (North Caucasian + Basque)

A “Pre-Greek” substratum underlying the Indo-European Greek language has been suspected for a long time. There is no reason to suppose that there was only one “Pre-Greek” language; the region where Greek was and is spoken may have been multilingual, with languages of diverse origins. In the following study a limited number of etyma are examined that seem to bear witness to a widespread Euskaro-Caucasian language (or language family) associated with the spread of agriculture out of Anatolia. Greek words like ἀκαοί ‘mite’, μαστός ‘breast, teat’, β/μύσταξ ‘upper lip, mustache’, ξύλον ‘wood, timber’, and ψῦχή ‘breath’ are basic and not likely to be cultural loans, and could reflect genuine relics of a Euskaro-Caucasian Pre-Greek language. The examples discussed here are probably part of a much larger subset that a thorough study of Furnée’s and Beekes’ total list of “Pre-Greek” words might yield.

Keywords: Basque language; North Caucasian languages; Euskaro-Caucasian hypothesis; Pre-Greek language; linguistic substrates.

A “Pre-Greek” substratum underlying the Indo-European Greek language has been suspected for a long time. Recently Beekes (2010: xiv) reiterated his rejection of the ‘Pelasgian’ theory (of an earlier Indo-European substratum underlying Greek) and preferred Furnée’s (1972) “elaboration of Kuiper’s 1956 study on Greek substrate words, which opened a new chapter in the research of the field.” Beekes resumed that “Furnée’s book met with fierce criticism and was largely neglected. In my view, this was a major mistake in Greek scholarship.” In his 2010 dictionary Beekes devotes ample attention to Pre-Greek, but the “comparison with Basque or Caucasian languages has not been considered in this dictionary, as this is not my [Beekes’] competence; it is likely that there are such connections, but this must be left to other scholars” (Beekes 2010: xv).

One of the current writers had an early exposure to this topic in Nikolaev’s (1985) “North Caucasian loanwords in Hittite and Ancient Greek” (in Russian). According to a current Moscow colleague, “Ancient Greek dialects possess a number of North Caucasian loanwords, see Николаев, 1985 (some [of] Nikolaev’s connections are highly questionable, but some seem probative)” (Kassian 2010: 404).

It seems that there is no reason to suppose that there was only one “Pre-Greek” language, and that the region where Greek was and is spoken may have been multilingual, with languages of diverse origins. Georgiev (1937, 1941) proposed a Pre-Greek language that was Indo-European of a *satəm* type, with *Lautverschiebung*, and close to Thracian. At present Mihaylova (e.g. 2017) holds firmly with Georgiev’s model. Another hypothesis is that of Eric Pratt Hamp (1983, 1985, 1989a, 1989b), also proposing an IE Pre-Greek language with *Lautverschiebung* and *Lex Grassmann*, but of a *centum* type (e.g., πύργος ‘tower’). Besides the possible IE sources and the Euskaro-Caucasian language proposed here, some of the Pre-Greek words have other, non-IE origins: Semitic or Hurrian are primary candidates.¹ The time span is so

¹ Thanks to notes from V. Blažek (p.c. 09-06-2020).

long that it is probable that there were many influences on the formation of the Greek language, which will never be fully disentangled.

In the following study a limited number of etyma are examined that seem to bear witness to a widespread Euskaro-Caucasian language (or language family) associated with the spread of agriculture out of Anatolia (Ehret 2015: 90; BCR 453–460; Bengtson 2017b).² Some of the examples coincide, more or less, with Nikolaev’s, as indicated. In general, these examples have been selected so that (a) the Greek words are endorsed as ‘Pre-Greek’ (or probably non-Indo-European) by Beekes, (b) there are putative North Caucasian cognates (updated to conform with NCED, published almost a decade later than Nikolaev 1985), and/or (c) there exist putative Basque cognates (most of them as cited in BCR).

As a preface to this study a disclaimer should be issued, that the following list of putative substratal words is preliminary, and it is not expected that all of the examples will eventually prove to be substrate words. All readers are invited to put forth alternative explanations, if these can be found.³

ἄκαοί ‘mite’ / **κόοις** ‘bug, bedbug, *Cimex lectularius*’: “I would rather think that **κόοις** is cognate [with **ἄκαοί**], as a substrate word, with prothetic vowel and *α/ο* interchange” (Beekes 49: 754). | **North Caucasian**: Avar *k’:arā* ‘mosquito’, Andi *k’:ara*, Tindi *k’:ara*, Bagwali *č’:ara* id., Karata *k’:ara* ‘gadfly’, Chamali *c’:ara* id., Akhwakh *k’:ara* ‘ant, bug’, etc.; Bezhta *kälä* ‘mosquito’, Hunzib *kelo* id.; Chechen *gora* ‘gadfly’, Ingush *gor* id. < PEC * (*ḳārā* ~ **ḳārā*) (NCED 719). | **Basque** **kaia*-/**karkar*:- (G) *karrakaldo* ‘beetle’, *karkarraldo*, *karkaraldo*, *kakalarro*, (BN) *karkamalo*, (B, G, AN) *kakalarro*, (B) *kakarraldo*, *karkaraldo*, (G, AN) *kakalerdo*, etc.; obviously many expressive changes have occurred. § Contrary to the note about **ἄκαοί** being substrate and cognate with **κόοις**, Beekes’ lemma on the latter word claims **κόοις** is “identical with Ru. *kor*’ [f.] ‘moth’, and traditionally analyzed as an old verbal noun from *(s)*ker*- ‘shave, split, cut’ seen in ... *κείωω* etc.” From a Sino-Caucasian perspective, cf. also Burushaski **kharū* ‘louse’, Tibeto-Burman **k(h)r[ā]-η* ‘mosquito’ (SCG 119–20).

ἄλωή ‘threshing floor, garden’ (Iliad), ‘halo’ (around sun and moon) ...; also ‘disk’ of the sun or moon, or of a shield; **ἄλοάω**, **ἄλοιάω** ‘to thresh, crush’ (Iliad); etymology unknown (Beekes 78). | **North Caucasian**: Tindi =*elī*- ‘to thresh’; Bezhta =*ol*-; Batsbi *arl*-, Chechen *ār*-, ‘to thresh’, *ēra* ‘threshing-floor; grain lying upon it’, Ingush *ard*- ‘to thresh’; Archi *iλ* (ač:as) ‘to thresh’, *iλ* = *itł* ‘threshing; grain prepared for threshing’; (with many derivatives) Archi *λorom* = *tłorom* ‘threshing board’;⁴ Avar *lol* ‘threshing board’, Andi *loli* ‘threshing; threshing-floor’, Tindi *rali* ‘grain ready for threshing’, Karata *lale* ‘threshing’; Tsezi *reṭa*-y ‘threshing’, Hinukh *reṭa*, id., etc. < PEC *=*ṼrLV*

² “I think the ancestors of the Basque people were the first European farmers, bringing agriculture from Asia Minor. The first wave went along the north Mediterranean coast and I would seek its traces in Greece and Italy, plus adjacent islands. The northernmost part of this wave was perhaps the Alpine region, where the tribal languages Rhaetic and Camunic were located, probably related with Etruscan. Till the present time there are traces of Basque-like toponyms and dialect words in Sardinia (V. Blažek, p.c. 09/12–13/2015; also quoted in BCR 453–54, footnote 4).

³ Cf. the disclaimer stated by Witzel in his study of a Central Asian substrate: “Naturally, not all words given below will turn out be substrate words; any initial listing like the present one will be fraught with overcounting in favor of non-IE origins, and also with unintended errors.” (Witzel 2015: 149).

⁴ It may be more accurate (phonetically) to transcribe these Archi words as *ikʰ*, *kʰorom*, since the lateral affricates in that language have velarized onsets, i.e. more like [kʰ], [kʰʷ], [gʰ], and in some East Caucasian subgroups of eastern Dagestan (Lak, Dargwa, Khinalug, and most of Lezgian) the lateral affricates have become pure velars, [k], [kʰ], [g], etc.; e.g. Lezgi *rugun* ‘threshing board’ < **riλ:oma* (NCED 52–55).

‘to thresh’ (NCED 1031). | **Basque** **larain* ‘threshing floor’: (B, G, AN, L, Bzt, Z) *lar-rain* ‘threshing floor’, (AN) *larrein*, (G) *larran*, (B) *larren*, *larrin*, (A) *larrin*, (R) *larren*, (with expressive palatal) *llarren*, *llarne* id. (FHV 165, 195; A&T XIX 315, 316; EDB 262; OEH; BCR Q.18). § East Caucasian has numerous derivatives, only some of which are cited here. Archi *łorom* = *tłorom* ‘threshing board’ (which resembles Basque **larain* ‘threshing floor’) is said to be a derivative by metathesis < **ł:iroma* < Proto-Lezgian **mił:o-ra* (see NCED 1031–33). The PEC structure **=V̄rLV* is the result of a common transposition < Proto-Euskaro-Caucasian **rV̄LV* ~ **LVrV*. From a Sino-Caucasian perspective cf. Burushaski **daltá-n-* ‘to thresh’ < **rV̄LV-n-* (SCG 182).

ἄνθρωπος ‘man’ (Iliad); Mycenaean *a-to-ro-qa* /ant^hrōk^wos/. “As no IE explanation has been found, the word is probably of substrate origin” (Beekes 106).⁵ | **Basque**: **andere* ‘lady; young lady; woman; wife’, (AN, G, BN, Z) ‘doll’, (Z) ‘queen bee; concubine’; var. (Z) *andé* (modern *āndé* ‘dame, demoiselle’), (G, AN, L, BN, Z) *andre*, (AN-Larraun) *anre* ‘lady, young lady’, (A, B) *andra*, (B) *anra*, (B-arc) *andera* ‘lady; woman; doll’, (B) *andrako*, *andreko* ‘little woman; doll’; Aquitanian ANDERE (female name), ANDERE- (element in female names); ANDERE, ANDERENI, ANDEREXSO (male names); ANDOS-, ANDOSS- (element in personal names: ‘lord?’) (A&T III 865–67; OEH ANDERE, ANDRAKO; EDB 93). § Hugo Schuchardt, as reported by A&T, believed the original meaning was ‘young woman’ (‘mujer joven’). Etymologists frequently mention Celtic parallels, such as Middle Irish *aínder*, *aíndir* ‘young woman’, Scottish Gaelic *aínnir* ‘virgin’, Welsh *anner* ‘heifer’, *enderig* ‘bull, ox’ < Old Welsh *enderic* ‘steer’, Breton *ounner*, *onner* ‘heifer’, etc. Michelena, agreeing with Tovar, remarks that the Celtic word (reconstructed as **andera*) is not Indo-European but taken from the Iberian languages, that is, that Basque *andere* does not represent a Celtic loan, but rather the opposite (OEH).⁶ Vennemann (1998) has compared Greek **ἄνθρωπος** with Basque *andere*, also bringing in other Greek words and names with the components *ανδρα*, *ανδρο-*, and *ανθρ-* (see further below about **σαλαμάνδρα**). Vennemann also cites possible substratal relics in Romance and Germanic: Old French *andre* ‘woman’, French argot *andrimelle* ‘woman or girl’, Occitan *andra*, *landra* ‘woman, prostitute’, Bolognese *landra* ‘slut’, etc. (some forms appear to come from *la andra*, incorporating the article).⁷ As to a possible alternation between Greek *ανδρ-* and *ανθρ-*, Beekes (p. xxiii) mentions that Furnée “found that the stops show variation between voiced, voiceless and aspirated, so that there presumably was no phonemic distinction between voice and aspiration in the [Pre-Greek] language.” Western Basque *andrako*, *andreko* ‘little woman; doll’, with the diminutive suffix *-ko*, is a rather close formal match to Mycenaean *a-to-ro-qa* /ant^hrōk^wos/ (see below about suffixes).

⁵ But cf. Garnier (2008): “... an inherited PIE compound **ǵd^h-r-e-h₃k^w-ó-* («directed downward», whence «earthling, earthman, earthwoman».)”

⁶ “pero seguramente tiene más razón Pokorny al suponer que esta palabra en céltico no es indoeuropea sino tomada de las lenguas ibéricas, es decir, que el vascuence aquí no representa un préstamo céltico, sino más bien lo contrario” (quoting Tovar).

⁷ Vennemann cites loans from Romance to Germanic in which the semantic link becomes ever more attenuated, e.g. Middle High German *landern*, *lendern* ‘to walk about idle’, etc.; see Modern German *schlendern* ‘to stroll, wander, amble, saunter, meander’ – seems to be related (in Pfeifer 1997: 1211–1212 a not very convincing solution). *Sch-* in German often marks a negative connotation. *Landern*, *lendern*, etc., may be related to German *Land* ‘country, countryside, land, ground’, which only has cognates in Germanic, Celtic, Slavic, and has been connected with a hypothetical IE **lendh-* ‘free land, heather, steppe’, Pfeifer 1997: 762–763.

δοκός ‘bearing beam’; **δόκανα** ‘name of two upright beams constructed with a cross-beam’ “Benveniste [1929] thinks that *δοκός* and *δόκανα* are PreGreek” (Beekes 345). | **Basque** **tako*, **tak-et*: (B, G, AN) *taket* ‘stake, post’, (B, AN) *taketa* ‘stake, stick, rod’, (B) *tako* ‘circular piece of wood’, (B-Markina) ‘piece’, (c) ‘wedge, block, chock, stopper’ (OEH; BCR Q.55). | **North Caucasian**: Adyge *tāq:a* ‘stump, block’, Kabardian *dāq:a* id.; Chechen *duq’ū* ‘log, beam’; Dargwa *duk’i* ‘log, beam’; Tabasaran *duq’an* ‘pole, small beam’, etc. < PNC **dwij(w)Ṽ* ‘log, stump’ (NCED 408). § Nikolaev 67, no. 10. Cf. also Bulgarian *tok* ‘a long board that is dragged on the ground to smoothen it; a four-meter long board on which a man steps and it is dragged by oxen on the plowed fields to crush the ground, thick board’. BER 8, 99 links it to *tok¹*, which needs to be separated from Slavic *takv* ‘current, flow, stream’ (acc. to Bernard 1982: 276); this would be another Balkan manifestation of the Euskaro-Caucasian substratum (see also **καλιᾶ**, **καλύβη** ~ Bulgarian *koliba*, below). From a Sino-Caucasian perspective, cf. Burushaski **dáko* ‘stick, post’ (SCG 44). The Basque word is probably the source of Spanish *taco*.⁸

ζέφυρος ‘west wind’; personified in the Iliad; Mycenaean *ze-pu2-ro*; Beekes wavers between a derivation from IE **h₃iebh-* ‘futuere’ and “... Pre-Greek, with PG **a* turning up as *ε* after the palatal **dʲ*?” (Beekes 499). | **North Caucasian**: Andi *sibiru* ‘autumn’, Akhwakh *c:ōro* ‘autumn’ / *c:ibero* ‘winter’,⁹ Tindi *c:ibar* ‘winter’, Karata *c:ibero* id.; Tsezi *sebi* ‘autumn’, Hunzib *sibər* id.; Lezgi *zul* ‘autumn’, Tabasaran *čul*, Tsakhur *cuwul* / *ciwul* id., Udi *ž’obul* ‘spring (season)’;¹⁰ Khinalug *cuwa-ž* ‘autumn’; Batsbi *st’abo* ‘autumn’, (with metathesis) Chechen *bǰästē* ‘spring’; Abkhaz *á-ʒən* ‘winter’, Abaza *ʒnə* ‘autumn’ (< **ʒə-nə*) < PNC **čōjwīlhV* ‘autumn, winter (rainy season)’ (NCED 327). § Nikolaev (68, no. 13) compared Greek and NC, as the former a loan from the latter. It is hard not to think of other words like Russian север /*séver*/ ‘north’, etc., and in fact Nikolaev mentions PIE **kēiwerō-* (his transcription) ‘winter, north’ as a loan from PNC to PIE. A similar view was taken by S.A. Starostin (1988, no. 5.10), citing Latin *caurus* ‘north wind’;¹¹ Lithuanian *šiáurė* ‘north’, *šiaurỹs* ‘north wind’; Slavic **sěverb* ‘north’; Old High German *skūr* ‘Ungewitter’ [English *shower*, etc.],¹² but not Greek ζέφυρος. Derksen (2008: 448–449) links Slavic *sěverb* ‘North’ to an IE **k₁eh₁uer-o-*, and to Latin *caurus* ‘north-western wind’ (< **k₁eh₁uer-o-*). Discussion in Bezlaj (III, 231); Snoj (2003: 652) sees an unexpected root, linked to PIE *(*s*)*k’éH₂ero-*. Martirosyan (2021) adds PIE **k₁eh₁uer-* > Arm. *sir* ‘cold wind’ (with an unclear etymology) and links it to the Slavic and Latin word (see above). Derivation from IE **h₃iebh-* ‘futuere’ (cited by Beekes) seems semantically unconvincing. Since all the words cited here are European, they could alternatively be interpreted as independent substratal loans from various Euskaro-Caucasian dialects.

⁸ ‘Thick and short piece of wood or other material, and generally cylindrical or rectangular, for various uses; plug (small, short and elongated piece, usually made of plastic, wood or metal, which is inserted into a hole); cue (for billiards),’ etc.

⁹ The “relation [of Akhwakh *c:ōro* ‘autumn’] to *c:ibero* ‘winter’ is not quite clear: perhaps old interdialectal loans, which gave rise to an etymological doublet?” (NCED).

¹⁰ Transcribed as *ž’obul* in NCED (the *paločka*, or ‘baton’ /*l*/ is not a vowel but is a conventional symbol among Russian Caucasologists that denotes pharyngealization of the preceding consonant or vowel); Klimov & Xalilov (2003: 280) transcribe the Udi word as *žž’obul* ‘вечна’.

¹¹ De Vaan (2008: 100) regards Latin *caurus* and the Balto-Slavic words as IE cognates (< **k₁h₁u-er-o-*), but excludes the Germanic words (and Armenian *c’owrt* ‘cold’).

¹² Kroonen (2013: 451), however, derives the Germanic words from PIE **skeh₁-* ‘shade, shadow’ (Greek *σκιά*, etc.) and separates them from the Latin, Baltic and Slavic words.

ἰκτίν ~ ἰκτίνος ‘kite’ (bird of prey) (Beekes 585–86) | **Basque** **saie* ‘vulture, eagle’: (B, G, BN, Z) *sai* ‘vulture’, (B-Gernika) *zai* id.; (B-Orozko) /*śái*/ ‘eagle’ (EHHA, map 130); also ‘eagle’ per Voltaire (northern Basque, ca. 1620) (OEH); *saie* is used to denote ‘ostrich’ in Uriarte’s Bible, Lev. 11:16 (1859, Gipuzkoan dialect) (BCR B.13). | **North Caucasian**: Tsezi *ce(y)* ‘eagle, vulture’, Hinukh *coy* ‘eagle’, Bezhta *cuha* id.; Chamali *s’ũy* ‘eagle’, Tindi *c:ũ*, Karata *c’:ũyi*, Avar *c’:um* ~ *c’:un* id.; Andi *c’:un* ‘eagle, vulture’, Botlikh *c’:ũzi*, Godoberi *c:ũzi* id.; Khinalug *c’im-ir* ‘small bird, sparrow’ < PEC **çwäm?V* ‘eagle’ (NCED 370). § Beekes also cites Armenian *c’in* ‘kite’; Old Indic *śyená-* ‘eagle, falcon’, Avestan *saēna-* ‘name of a big bird of prey’ are “rather deviant” (unclear what this means), and regards the Greek word as of IE origin (< **t̥kiH-in-*). Witzel (2015: 167, no. 293) however cites **caina* (> *saēna-*, *śyená-*) among examples of a Central Asian substrate in Old Iranian. Nikolaev (68, no. 14) cited Greek ἰκτίν as a loan from PEC, along with Hittite *ḫaštapi-* ‘oracular bird’ (p. 61, no. 6); Armenian *c’in* ‘kite’ is regarded as an independent loan from North Caucasian. Bouda (1948) compared Basque *sai*, *sae* and Avar *c’:um*. On the phonetics between Basque **saie* and PEC **çwäm?V*, the loss of a nasal before a laryngeal is recurrent in Basque (and convergently in some NC languages), e.g. Basque *(*e=*)*kē* ‘smoke’ = PNC **ḫwĩnhV* ‘smoke’ (Avar *k’:uy*, Bagwali *k’:ũy*, etc.: NCED 738; BCR F.2); Basque **sihi* ‘wedge, skewer, spit’ = PNC **çānHV* ‘arrow, bow’ (Bagwali *c’i* ‘arrow’: NCED 358; BCR Q.42).¹³ The phonetic link between Greek ἰκτίν and PEC **çwäm?V* (for Greek -*v* cf. Andi *c’:un*, etc.) is not as clear; the initial *i-* could correspond to Basque fossilized class prefixes, as in Basque **e=tanha* / **e=rhala* ‘swallow, swift’ (bird) (BCR B.21) or **i=tain* ‘tick’ (BCR B.41); see below under **Morphology: Fossilized class (gender) markers**. The Greek cluster -*κτ-* may be a rare example of Pre-Greek **-kt-* = the PNC/PEC tense affricate **ç*, though more examples would strengthen the case. (Cf., perhaps, Greek ἰκτίς, -ιδος ‘marten’ [Beekes 2010: 586 “no etymology”] if it is related to PNC **çĔrcV* ‘marten, weasel’ > Adyghe *cəza* ‘marten’, etc. [NCED 360]).

καλιᾶ ‘wooden dwelling, hut, barn, granary, bird’s nest’. “Etymological connection with ... καλύπτω [‘to cover’], etc. is extremely doubtful” (Beekes 624); (probable derivatives) καλύβη ‘hut, cabin’; ‘bridal bower’; ‘sleeping tent’; κόλυβος ‘farmstead’ (Hesychius); variant κολυβός: “The variant κολυβός ... shows that the word is Pre-Greek” (Beekes 628). | **Basque** **o=ketu*: (B, G) *okellu* ‘stable, corral’, (B) *ukullu* id., (B) *okolo*, *okolu*, *oko(i)llu* ‘corner’, (G) *okolu* ‘yard’, (BN-Amikuse, Z) *okholü* id., (G) *okullu*, *okollu*, *ikullu* ‘hall’ (FHV 83; EDB 307; OEH; BCR: Q.5). The oldest attestation is {*oquelua*} = /*okelua*/ ‘rincón [corner, nook]’ (with definite article -*a*) in Landucci’s (1958) dictionary. | **North Caucasian**: Dargwic (Akusha, Urakhi) *qali* ‘house, room’, Akusha *qal-č* ‘roof’; Tabasaran, Agul, Rutul *χal* ‘house’, Archi *χal* ‘nest’, *χali* ‘family’ (< *‘household’), Kryz, Budukh *χal* ‘roof’; Avar *hor* ‘mow, hayloft, shed’, etc. < PEC **qālV* ‘house, hut’ (NCED 889).¹⁴ § Nikolaev (69, no. 16) proposed Greek καλιᾶ as a loan from PEC **qālV*.

¹³ Trombetti (1925: 142, no. 289) cites Basque *sahi* ‘avvoltoio’, with internal -*h-*. We have not been able to confirm this form in any other source.

¹⁴ This EC word is not to be confused with another that is quite similar, phonetically and semantically: Lak, Dargwa *qala*, Avar *q:ala*, Lezgi *qele* ‘fort, citadel, fortress, tower’, etc., from Turkic: cf. Azeri *gala* ‘fortress, lock’, Kumyk *qala* id., Old Turkish *qala* ‘fortified part of town’ (Džidalaev 1990: 94). Klimov & Xalilov (2003) clearly show the difference, with two separate lemmata, between: комната [‘room, chamber’] (p. 114): Dargwa *qali*, Tabasaran, Agul, Rutul *χal* ‘room’, also ‘house’ in all languages cited (no note about any borrowing) and крепость [‘fort, castle’] (p. 116): Avar, Andi, Karata (and several other NC languages) *qala*; (with glottals) Lezgi *q’ele*, Tsakhur (and 4 other Lezgian langs. + Khinalug) *q’ala*, etc. Note the oppositions such as Dargwa *qala* ‘fort’ vs. *qali* ‘room, house’; Ta-

The proposed derivation of Basque *okelu* from Latin *locellum* is highly questionable semantically; the specialized meanings of the Romance words derived from *locellum* ‘Sarg, Grab’ are quite distant from the Basque meanings (‘stable, corral, hall, yard’) and are instead associated with burial (e.g., Spanish *lucillo* ‘burial urn’: see Dicc; REW 5095); none of the Basque glosses have anything to do with burial. Basque **o=ketu* matches PEC **qǎlǎ* very well, phonetically and semantically: Basque **k* = PNC **q* and Basque **e* = PNC **ə* are regular.¹⁵ Basque **o=* is the fossilized class prefix (with an allomorph **u=*) seen also in, e.g., Basque **o=hol* ‘board, plank’ (Q.62) ~ Rutul *χil* ‘wooden trough’, etc. < PEC **χulV* (NCED 1078), Basque **u=pel* ‘barrel, cask’ (Q.29) ~ Tsezi *pelu* ‘pipe, reed pipe’, etc. < PEC **HpētV̄* ‘pipe; vein’ (NCED 601); and others (BCR 67–68). See also Bulgarian *koliba* ‘hut, cabin, shack’, etc., which is considered a very early loan from Greek, with many cognates in Balkan languages and perhaps beyond (BER 2, 555–556). The word is considered as stemming from an autochthonous Balkan population: see BER 2, 556, Skok 2, 124. (See also *δοκός* ~ Bulg. *tok*, above).

κόμη ‘hair’ of the head, also of the mane of a horse (Iliad), metaphoric: ‘foliage’, also of growth in general ... ‘tail of a comet’ ... “ETYM Not explained with certainty” (Beekes 743–44). | **North Caucasian:** Andi *q’:*āw ‘hairdo’, Avar, Tindi *q’:*ama ‘cock’s comb’, (with suffix) Bagwalal *q’:*am-ča ‘mane’; Dargwa *q’:*ama ‘hairdo; fringe, forelock’; Archi *q’:*am ‘forelock, mane’; Abkhaz a-χ^wá ‘hair’, Abaza *qwa* ‘hair, feather, wool’, etc. < PNC **ǵ(w)ǎmǰǰ* ‘plait, mane; hair’ (NCED 931). | ? **Basque** **kima* ‘mane (of horse); bristles (of swine)’: (G, AN) *kima*, (L, BN) *khima*, (AN, B) *kime*, (BN) *khinba*, (AN, BN, Z) *k(h)uma*, (Z) *gima*, etc. (OEH KIMA; FHV 296; A&T XVIII 1001; EDB 251). § Nikolaev (69–70, no. 23) compared Greek and NC. The Basque forms are rather difficult and questionable: (a) differences of the first vowel (PNC /ǎ/ : Basque /i/; /u/ in some Basque forms may be due to secondary assimilation before /m/); (b) the possibility of borrowing or influence from older Spanish *coma* ‘mane’ (now obsolete in favor of *crin*) < Latin *coma* < Greek; (c) the similar word (G) *zima*, (B, G) *txima* /čima/, (G) *txuma*, *txume*, etc. ‘greña / hair of a person or animal that is long and badly combed, tousled, or tangled’ (OEH TXIMA), which is often discussed in connection with **kima* and may be cross-contaminated with it (FHV 296). But *zima* and *txima*, at least, cannot be derived from Latin *coma*.

μάδρουα ~ άμάδρουα ~ βάδρουα ~ άδρουα (< *Ἰάδρουα /wádrua/) ‘plums, sloes’: Beekes (890) explains: “άμάδρουα did not originally mean ‘belonging to a tree’, as tree names in [άμα-] meant ‘blossoming at the same time as’. Rather, initial /h-/ was added by folk etymology to *ά-μάδρουα, a form with (non-IE) prothetic vowel. This form (ά)μάδρουα must be a Pre-Greek etymon. If βάδρουα is reliable, we also have variation μ/β, to which Ἰ may be added in order to explain ... άδρουα” (Beekes 22–23, 191, 890). | **Basque** **ma=dari* / **u=dari*: (A, AN, B, L, BN, Z) *madari* ‘pear’, (G, AN, L, BN) *udare*, (L, BN) *udari* ‘pear’; in some dialects ‘fruit’ (in general); other variants: *udara*, *udere*, *urdare*, *urdere* (OEH); in place names / family names *Madariaga*, *Maltzaga* ‘(place of) wild pear trees’ (FHV 528; A&T XX 651; EDB 354; OEH). § K. Bouda and J. Hubschmid men-

basaran, Agul *q:ala*, Rutul *q’ala* ‘fort’ vs. Tabasaran, Agul, Rutul *χal* ‘room, house’, etc., showing clearly that the etyma are distinct.

¹⁵ The correlations between Basque **l*, **t* and PNC **l*, **t* (where **t* in each family seems to have been a ‘dark’ or velar lateral) are not yet entirely clear (BCR 189–193). Possibly a secondary contrast **l* / **t* developed independently in each family.

tioned connections of Basque *madari* with Greek μάδρα, ἀμάδρα, and Latin *malva* ‘mallow’ (!) (as reported by A&T XX 651). The semantic difference ‘plum’ ~ ‘pear’ is unremarkable; cf. the North Caucasian etymology including Chamali *k’uk’ul* ‘apricot’, Andi *k’urk’ul* ‘plum, damson’, Lak *k:urk:ul* ‘a sort of pear’, etc. (NCED 728).

μάλκη ‘numbness from cold’ in hands and feet, plur. ‘chilblain’; **μαλκίω** ~ **μαλακίω** ‘to become numb with cold, freeze’; “A convincing explanation is still lacking ... The variant spelling *μαλακίω* may indicate that the word is Pre-Greek” (Beekes 898–99). | **Basque** **mal-gor* ‘numb (from cold)’: (BN) *malgor*, (Z) *mālgor* ‘entumecido’ / ‘engourdi par le froid’; (Sal) *malgor-tu* ‘to get moldy, go numb, dry up (a tree) completely’, *malgor* ‘hollow tree’ (A&T XX: 662; OEH); if the Basque word is a compound **mal-gor* in which **mal-* meant ‘cold’ (= PEC **mhēl̥χe* ‘cold’: see below) + **gor* ~ **gogor* ‘hard, cruel; deaf’ (cognate with PEC **gwērV* ‘stone’: NCED 467; BCR R.28).¹⁶ | **North Caucasian:** Tabasaran *merc’-uli* ‘cold’ (adj.), Lezgi *meq’i*, Rutul *miq’di*, Tsakhur *miq’ana* id.; Chechen *mil-la* ‘from cold, with cold’, Batsbi *mil-dar* ‘to get cold’; Avar *mart* ‘hoarfrost’, etc. < PEC **mhēl̥χe* ‘cold’ (NCED 808). § The Basque development **mal-gor* is parallel to Basque (BN, L, Z) *molkho* ‘cluster’ < **mardo* ‘cluster’ + **-ko* [diminutive/expressive suffix], in which **mardo* = PEC **mār[χ]o* ‘handful, armful’ (NCED 798; BCR L.9), i.e., the original resonant+lateral affricate cluster like **-lχ-* or **-rχ-* resolves as Basque /l/ when stem-final before a suffix or compounded morpheme. As to the loan correspondence of Greek /k/ in μάλκη to PEC **χ* in **mhēl̥χe*, it is parallel to the loan correspondence postulated by Starostin (1988, nos. 1.6, 1.7, 2.2), e.g. PIE **peku-* ‘livestock’ < PEC **bhāχwi* ‘small cattle’ (NCED 293; BCR N.20).

μαστός ~ (Doric) **μασδός** ~ **μασθός** ~ (Ionic, Epic) **μαζός** ‘teat, breast, woman’s breast; (metaphorically) hill, knoll’. “If the form is Pre-Greek, *μαζός* [mazdos] and *μαστός* differ in voice only (and aspiration in Hell. *μασθός*). Since voice and aspiration are not distinctive in PreGreek, all forms may go back to the same Pre-Greek word” (Beekes 912). | **Basque** **mośu*, **mus-ko*: (G) *musu* ‘nose, snout, face, lip, kiss, point, tip’, *musu-zulo* ‘nostril’, (B) *mosu* ‘kiss (on face); lip’; (with suffix) (G) *musu-ko* ‘muzzle’; ‘face, facial, pertaining to the lower half of the face’; (BN) *mos-ko* ‘beak’, (Z) *mūs-ko* id., (Z-Eskiula) *müskúa* ‘(the) nipple’, (Z-arc) *mus-ko* ‘sting’, (B-Oñate) *mus-ki* ‘snot, mucus’, (B, G) *mus-kil* id., (Sal) *titi-mus-ko* ‘nipple’, (AN-Jaurrieta) /*titamúšku*/ id. (AT XXI 936; EHHA; BCR A.17). | **North Caucasian:** Chechen, Ingush *muc’ar* ‘snout, muzzle, trunk’; Avar *móc’u* ‘teat, nipple; tip’; Akhwakh *mic’o* ‘teat, nipple’, Chamali *mis’*, Tindi, Godoberi *mic:i* id.; Inkhokwari *mucu* ‘rib’; Lak *mazu* ‘nipple (of animal)’; Dargwa: Chiragh *muc:e* ‘sting’; Lezgi *murz* ‘blade; edge, verge; narrow side of an object’, Tabasaran *murz* ‘edge, verge’ < PEC **mhārcū* ‘point, edge, protruding part’ (NCED 811). § Nikolaev (70, no. 29) proposed Greek *μαστός* as a loan from North Caucasian. For the correspondence of Greek *στ* = PNC **ç* /*c’*/ = Basque **ś* see also, below, Greek *σταφ-* = PEC **çib-* = Basque **śap-*. On the semantic side the Greek sense of ‘teat, nipple’ is matched in Avar and Andian idioms, and some local Basque dialects (Eskiula *müsko* [with a common diminutive suffix *-ko*]; in Salazar, Jaurrieta, compounded with *titi* or *tita*, a widespread so-called ‘nursery word’). The original meaning may have been ‘point, tip, edge’ (attested in NC and Basque), with multiple specializations (see below). As to a supposed Romance origin of Basque *musu*, typical is Trask’s (1997: 261,

¹⁶ For the semantic relationship of ‘deaf’ and ‘hard’ (~ PEC ‘stone’), cf. English *hard of hearing*, *stone deaf*; Spanish *duro de oído*, *sordo de piedra*, etc.

284) statement (based on those of earlier scholars) that “late Latin *MŪSU* ‘muzzle’ and its diminutives are widely represented in western Romance ... and it is difficult or impossible to trace the histories of the Basque words [*musu*, etc.] with confidence” (AT XXI 947). In fact “Proto-Romance” **mūsus* ‘snout’ (REW 5784) is only hypothetical; Meyer-Lübke considers the word, with wide attestation in the whole Mediterranean area, as “stemming from northern France” and being an “Urschöpfung,” which is not an etymological explanation; and Trask’s reference to “western Romance” is key: the lack of reflexes in Rumanian may indicate a Vasconic substratum word attested only in the West. But see also Bulgarian *mucūna* ‘snout’, thought to have been loaned, via Modern Greek *μουτσοῦνα* ‘mask, snout from an animal or human mouth, jaw, pig’s snout’ < Venetian *musona* id. (Leschber 2011: 78); further, Bulgarian *mucūna* > Aromanian *muṭună* ‘mask’ (BER 4, 359). Pellegrini (1999) considers the root **musu*, on which the Italian word *muso* ‘snout’ is based, to be an extremely old root, citing various Italian forms, always with the voiced *-s-*, and also makes references to non-European terms by pointing out that words that come from the root **musu-* (and **busu-*) were formed in many languages, not just Indo-European, meaning ‘mouth, lip, kiss, face’, etc. PEC **mhǎrcū* offers a potential cognate that is a phonetic match, and has reflexes with meanings precisely matching those of Basque, specifically:

Basque (G) *musu* ‘snout, nose’, etc., *musu*-ko ‘muzzle’ ~ Chechen, Ingush *muc*’-ar ‘snout, muzzle, trunk’

Basque (Sal) *titi-mus*-ko ‘nipple’, (Z) *müs*-ko id. ~ Avar *móc*:*u* ‘teat, nipple’, etc.; Lak *mazu* ‘nipple (of animal)’; Pre-Greek *μαστός* ~ *μασδός* ~ *μασθός* ~ *μαζός* ‘teat, breast’

Basque (G) *musu* ‘point, tip’, etc. ~ Avar *móc*:*u* ‘tip’, etc.; Tabasaran *murz* ‘edge, verge’

Basque (Z-arc) *mus*-ko ‘sting’ ~ Dargwa (Chiragh) *muc:e* ‘sting’

To sum up, cognation of Basque **mośu* with PEC **mhǎrcū* seems preferable to a derivation from a hypothetical Latin **mūsus*, which has no Indo-European antecedents.

μέσπιλον ‘medlar, medlar tree, *Mespilus germanica*’; also ‘hawthorn, *Crataegus (orientalis, oxyacantha)*’; “A foreign word of unknown origin. Probably Pre-Greek on account of the suffix *-ιλ-* ... Borrowed as Lat. *mespilum*” (Beekes 935–36). | **Basque** **mahać* ‘grape(s)’: (BN, L) *mahats* ‘grape(s)’, (Z) /*máhãć*/, (G-Bergara, Leintza) *magats*, (B, AN-Larraun) *maats*, (B-Ibarruri, Zeanuri) /*márac*/, (B, G, AN, Bzt, Sal, R) *mats*, (B-Aulestia) *matz* id., etc. (FHV 113; A&T XX 651; EDB 278; OEH; BCR P.17). | **North Caucasian**: Chechen *hamc* ‘medlar’, Ingush *hamis*-k id.; Avar *ŕeč* ‘apple’, Andi *inči*, Akhwakh, Karata *ŕeče* id.; Tsezi *heneš* ‘apple’; Lak *hiwč*; Dargwa *ŕinc* id.; Tabasaran *wič* ‘apple’, Archi *q̄nš* id.; Khinalug *mič* id.; Abkhaz *a-báć* ‘medlar’, Adyge *nāpca* id., etc. < PNC **ǰämčō* ‘apple; medlar’ (NCED 237). § The Basque-NC comparison would require metathesis such as [**maŕaćV*] > Basque **mahać*. Cf. the metathesis in Adyge *nāpca* ‘medlar’ < **banca* < **bVmc*:^wV (according to NCED); **banca* is remarkably similar to Michelena’s **banats* ‘grapes’ (FHV 113). If, as Beekes suggests, *-ιλ-* is the suffix of the Pre-Greek word, it leaves *μέσπ-* as the root, also requiring metathesis according to the PNC form; the /p/ is evocative of the /p/ in Adyge *nāpca* ‘medlar’, but these are at best just convergent developments. From a Sino-Caucasian perspective cf. Burushaski **[m]içil* ‘pomegranate’, with a suffix similar to the Pre-Greek suffix *-ιλ-* (SCG 267). Diakonoff & Starostin (1986: 24) suggest a Hurrian cognate, *χιν3-urə* ‘apple’ (cf. Dargwa *ŕinc*), borrowed in Armenian as *χιν3or*. The semantic change of Basque ‘grape’ ~ NC ‘medlar, apple’ ~ Burushaski ‘pomegranate’ should not be surprising: cf. Rumanian *poamă* ‘fruit, apple’, Moldovan *poamă* ‘grape’ ~ French *pomme* ‘apple, potato’, etc.

(Buck 5.71); and other ‘fruit’ etymologies (e.g. Greek μάδουα ‘plum, sloe’ ~ Basque **madari* ‘pear’, above). Nevertheless, this comparison remains difficult, if not implausible: the origin of the -π- in Greek is not well explained. Even if the Basque and NC terms are indeed related, the Greek form is far removed phonetically, and the etymology requires many assumptions.

μῖκρός ~ σμικρός ~ μικκός ~ μικός ‘small, short, little’: “The group of words has a familiar and colloquial aspect, as is shown by the variants μικός and geminated μικκός. The initial interchange in μικρός and (older) σμικρός is unexplained and (also) points to Pre-Greek origin” (Beekes 951–52). | **Basque** **miko*: (BN, L) *miko* ‘a little, a little bit, a pinch’, (AN-Irun, Bzt) *miki* id., (BN-Garazi, Sal) *mikitta* ‘a tiny bit’. This word is traditionally derived from Spanish *miga* ‘crumb’, etc. < Lat. *mīca*; and/or Greek μῖκρός, but these do not quite work phonetically (A&T XXI 926; OEH; REW 5559). | **North Caucasian**: Chamali *mik’u-b* ‘small’, *mač* ‘child’, Karata *mik’i-s*: ‘small’, *mak’e* ‘child’, Godoberi *mik’i-si* ‘small’, *mak’i* ‘child’; Dargwa Chiragh *nik’a-ze* ‘small’; Budukh *mik’e* ‘few; a little, small’, etc. < PEC **mikwV* ‘small, young one’ (NCED 821). § Note also Romanian *mic* ‘small’ (see *nimic* ‘nothing’ < Latin *nēmīca*: REW 5885), normally etymologically linked to a totally hypothetical Latin **miccus* or Latin *mīca* ‘Krümchen’ (REW 5559),¹⁷ which also mentions Basque *mika* and Romanian *mic* ‘klein’; the Romanian and South Italian forms could be based on Greek *mik(k)ós* – no further etymological explanation is given.

μύλλον [n.] ‘lip’ (Beekes 980). | **North Caucasian**: Dargwic **muḥuli* ‘mouth’ (Akusha *muḥli*, Chiragh *mūle*, Kadar, Mekeg, Urakhi, Kharbuk *muḥli*, Gapshima *mūḥli*, Kubachi *mūle*, Tsudakhar *muḥuli* ‘mouth’);¹⁸ (with metathesis) Avar *humér* ‘face’, Akhwakh *hama-ʒal* ‘face’ (< **hVmV-ǰili*) < PEC **mVhwVlī* / **hwVmVlī* (NCED 499).¹⁹ § “Frisk compares a Germanic group with a single consonant: OHG *mūla* [f.], MHG *mūl* [n.] ‘mouth, jaws’ ... It does not seem that μῦθος is connected, nor that the gemination is expressive. Perhaps an onomatopoeia” (Beekes 980). (Onomatopoeia - how?) Kroonen (2013: 374) notes that (possibly apart from μύλλον) the Germanic word is restricted to Germanic and could go back to quasi-PIE **muH-lo-*, if Bavarian *māuen* ‘to chew, rumigate’ is related.²⁰

μύσταξ ~ βύσταξ ‘upper lip, mustache’. “Both the variation μ-/β- and the variant μύττακες point to Pre-Greek origin” (Beekes 249, 986). | **Basque** **bisa-ř* ‘beard’: common Basque *bizar* (definite form *bizarra*), (Z) *bizar*, (AN) *bizer*, *pizer*, *pizar*, (B) *bisar*, *bixar* /bišar/, *bixer* id. (EHHA; BCR A.24). With the frequent fossilized plural ending *-ř (BCR 76–78), and analogous in form to Agul *muž-ur* ‘beard’ (see below). With expressive palatal: (Z) *bixar* /bišar/ ‘goatee’. | **North Caucasian**: Khwarshi *biša-n-de* ‘beard’, Hunzib *bilažba* id. (< **biža-l-ba*), Bezhta *biza-l-ba* ‘mustache’; Tindi *miža-tu* ‘beard’, Akhwakh *miže-tʰu*, Chamali *miza-tʰw*, Bagwali *miža-tʰw* id.; Tabasaran *muž-ri*, Agul *muž-ur*

¹⁷ De Vaan (2008: 378) prefers to separate *mīca* from (σ)μικρός, citing Nyman’s connection with “*micāre* ‘to quiver, dart, flash’, viz. as the ‘glittering’ particle.”

¹⁸ In NCED Dargwa is considered a single language with diverse dialects, but there seems to be a growing consensus that Dargwa is instead a small linguistic group, like Tsezian or Nakh; see **Dargwic** in *Glottolog*: <https://glottolog.org/resource/languoid/id/darg1242>. /u/ denotes a pharyngealized vowel; /h/ is a voiceless emphatic laryngeal [pharyngeal] fricative.

¹⁹ NCED cites **hwVmVlī* as the proto-form, but **mVhwVlī* is implicit in the Dargwic forms, with no indication in NCED which would be original.

²⁰ By “rumigate” *ruminate* must be intended.

‘beard’; Khinalug *mič:-äš* ‘beard’, etc. < PEC **bilǰV* ‘beard’ (NCED 303).²¹ § Nikolaev (71, no. 31) proposed that Greek *μύσταξ* ~ *βύσταξ* was a loan from PEC **bilčV* (later reconstructed as **bilǰV* in NCED). In some NC languages there are regular changes of the type **bilǰV* > **binǰ-* > **miǰ-* > **muǰ-*, etc. (cf. the Greek variants *μύσταξ* ~ *βύσταξ*). This etymon, via Greek, is the source of European words such as English *mustache*. In Baztanese Basque there is a strange blend, *mustratx* ‘mustache’ (apparently Basque **muštu-r* ‘snout’ [BCR A.19] + French *moustache*).

νέκταρ ‘nectar, drink of the gods’; **νεκτάριον** a plant name = *έλένιον* [Dioscorides Medicus], also name of a medicine and several eyesalves [Galenus]; “In contrast with *αμβροσία*, which is of related meaning ... *νέκταρ* does not have an ascertained etymology. ... [Furnée 1972]: 320 compares **νικάριον**, an eye-salve. If this is correct, the word may be Pre-Greek. He also points to other Pre-Greek words in *-αρ* (op.cit. 134⁷⁵)” (Beekes 2010: 1004–05). | **Basque** **nega-r* / **niga-r* ‘tears, weeping’ ~ **nega-l* ‘herpes, scurf’: (B, G, AN, L, Sal) *negar* ‘tears, weeping’, (Sal, B-dial.) *near*, (BN, L, Bzt, Azk) *nigar*, (Bzt) *niger*, (Z) *nīgar*, (R) *nexar* [nešar] id.; (B-Ubidea) *negar* ‘rennet’; (AN-dial., L) *negar* ‘sap, resin (of plants)’²² (A&T XXI 958; OEH NEGAR; BCR A.78). Cf. also (BN, L, Bzt) *negal* ‘skin rash, scurf, herpes’, (AN, BN, L, Z) *negel*, (L) *nagel* id., with a different suffix, **-l*, common in Basque body-part words, and the sense ‘herpes, rash’ is similar to ‘pus’ in the Nakh languages. | **North Caucasian:** Dargwic (Akusha, Chiragh) *nerb* ‘tear’, (Urakhi) *nirb*, (Kaitag) *nerb* ~ *merb*, (Tsudakhar) *nerb*, (Kubachi) *mēb^w* id.; Lezgi *nab^w*, Agul *neb^w*, Archi *nabq*, Udi *neb*; Lak *maq*; Avar *máfu*, Akhwakh *maq’a*; Bezhta *maq’o*, Khwarshi *muq’u* id.; Chechen *not’q’a* ‘pus’, Ingush *nod*, Batsbi *not’q* ‘pus’, *nat’q’-ayrī* ‘tears’, etc. < PEC [direct stem] **nēwǰū* ‘tear; pus’ / [oblique stem] **nīwǰǂ*- (NCED 848). § **Phonetics:** The languages compared here involve a segment NEK- or NIK- + a suffix *-(A)R*: (Pre-)Greek *νέκταρ*, *νικάρ-*, Basque **nega-r* / **niga-r*, Pre-Proto-Dargwic **neb^w-r*. The internal /r/ in Dargwic **nerb^w* is thought to come from a former plural suffix, thus **nerb^w* < **neb^w-r*, parallel in formation to Basque **nega-r*. “The medial *-r* in PD is obviously secondary, probably having penetrated there from an original plural form in **-r*, being later substituted in PD by the **-bi*-plural” (NCED). As to the puzzling *-κτ-* in (Pre-)Greek *νέκταρ* (lacking in the possible variant *νικάριον*) there could be a clue from the Proto-Nakh form **naǰqu* ‘pus’, which NCED explains as “an original plural form (**naǰqu* < **na(w)ǰ-tu* < **nēwǰ-dV*),” if a similar formation could be projected back to Euskaro-Caucasian. The vowel alternation NEK- or NIK- also occurs in all three language areas studied: (Pre-)Greek *νέκταρ* / *νικάρ-*, Basque **nega-r* / **niga-r*, and PEC **nēwǰū* / **nīwǰǂ*-. See below, under **Morphology: Ablaut** for a brief discussion of Euskaro-Caucasian ablaut. **Semantics:** The underlying concept is ‘secretion, exudation (of human and animal bodies, and of plants)’, a typologically common semantic realm:²³ in (Pre-)Greek, ‘nectar; medicine; eye-salve’; in Basque, ‘tear(s); rennet; sap, resin’; in

²¹ Due to multiple possibilities of vowel reconstruction based on the attested vowels, the NCED authors allow for the alternative first vowels **-ō-* or **-ä-* as possibilities (~ PEC **bōlǰV*, **bälǰV*). External comparison with Basque **bisa-r* ‘beard’ supports the PEC form **bilǰV*, with **-i-*.

²² OEH gives references to this meaning in dialectal records by Prince Louis Lucien Bonaparte (1813–1891), and the 19th-century unpublished dictionary by Maurice Harriet, who wrote “*Mahatsaren nigarra*, sève, larmes, pleurs de la vigne.” The 20th-century Basque writer Andima Ibiñagabeitia used the compound *arbola-negar* = ‘resina’.

²³ For semantic typology, cf. Lak *pic* ‘dew, sweat’; Avar *pic*: ‘resin’, Karata *bic’i*; Dargwa *penc* ‘resin’; Chechen *mutta* ‘juice, sap’ (Rus. сок); Ubykh *bzə* ‘water’, etc. < PNC **pīnčwǂ* ‘resin, juice’ (NCED 871); a putative Basque cognate is **pista* ‘fresh rheum; sleep sand (secretion from eyes)’ (BCR A.79). See also Basque **i=serdi* ‘sweat; sap (of trees)’ (BCR A.89), putatively cognate with PEC **cālǰwV* ‘blood; life’ (NCED 376).

East Caucasian, ‘tear(s); pus’. The actual substance of νέκταρ is not discussed by Beekes, but Roscher (1883) deemed both ambrosia and nectar to be forms of honey. The modern English sense of ‘the saccharine secretion of a plant, which attracts the insects or birds that pollinate the flower’ is quite recent, ca. 1545–55 CE (Flexner 2001: 1284).

ξύλον ~ (Attic) σύλον ~ σύλινος ‘wood, timber, firewood, tree, beam, stick; wooden block put around the neck, gallows; bench, table’; also as a measure of length. “It seems to correspond with Lith. *šūlas* ‘post, pole, stave’ < IE **ksulo-*, Ru. *šúlo* [n.] ‘garden-pole’, SCr. *šūlj* [m.] ‘block’ < IE **kseulo-* (?). Germanic words like OHG *sūl* [f.] ‘style, pole’, Go. *sauls* ‘pillar’ have a similar appearance. The relation between the Slav., Balt., and Gm. words has been amply discussed, but hardly explained. Was the word taken from a non-IE substrate language?” (Beekes 1037–38). | **North Caucasian:** Lezgi, Tabasaran *č’ul* ‘ceiling beam’, Agul *č’il* ‘thin log’, Tsakhur *č’il* ‘planking poles’; Avar *č’álu* ‘log, beam’; Lak *č’ula* ‘beam, girder, log’, etc. < PEC **čhwitū* (~ **čhwitū*) (NCED 388).²⁴ § S.A. Starostin (1988, no. 4.11) proposed PIE **kseul-* ‘beam, post, piece of wood’ as a loan from PEC **čhwitū* ‘beam’ (reconstructed then as **čiwotu*, six years before NCED was published). Pfeifer (1997: 1179) regards German *Säule* ‘pillar, pile’ as of “Herkunft ungewiss,” while Kroonen (2013: 491) deems its ancestor, Proto-Germanic **sūli*, “an *i*-stem of unknown origin” with an ablaut variant **sauli-* > Gothic *sauls* ‘pillar’.

ὄγχνη ~ ὄχνη ‘pear tree, *Pirus communis*; pear’. “[Furnée 1972] thinks the word is Pre-Greek, also on account of the by-form ὄχνη” (Beekes 1045). | **Basque** **ok-*(*arhan*) ‘plum, sloe’ (BCR P.16): (B, G-Etxarri-Aranaz, AN-Arakil) *ok-aran* ‘plum’, (AN-Olza) *ok-arin*, (AN-Ilzarbe) *uk-arain* id., (B) *txarri-ok-aran* ‘sloe’ (*txar-* /*čai*/ ‘bad, wild’; cf. Tabasaran *č’uru* ‘bad; wild [of plants]’, etc.: BCR R.5; NCED 555). A compound with **ar=han* ‘plum’ (BCR P.15). **ok-arhan* may originally have designated the cultivar plum (cf. Karata *ače*, Lak *aq* ‘garden’, etc.) as opposed to wild plums and sloes (AT XXI 975; OEH). (B) *txarri-ok-aran* ‘sloe’ reflects the fact that the meaning of **ok-* was forgotten before the element /*čai*/ ‘bad, wild’ was added. | **North Caucasian:** Andi *oči* ‘sweet cherry’, Akhwakh *aqi* ‘grape’, Tindi *ači*, Chamali *ač* id., Karata *ače* ‘garden’; Khwarshi, Inkhokwari *oh* ‘grape’; Dargwa Chiragh *aq* ‘fruit(s)’, Akusha, Urakhi *anq* ‘garden’; Lak *aq* ‘garden’; etc. < PEC **?əqV* ‘grape; fruit; orchard, vineyard’ (NCED 206); “...excessive -n- in [Proto-Dargwic **?anq*] (all other languages reveal absolutely no trace of any medial resonant); it may have penetrated from an oblique base like **?aq-nV-* (or, more probably be a result of contamination with another root: PEC **HēnqwV* ‘meadow, plot’ q.v.)” (NCED). § Nikolaev (71, no. 32) proposed the borrowing of Greek ὄγχνη / ὄχνη from PEC **?ē(N)qV*. If, as NCED suggests, there was a PEC “oblique base like **?aq-nV-*,” it could explain the Greek -v- in ὄγχνη. Compare also Latin *acinus* ‘grape or other berry’, a close phonetic match to the hypothetical PEC **?aq-nV-*, just mentioned. Latin “*acinus* is generally regarded a loanword from an unknown Mediterranean language; since the seeds of grapes are rather bitter, I see no reason to reject a derivation from the

²⁴ There is another very similar NC root: cf. Avar *цIул c’ul* ‘wood, firewood’, Andi *c’ul* ‘stick’, Akhwakh *č’uli*, Karata *c’ule* id., Tindi *c’uli* ‘(shepherd’s) staff’, Chamali *c’uli* ‘whip’, etc.; Hunzib *c’ulu* ‘arrow’, Bezhta *c’ulu-c’a* id., Tsezi *c’eru-c’a* ‘bow’, etc. < PEC **čwŋhV* (NCED 374). It is also tempting to think about Basque **sul* ‘wood, timber, lumber’: common Basque *zur*, in parts of Bizkaia and Navarre *zul*, Roncalese *zūr* (with a nasal vowel), etc. (BCR Q.51), compared in BCR with PEC **zwl[ē]h* ‘twig, rod, sheaf’ (Andi *žala* ‘branch, rod’, Avar *žul* ‘broom, besom’, Chamali *zala* ‘rod’, etc.; NCED 1103). However, for phonetic reasons, it seems best to keep these forms separate from Greek ξύλον, etc. PNC/PEC **ž-* and **ž-* correspond to Basque initial **s-* (BCR 151–52), while PNC **č-* and **č-* correspond to Basque initial **č-* (BCR 149–50).

root **ak-* ‘sharp’” (de Vaan 2008: 23). The vowels (*o* or *e*) are a little difficult. The change of PNC **e* > Andian **o* is regular, but this “**o* was preserved only in Andi, and merged with **a* in all other languages” (NCED 74, 108), thus Andi *oxi* but *a-* in the other Andian languages. As to Basque **o-*, the best match for PNC **?e-* = Basque **o-* seems to be PEC **?ěndū* ‘forehead’ (NCED 205), Andi *honno* ‘forehead’ = Basque **ondo*₂ ‘side; bottom; proximity, closeness’, Bizkaian *ad-ondo* ‘forehead (of cattle)’ (BCR I.4).²⁵ But there are also alternative solutions of Pre-Greek ὄγχνη. Blažek (2014: 45) mentions a different North Caucasian word that is semantically exact with the Greek word: Avar *géni* ‘pear’, Andi and Karata *hīhī*, etc. ‘pear’; (Tsezian): Bezhta and Gunzib *hī* ‘pear’; (**hī* ‘pear’ + **?ěš* ‘apple’ >) Tsezi *heneš* ‘apple’, Khwarshi *hīyoš* ‘apple’; (Proto-Nakh: **kam-maka*) > Chechen *kam-maka* ‘peach’, Ingush *kam-maka* ‘apricot’,²⁶ all reconstructed as Proto-East Caucasian **yōn?V* ‘pear’ (NCED 475). PEC **yōn?V* has, in turn, been compared with Basque **-han* in **ar-han* ‘plum’ (BCR P.15), as cited above. Blažek also cites some Semitic words meaning ‘fresh, unripe dates’: Akkadian *uḫinnum*, *uḫinnu(m)*, *uḫe(n)num* ‘fresh / unripened date(s)’ > Jewish Aramaic *ʔāhēnā* ‘nicht voll gereifte Datel’ (> Arabic *ʔahān* ‘bunch of green dates’), Syriac *hēnā* ‘an unripe fruit, especially fig’.

ὄαχis ‘spine, backbone, back; (mountain) ridge’. “However, since ƒṙāχ-/ƒṙāχ- cannot be derived from an IE form (the ablaut in the above reconstructions being impossible), it may instead be Pre-Greek” (Beekes 1277–78). | **Basque** **erēka* or **e=rēka* ‘gully, ravine’: (c) *erreka* ‘gully, ravine, riverbed, arroyo, creek, brook, stream’ (FHV 155; AT XI 571; EDB 177; BCR D.8); toponym *Erreka* (Bizkaia 1093 CE); sporadically written *herreka* or *errheka* (OEH). Romance forms like Gascon *rèc*, *arrèc* ‘brook, stream’ are probably from Vasconic; “Geographische Verbreitung und Bedeutung legen iberischen Ursprung nahe” (REW 7299). | **North Caucasian**: Tindi *rek:a* ‘gorge, ravine’, Karata *rik’:e* id., Godoberi *rek:i-n* ‘valley’; Bezhta *rūq’e-ro* ‘mountain slope’, Hinukh *ruqe-s* ‘plain’; Chechen *duq* ‘mountain ridge’; West Caucasian: Ubykh *q’wa* ‘cavern’, Adyge *q:ʷə-šha* ‘mountain’, Kabardian *q:ʷə-šha* ‘cavern’ < PNC **rīq̄wā* ‘mountain, rock; cave’ (NCED 953). § Nikolaev (71, no. 34) proposed Greek ὄαχis was a loan from PNC **rVq’q’V* (later revised to **rīq̄wā* in NCED). Note the vowels in Pre-Greek ὄαχis vs. PNC **rīq̄wā* – metathesis of vowels? The semantic glosses are diverse, from ‘ridge’ (Pre-Greek and Nakh) to ‘slope, plain, valley’ (NC), ‘ravine, gorge, gully’ (Tindi, Karata, Basque), and ‘cavern’ (Ubykh).

σαλαμάνδρα [f.] ‘salamander, kind of newt’; “Given its non-Indo-European structure, σαλαμάνδρα may be Pre-Greek. Cf. also on σαύρα [‘lizard’], which is probably Pre-Greek, as well” (Beekes 1303); σαλαμίνθη [f.] ‘spider’ (Byzantine); “The suffix *-ivθη* is clearly Pre-Greek, but further connections are unknown” (Beekes 1303). σαύρα [f.] ‘lizard’ ... also σαῦρος [m.] ‘lizard’. “Without etymology, like many other words for ‘lizard’. ... As the animal was not a part of the PIE world, the word must be of local, i.e. of Pre-Greek origin” (Beekes 1313). **Basque**: **suge* (or **súhe?*) ‘snake’: (c) *suge* [súye], (G) *suga* [súɣa], *suba* [súβa], (AN, B-Lekeitio, Ubidea, BN-Aldude, G-Iziar) *sube* [súβe], AN (Zugarramurdi) /súyé/ ‘snake’, /súheá/ ‘the snake’, (Z) *süge* [súye] id. (EHHA,

²⁵ (B) *ad-* seems to be a reduced form of **a=dar* ‘horn’ (BCR A.4). The problem of disentangling Basque **ondo*₁ ‘joint’ (A.77) from **ondo*₂ ‘side, beside’ (I.4; and from **honda-r* ‘sand’, etc. [D.18], and from reflexes of Latin *fundum*) is discussed in BCR (240–41).

²⁶ The Proto-Nakh form is a compound of **van* + **paka*, the second part of which comes from PNC **pīrq̄wA*, a word which means ‘apricot’, ‘peach’, ‘plum’, ‘fruit’ (in general) in individual NC languages (NCED 873).

map 114); (in compounds): **suge-lind(il)a*: (L–18th c.) *sugalindila*,²⁷ (B) *sugelinda*, ‘lizard’, (G) *sugalinda*, (B) *sugalindara*, (B, G) *sugelindara*, (B) *sugelandara*, (L) *sugekandela*, (L-Ainhoa) *subekandela*, (L, R) *sugekandera*, etc. (see **lindila* ‘lizard’, BCR B.25); **suhalendil(a)*: northern Basque *suhendil* ‘lagartija / lézard des murailles’ (Pouvreau, 17th c.);²⁸ (L-Murgerre) /*suháindola*/, (BN-Armendaritze) /*suyándoila*/, /*súyeandóil*/, /*suyándola*/ ‘lizard’; **suhangil(a)*: (BN-Gamarte) /*súaŋgila*/, (BN-Ezterenzubi) /*suyáingil*/, (BN-Baigorri) /*suβeáingil*/ ‘lizard’, etc. (EHHA, map 119); also *Sugaar*: a mythical serpent in Basque folklore (FHV 59; EDB 342). | **North Caucasian**: Lezgi *šarat’ul* ‘lizard’, Kryz *šurut* ‘scorpion’; Ingush *šulq’a* ‘lizard’, Chechen *šat’q’am* ‘a kind of lizard (медяница)’ (< **šult-ikV*); Dargwic (Akusha) *šuršut’an* ‘lizard’, (Kharbuk) *š:ilt’a* id.; Avar (Antsukh dialect) *š:ut* ‘lizard’ < PEC **šVIVtV* ‘lizard’ (NCED 987). § Since it is well known that words for small creeping creatures (e.g., reptiles, amphibians, arthropods) are fraught with many kinds of expressive and irregular phonetic changes (Bengtson 2017a: 283) it is quite difficult to unravel the origins of the etyma involved; so this lemma can be regarded as more exploratory than definitive. A quick look at the EHHA maps 115 and 119 shows that words for ‘salamander’ and ‘lizard’ are extremely varied from one region or even community to another. Michelena proposed that some of the numerous variants of Basque ‘lizard’ stem from *suge* ‘snake’ + *andere* / *andera* ‘lady’ (see above under *ἄνθρωπος*) and there likely was influence of other words (*sagu* ‘mouse’, *lindo* ‘clean, without stain’, *kandela* ‘candle’, and *süsker* [a Zuberoan word for ‘lizard’]) that would explain the appearance of some variants.²⁹ In BCR (no. B.25) it is postulated instead that there was Basque **lindila* (an element in some ‘lizard’ words), cognate with PEC **lwitlwiV* ‘lizard’ (NCED 763, attested in only three Daghestanian languages, Chamali *toʔol*, Lezgi *ftfil*, Rutul *xutxul*); the vowels match very well, as do the initial laterals, but in inlaut the Basque cluster *-nd- is matched with the strange PEC cluster *-tlw-, which, as far as we know, does not occur in any other PEC or PNC reconstruction; as expected, there must have been some expressive sound changes on both sides. This **lindila* later contaminated with **andere* ‘lady’ and the Romance word *kandela/-ra* ‘candle’ (apparently from the slim shapes of lizards and candles). Or perhaps **andere* is also original, since it occurs in other Basque animal names.³⁰ Regarding *σαλαμάνδρα*, besides Basque **andere* possibly corresponding to the -άνδρα part, some Basque lizard names have components that resemble -μάνδρα: (Bzt-Aniz, Lekaroz) *subemandil*, (L-Azkaine) *sumandil*, (L-Senpere) *subemandil*, (R) *sugemandila* ‘lizard’ (OEH SUGANDILA; EHHA map 119); and possibly the *σαλα-* component is related to PEC **šVIVtV* ‘lizard’, if *-tV is a suffix.³¹

²⁷ The form *sugalindila* is documented by the 18th century Lapurdian writer Haraneder, who recorded several archaic forms (OEH SUGANDILA).

²⁸ Sylvain Pouvreau (d. 1675) was a priest of French descent who in the course of his studies and jobs learned Latin, Hebrew, Spanish, and Basque, the last of these well enough to write several translations of religious tracts as well as an unpublished Basque-French dictionary (ca. 1650–1660), parts of which are preserved in the Bibliothèque Nationale de Paris. This dictionary is respected and widely quoted by Vasconists (Trask 1997: 48, 50–51).

²⁹ “De **suge* + *andere*/-a. Es probable que haya habido influencia de otras palabras (*sagu*, *lindo*, *kandela*/-ra, *süsker*...) que explicaría el aspecto de algunas variantes” (OEH SUGANDILA).

³⁰ (BN, L) *satandere* ‘weasel, marten’ (carnivora: mustelidae) (< **sag-t-andere*, ostensibly ‘mouse-lady’, but originally this *-andere*, before phonetic distortion, may have been related to Proto-Andian **handa-*, as in Tindi *handa-reḷ:u* ‘weasel’, etc.; cf. Basque **ergu-nedi* ‘weasel’, also possibly containing a distorted morph *-*nedi* related to Tindi *handa-*, Tsezi *madu-* (in *madu-tʔi* ‘weasel’), etc. (BCR B.10; NCED 239).

³¹ Cf. Bezhta *dibi-t’o* ‘drum’, *q’asq’a-t’o* ‘throat’; Khinalug *k’unk’u-t’a* ‘weasel, marten’; Basque *neska-to* ‘little girl’, (Bzt) *eltxe-to* ‘small pot’, *elixa-to* ‘small chapel’, etc. (BCR 55).

Pre-Greek **σαλα-** ~ Lezgi *šara-t'u-l* 'lizard'; Ingush *šul-q'a* id. < PEC *šVIV-*tV*
 Pre-Greek **-μάνδρα** ~ Basque *-mandil(a)* (in dialect words for 'lizard')

As to **σαλαμίνθη** 'spider', connections between names of reptiles, amphibians and arthropods is not uncommon: e.g., Basque (R) *arreuli* 'salamander', (Z) 'scorpion' (BCR B.26); Basque (G) *arrubi* 'salamander, scorpion' (BCR B.27), and Lezgi *šarat'ul* 'lizard', Kryz *šuruł* 'scorpion' (mentioned above). Another twist to these etymologies is the ancient belief that salamanders were associated with fire and immune to fire, so much so that several ancient dignitaries (the emperor of India, Pope Alexander III, Prester John) wore garments made of salamander skins, believing that they protected them from fire (Ashcroft 2000: 112–13). The species *Salamandra salamandra*, known as *Feuersalamander* in German (along with numerous dialectal designations) is widespread in Europe, south of the Baltic and North Seas and west of the Bosphorus. It may be notable that this association may have crept into some of the Basque designations of 'lizard', such as (L-Azkaine) *sumandil*, in which *su-* in the folk mind could be associated as much with Basque **šu* 'fire' (BCR F.1: cf. PNC oblique stem **čũy-* 'fire') as with **šuge* 'snake'. In a Sino-Caucasian context Basque **šuge* 'snake' may be linked with Yeniseian **c[ī]k* 'snake, fish' (BCR Z.13). On the other hand, Pre-Greek **σαύρα** [f.], **σαῦρος** [m.] 'lizard', if not related to Lezgi *šara-t'u-l*, etc., could have a Semitic origin: cf. Akkadian *šurārû*, *šurāru(m)*, (ἄπαξ) *šurīrû* 'lizard(s)' (CDA 341) < Semitic **šauru* 'lizard'.³²

σιρός ~ **σιρός** ~ **σειρός** 'pit or vessel for keeping corn, silo'. "Technical word without etymology. The variation between *σιρ-*, *σιρ-*, *σειρ-* is hard to explain from an IE point of view" (Beekes 1335). / **σῦριγξ**, **σῦριγγος** 'quill, flute, syrinx [shepherd's pipe]' (*Ill[iad]*); also of pipe-like objects, e.g. 'windpipe, blood-vessel, fistula' (medic., etc.), 'spear case' ... 'hole in the nave of a wheel' ..., 'subterranean passage' ... Arm[enian] *sring* 'flute, pipe' was probably taken from the same source. Borrowed as Skt. *suruṅgā* [f.] 'subterranean passage' (Beekes 1423–24). / **σωλήν** 'pipe, channel'; 'grooved tile', etc. < hypothetical **σωλος* or **σωλον*; "Etymology unclear; ... [Furnée] suggests that the word is Pre-Greek (giving other such words in *-ην*)" (Beekes 1439).³³ | **Basque** **sulho* 'hole, cave; (anatomical) tube': (BN, L) *zulho*, *zilho* 'hole, burrow', (B, G, AN) *zulo*, (B-Orozko) *zulu*, (AN-Goizueta) *zolo*, (B-Aulestia) *sulo*, (B, Sal, L-Ainhoa) *zilo*, *zillo*, (Z) *zilo*, *xilo*, (R) *xillo* /šilo/ id., (AN, BN, Z) *zilo-ka* 'cave', (AN-Lezaka, Bzt) *ur-zilo* 'cistern' ('water-hole'), etc.; generally, southwestern *zulo* / northeastern *zil(h)o*; (G) *zilo* "Silo, lugar subterráneo donde se guarda el trigo" [Larramendi, 18th c.]; (B-Vergara, Salinas) *silo* "Silo para conservar hierba fresca" (OEH SILO); in anatomical compounds: (G) *ipurt-zulo* 'anus', *eztar-zulo* 'pharynx', *musu-zulo* 'nostril', (Z) *südür-xilo* 'nostril', (B) *sama-zulo* 'gullet', etc. (FHV 77, 320; EDB 227, 342, 380; BCR I.12). | **North Caucasian**: Avar (Antsukh dialect) *šulu* 'pipe', Chamali na-*s:ul* 'tubular bone', Andi tom-*š:il*, Karata hani-*š:el* id., Tindi han-*š:al* 'arm (from hand to elbow)';³⁴ Tsezi *šilu* 'horn', Be-

³² Thanks to suggestions from V. Blažek (p.c. 11/04/2020). He is currently preparing a proposal that Greek *σαύρα* / *σαῦρος* were borrowed not directly from Akkadian but more likely from a Semitic language of an Amomite type, thanks to trade contacts between the Levant and Crete.

³³ The comparison with *σωλήν* is suggested by Giampaolo Tardivo (p.c. 11/22/2020). For *σιρός* Tardivo suggests a Semitic origin: Hebrew *sir* 'pot, vessel', Arabic *zir* 'a large jar'. But "Hebrew *sir* cannot correspond to Arabic *zir* which does correspond to [Egyptian] (Pyramid texts) *zwr* 'drinking vessel' ... likely one more [Egyptian] loan in Arabic (I've just published a paper on these loans [Militarev 2020]) (A. Yu. Militarev, p.c. 12/03/2020).

³⁴ The four Andian compounds come from **honi-š:VIV* 'marrow-pipe' (thus, 'tubular bone') or **tomV-š:VIV* ? 'sinew-tube' (thus, 'forearm').

zhta *šelo*, Hunzib, Inkhokwari *šelu*, Khwarshi *šeru* id.; Lezgi *sulu-r* ‘throat’,³⁵ Kryz *sil* ‘top (of boot)’, (with metathesis) Rutul *lis* ‘gullet’, etc. < PEC **šwōtV* ‘hollow tube’ (NCED 978). § At least from the few examples here, nothing decisive can be said about the development of liquids. Pre-Greek also has a high-front vowel (*i* ~ *ī* ~ *ei*) while some NC languages (Tsezi *šilu* ‘horn’, etc.) and Basque dialects (Z *zilo*, *xilo*) have developed *i*-vowels, alongside back-rounded vowels. Semantically, the meanings denoting tubular body parts are attested in NC (Chamali na-*s:ul* ‘tubular bone’; Tsezi *šilu* ‘horn’, etc.); Basque (G *eztar-zulo* ‘pharynx’, musu-*zulo* ‘nostril’, abo-*zulo* ‘mouth(-hole)’, etc.); and in Pre-Greek (σῶριγξ ‘windpipe, blood-vessel, fistula’). Specializations as ‘subterranean passage / cave’ and ‘pit or vessel for keeping corn, silo’ are attested in Basque and Pre-Greek. σωλήν ‘pipe, channel’ is very close to the semantics of Avar (dial.) *šulu* ‘pipe’. By one route or another, this etymon is the likely ultimate source of English *silo*, and related European words. Skeat (1882: 562) derives it from Spanish *silo* < Latin *sīrum* < Greek σῖρός, and this is still a commonly cited source. Though REW (7955) derives Spanish *silo*, Provençal *sil* and Galician *siro* from Greek σῖρός ‘unterirdische Getreidekammer’, the Real Academia (Dicc) declares the Spanish word as “de origen incógnito.” The web resource *Online Etymology Dictionary* has, in our opinion, a more reasonable theory, that “the Spanish word is from a pre-Roman Iberian language word represented by Basque *zilo*, *zulo* ‘dugout, cave or shelter for keeping grain’.” The entry quotes Barnhart & Steinmetz (1988): “The change from *r* to *l* in Spanish is abnormal and Greek *siros* was a rare foreign term peculiar to regions of Asia Minor and not likely to emerge in Castilian Spain.”³⁶ For the German word *Silo* the origin is unclear, according to Pfeifer (1997: 1292).

σταφυλή ‘bunch of grapes’; ‘grape’ [Iliad]; (metaphorically) ‘swollen uvula, uvula inflammation’. “The similarity with ἀσταφίς ‘dried grapes’ is probably not accidental, but the exact relation of the words is unknown. The group of words is Pre-Greek ... ἀσταφίς ~ ὄσταφίς ~ σταφίς ... ‘dried grapes, raisins’ [is a] typical substrate word, with prothetic vowel and variation *α/ο*–” (Beekes 155, 1391–92). | **Basque** **šapa-i* ‘blackberry-bramble, thicket’: (BN) *sapar* ‘thicket, bramble’, (BN-Amikuse, L-Bardos) *saphar* ‘hedge, fence’, (BN) *saparr-ondo* ‘thicket, bramble’; with expressive palatal /č/: (R) *txapar* ‘kermes oak’ (*Quercus coccifera*), ‘scrub, brush, undergrowth’, (Sal) *txaparro* ‘scrub of evergreen oak or holm oak’ (FHV 54, 296; EDB 258; BCR C.19). | **North Caucasian**: Avar *c’ibí-l* ‘grape’, Avar (Chadakolob) *c’ibí-l* ‘grape’; Rutul *c’ib* ‘juniper’, Tsakhur *c’ib* ‘juniper’, Lezgi *c’p’-az* ‘blackberry’ < PEC **čibV* ‘a kind of berry’ [better: ‘berry, plant with berries’] (NCED 367; a sparsely attested [Avar, Lezgian] isogloss.) § The comparison by Nikolaev (72, no. 37) was actually with Proto-Nakh-Daghestanian *[*c’c’*]VmbitV ‘виноград’/ ‘grapes, grapevine’ > Avar *c’ibí-l* ‘grape’ and Proto-Lezgian **t’umbul*. By the time the NCED was published, nine years after the 1985 article, these words had been resorted into two different etymologies, the one cited above and PNC **čūmhV* ‘kernel, stone (of fruit, nut); marrow’ (NCED 1004). The types of berries denoted in the above etymologies are diverse (juniper, blackberry, grape), so the oldest meaning may have been ‘plant with (some kind of) berries’. Such plants tend to be low-lying bushes with a tangle of spiny branches (blackberry, juniper), thus the se-

³⁵ Lezgi *sulur* ‘горло / throat’ is not discussed in NCED, but is cited in Klimov & Xalilov (2003: 71–72). Lezgi *sulur* fits this etymology phonetically (consistent with Proto-Lezgian **sol-* ~ **s:ol-*) and semantically: “the meanings ‘gullet, throat’ and ‘top of boot’ are sometimes interchangeable (cf., e.g. Lezg. *q:uχ* meaning both)” (NCED 979).

³⁶ <https://www.etymonline.com/>

mantic connection with Basque ‘bramble, thicket’. Avar ‘grape’ seems to be a secondary semantic development < ‘berry’. For the correspondence of Greek $\sigma\tau$ = PNC $*\zeta /c'/$ = Basque $*\acute{s}$ see also II: $\mu\alpha\sigma\tau$ - = PEC $*mh\acute{o}r\zeta$ - = Basque $*mo\acute{s}$ -; Basque $*a$ = PNC $*i$ is uncommon, but also occurs, e.g. in Basque $*sathui$ ‘quick, nimble, flexible’, etc. = PNC $*\acute{s}iV / *s\acute{i}V$ ‘light (of weight)’ (BCR R.42). Basque $*\acute{c}apa-r$ is the source of Spanish *chaparro* ‘scrub oak’ (Dicc) > American English *chaparral* and *chaps* (leather leggings).³⁷ Other Romance developments include Aragonese *chaparro* ‘scrub pine’; cf. Latin *sapinus* ‘fir’, of unclear (Celtic?) origin > French, Provençal *sapin*, Old Italian *zappino*, etc. (Hubschmid 1960: 40–41; REW 7592). Basque $*\acute{s}apa-r$ should of course be kept separate from some other superficially similar Basque words for ‘bramble’: $*lapa-r$, $*lahar$, and $*gapa-r$ (see BCR C.15, C.17, C.18), each of which has a distinct NC cognate; but clearly these have all become contaminated in the popular mind.

$\psi\bar{\upsilon}\chi\acute{\eta}$ ‘aspiration, breath, life, vitality, soul (of the deceased), spirit’; $\psi\bar{\upsilon}\chi\omega$ ‘to breathe, blow’ [‘I breathe, blow’]. “I do not find these suggestions [of IE etymologies] convincing. There is hardly any evidence for an IE root $*bhes$ - ‘to blow’ ... Therefore, the word is more probably of Pre-Greek origin” (Beekes 1672). | **Basque** $*bi=si$ (noun) ‘life; lifetime’, (adj.) ‘alive’: Common Basque *bizi* ‘alive, living, lively; life’, (B-Markina) *bixi* /*biši*/ (A&T VII 147; EDB 145; BCR A.87). | **North Caucasian**: Chechen, Ingush, Batsbi *sa* ‘soul’; oblique base $*si$ - (Chechen *si-na*-, Ingush *si-no*, Batsbi pl. *siy-š*.); III-class); Lak *si:h* ‘breath, vapor’ (III-class); Karata *si:uh-an*- ‘to get tired’; West Caucasian: PWC $*p\acute{\alpha}-\acute{s}wV$ > Ubykh $p=\acute{s}\acute{a}-\chi^w\acute{\alpha}$ - ‘to breathe’; Adyge, Kabardian $p=\acute{s}\acute{\alpha}-n$ ‘to get tired’. Abkhaz *a-ps-rá* ‘to die’, Abaza *ps-ra* id. < PNC $*\acute{s}iHwV$ ‘breath; to breathe’; with III-class prefix $*b=\acute{s}iHwV$ (NCED 961). § Nikolaev (72, no. 40) cites Greek $\psi\bar{\upsilon}\chi\acute{\eta}$ as a loan from North Caucasian, in which ψ /*ps*/ corresponds to /*pś*/, /*ps*/ in the West Caucasian forms, and χ /*k^h*/ to the PNC laryngeal $*H$ (Lak /*h*/). The Basque word is analyzed in BCR as the root $*=si$ (= PNC $*\acute{s}iHwV$) preceded by the fossilized class prefix $*bi=$ (= PNC $*b=/*w=$ III-class [inanimate] singular: note that the Nakh and Lak parallels cited above belong to the III-class). NCED suggests deriving PWC $*p\acute{\alpha}-\acute{s}wV$ from an earlier $*p\acute{\alpha}-\acute{s}\acute{\alpha}HwV$, which is exactly parallel in form with Basque $*bi=si$, and also provides a plausible antecedent to Greek $\psi\bar{\upsilon}\chi\acute{\eta}$ /*psūk^hē*/. “The semantic developments ‘to breathe’ > ‘get tired’ ... > ‘die’ are quite usual.” (NCED 961); cf. Russian *dušá* ‘mind, soul, spirit’ : *dušít* ‘to smother’; Greek $\epsilon\kappa\cdot\psi\bar{\upsilon}\chi\omega$ ‘to breathe one’s last; expire, lose consciousness, die’. It is tempting to suggest Latin *spīrō* ‘I breathe, blow; am alive, am inspired’, *spīritus* ‘breath, breathing; breeze, air; spirit’, *ex-spīrāre* ‘to breathe out, die’, etc., from Proto-Italic $*spīr/s-$ (i.e., $*spīr-$ or $*spīs-$, according to de Vaan 2008: 581), if there was a metathesis of $*psī-$ > $*spī-$. DeVaan only opines “Possibly an onomatopoeic formation imitating the sound of breathing. There are no direct [IE] cognates.”³⁸ Diakonoff & Starostin (1986: 36) thought there were cognates of PNC $*\acute{s}iHwV$ in Hurrian-Urartian: Hurrian *šey-iri* ‘alive’, *šey-ori* ‘fate’ or ‘life’, Urartian *šu/οχ-ori* / *šex-eri* ‘alive’.

³⁷ Other developments have penetrated world current events. The Mexican Spanish word *chapo* ‘persona de baja estatura’ (Dicc) < Basque (B) *txapar* ‘persona de pequeña estatura’ (OEH) is widely known as the nickname of drug trafficker Joaquín “El Chapo” Guzmán (now imprisoned in Colorado, USA).

³⁸ In his older dictionary Walde (1910: 731) cites Old Church Slavic *pišta*, *piskati* ‘pfeifen, flöten’, Sanskrit *picchorā* ‘Pfeife, Flöte’, and reflexes of Proto-Germanic $*fisan-$ ‘to blow; to fart’. In the etymological lemma for the latter word in Kroonen (2013: 142) Latin *spīr-* is also cross-referenced, along with Welsh *ffŷn* ‘breath’ (< $*spoi-n-eh_2-$). Kroonen speculates that “the PIE form of the verb may have been $*psēi-s-e-$,” with the first /*s*/ dropped in Germanic due to dissimilation. Again, PIE $*psēi-$ is close to the form of PNC $*(b=)siHwV$. and Basque $*bi=si$.

Phonology

Some sound correspondences have already been remarked upon. In the examples **μαστός** and **σταφυλή** we see the equation Pre-Greek *st-*, *-st-* = PNC **ɕ*/*c'*/ = Basque **ś*. In example III we have Pre-Greek *-st-* = PNC **-ɕ-* = Basque **-s-*. Both represent changes of the type TS > ST (or, less likely, ST > TS) which are reminiscent of shifts within North Caucasian (Nakh languages) and between North Caucasian and Basque. For the former, the authors of NCED remark that

Most difficult to explain are cases of [Proto-Nakh] reflecting PEC hissing (and hissing-hushing ...) affricates and fricatives as a *st (*st̥) cluster (both in initial and non-initial positions) ... probably as a result of distant palatalization) after or before a *j ... or following the resonant *l (NCED 47, 51).

Basque /*st*/, /*st̥*/ realizations coincide with Nakh /*st*/ or /*st'*/ in only a few cases:³⁹

Basque (B) *beaztun* ‘gall, bile’ (vs. [L-arc] *behazuñ*, etc. < **beha-sun* A.88) ~ Chechen *stim* ‘gall’ (PNC **cwǎymě* ‘gall, anger’: NCED 329)

Basque (R) *aizto* ‘knife’ (Q.11) ~ Chechen *sto* ‘chisel’, Ingush *osta*, Batsbi *st'o* id. (PNC **Hǎy3V̄* ‘chisel’: NCED 542)

Basque **aštun* ‘heavy’ (R.29) ~ Chechen, Ingush =*arst-* ‘to fatten, become fat’, Batsbi =*arst'*- id. (PNC *=*HrV̄yśĒ* ‘thick, dense, fat’: NCED 608)

This suggests that the conditions producing Basque /*st*/ clusters were at least slightly different from those underlying Nakh /*st*/ clusters. In putative Basque-NC cognates there seems to be a correlation between Basque /*st*/ or /*st̥*/ and PNC/PEC tense sibilants (**ś*, **ɕ*, **ɕ'*, **ɕ̥*):

Basque **e=stari* ‘throat’ (A.32) ~ PNC **ɕwĔri* / **riɕwĔ* ‘neck’ (Agul *s:ür* ‘gullet’: NCED 953)

Basque **hestu-n* ‘ring, link’ (Q.37) ~ PEC **HV̄ɕV* (Khwarshi *ocu* ‘ring, hoop; buckle’: NCED 612)

Basque **listo-* / **lišto-* ‘hornet, wasp’ (B.31) ~ PEC **łǎmɕV* (Akhwakh *łac':u* ‘ant; bug, bedbug’: NCED 766)

Basque **pista* ‘rheum, eye secretion’ (A.79) ~ PNC **pĩncwǎ* ‘resin, juice’ (Lak *pic* ‘dew, sweat’: NCED 871)

Basque **esti* ‘honey, sweet’ (if < **emsti*: P.21) ~ PEC **mǐzV* ‘sweet’ / **hwmiǐzū* ‘honey’ (Archi *ic'*: ‘sweet’ / *imc* ‘honey’: NCED 824)

With only two Pre-Greek examples, it is insufficient to demonstrate a firm correlation between its /*st*/ reflexes and Euskaro-Caucasian. However, it may be a tantalizing hint that more examples could be found with a concerted search.

Morphology

Fossilized class (gender) markers: Beekes and others have remarked on the variations of initials in cases such as **μάδρουα** ~ **άμάδρουα** ~ **βάδρουα** ~ **ǎδρουα** ‘plums, sloes’; we saw a similar alternation in Basque **ma=dari* / **u=dari* ‘pear’. There is a similar situation in **ἀκαρί** ‘mite’ / **κόρις** ‘bedbug’, about which Beekes remarked on the prothetic vowel as one of the signs of a Pre-Greek substrate word: “Pre-Greek had a prothetic vowel, e.g. **άσκάλαφος** [‘name of an unknown bird, perhaps an owl’] beside **κάλαφος**. In most cases, the vowel is **ά-**. The numbers

³⁹ Number designations after Basque forms (A.88, etc.) correspond to etymology numbers in BCR, where more complete information on each comparison may be found.

[according to Furnée 1972: 368ff.] are as follows: $\alpha \pm 90$, $o 10$, $\varepsilon 5$, $\iota 3$, $u 0$, $\eta 6$, $\alpha\iota 2$. Note that, generally speaking, α may interchange with o , ε , and $\alpha\iota$. Indeed, we have cases where prothetic o interchanges with α , and the same holds for ε ...” (Beekes xxiii). Yet another example is $\acute{\alpha}\sigma\tau\alpha\phi\acute{\iota}\varsigma \sim \acute{\omicron}\sigma\tau\alpha\phi\acute{\iota}\varsigma \sim \sigma\tau\alpha\phi\acute{\iota}\varsigma$ ‘dried grapes, raisins’, beside $\sigma\tau\alpha\phi\upsilon\lambda\acute{\eta}$ ‘bunch of grapes; grape’. With a possible prefix ι - we have $\acute{\iota}\text{-}\kappa\tau\acute{\iota}\nu \sim \acute{\iota}\text{-}\kappa\tau\acute{\iota}\nu\omicron\varsigma$ ‘kite’.

This brings to mind the list of seven “puzzles” that R.L. Trask thought Basque-Caucasian comparisons should help to solve. First on the list was a statement that “Pre-Basque clearly had an extraordinarily large proportion of lexical items beginning with a vowel, and ... only a very few word-initial consonants. Why is this so?” (Trask 1996: 115–16).

In fact, one of the current authors (e.g. Bengtson 1994) had already offered an explanation regarding Basque nouns, that some of the initial vowels reflected fossilized class prefixes, or “stage III articles,” a solution that Trask repeatedly rejected. This hypothesis is supported by the fact that many, but by no means all, Basque-North Caucasian parallels involve Basque words with initial vowels.

Basque $*a=\acute{c}o$ ‘old woman’ (BCR J.7) ~ Lak $c:u$ - ‘female’, etc. < PNC $*\acute{c}w\acute{o}yV$ ‘woman, female’ (NCED 374)

Basque $*a=kec$ ‘boar’ (BCR N.23) ~ Lak $q:\acute{a}\acute{c}a$ ‘bull-calf’, etc. < PEC $*g\acute{a}\acute{c}V$ (NCED 453)

Basque $*e=k\bar{e} / *k\bar{e}$ ‘smoke’ (BCR F.2) ~ Avar $k':uy$ ‘smoke’, etc. < PNC $*\acute{k}w\acute{i}nhV$ (NCED 738)

Basque $*i=\acute{c}u / *s\acute{u}$ ‘fire’ (BCR F.1) ~ Lak $c'u$ ‘fire’, etc. < PNC $*\acute{c}\acute{y}\acute{i} / *c\acute{y}y$ - ‘fire’ (NCED 354)

Basque $*o=hol$ ‘board, plank’ (BCR Q.62) ~ Rutul $\chi\acute{i}l$ ‘wooden trough’, etc. < PEC $*\chi ulV / *xutV$ (NCED 1078)

Basque $*u=ri[s]a$ ‘female (animal); woman’ (BCR N.15) ~ Akhwakh $reša$ ‘heifer’, etc. < PEC $*r=išw\acute{E}$ ‘heifer; female child’ (NCED 671)

Many more examples are cited in BCR (pp. 58–71). It is further proposed that Basque $*e=$ and $*i=$ are historically the same prefix, likewise with $*o= / *u=$, that is, mid and high vowel allomorphs, as also seen in the hypothesized prefix $*be= / *bi=$ (see below).

Iversen & Kroonen (2017: 517), in their study of a postulated pre-Indo-European substrate that they term as the “Early European Neolithic language” point out that many relic words traced to this substratum “exhibit the same alternation consisting of forms with and without word-initial a -. In all likelihood, this was a productive derivational element—that is, a prefix—in the language from which these words were borrowed.” Some examples cited by Iversen & Kroonen (with putative Basque and NC cognates) include:

Latin *merula* ‘blackbird’ (< $*mesl-$) : Old High German *amsala* id. (< $*a\text{-}msl-$) : cf. (without a prefix) Basque $*mosolo$ ‘(small) owl; buho, mochuelo’: *mozolu*, *mozoilo*, *mosolo*, (expressive) *moxolo*, *motzollo* id.; NC: Archi *mus:al* ‘wild turkey’, Chamali (dial.) *mus:iya* id.⁴⁰

Old English *lāwerce* ‘lark’ (< $*laiwar-$) : Gaulish *alauda* id. (< $*a\text{-}laud-$) : cf. Basque $*e=tanha$ (~ $*e=nhala$) ‘swallow, swift’; Dargwic *laha* ~ *lawha* ~ *lahwa* ~ *lax^wa* ~ *nax^wa* ‘pigeon’⁴¹

⁴⁰ The NC words reconstruct to PEC $*Vms\acute{w}l\acute{z}\acute{e}$ ‘wild turkey’ (NCED 225); Spanish *mochuelo* ‘a kind of small owl’ looks like a loan from a Basque or Vasconic expressive variant of $*mosolo$. On semantic changes, as can be seen from other bird etymologies, meanings can historically vary quite widely: **A.** Hittite *haraš*, *harašaš* ‘eagle’; Greek $\acute{o}\rho\nu\epsilon\omicron\nu$ ‘bird’ (general), $\acute{o}\rho\nu\iota\varsigma$ ‘bird, cock, hen’; Armenian *oror*, *urur* ‘seagull, harrier’, etc.; **B.** Dargwa *hunuc* ‘eagle’ (poetic); Avar *hinč*: ‘bird’ (in general); Chechen *hōza* ‘sparrow’, etc. (NCED 525); compared with Basque $*hunc/*honc$ ‘owl’ (BCR B.23); **C.** Chechen *šoršal* ‘blackbird, thrush’; Bezhta *šašu* ‘swallow’; Khinalug *čānč* ‘pigeon’ (NCED 987); compared with Basque $*soso / *šošo$ ‘blackbird, thrush’ (BCR B.18).

⁴¹ BCR B.21; NCED 750. The bird species swallow and swift are superficially similar, less so the pigeon (dove). (See the notes to ‘blackbird’, just above.)

Old English *secge* ‘sedge’ (< **sak-*) : Russian *osóka* id. (< **a-sak-*) : cf. Basque **i=śac* ‘broom (plant)’; Chechen *šac* ‘sedge’⁴²

Latin *rāpa* ‘turnip’, Old High German *ruoba* (< **rāp-*), Proto-Slavic **rěpā* ‘turnip’ (BER 6, 387) : Welsh *erfin* < **a-rb^(h)-* id. : cf. Basque *arbi* (< **a=r(V)bi*) ‘turnip’

It can be noted that several of Iversen & Kroonen’s Early European Neolithic words have Basque and/or North Caucasian comparanda, giving weight to the hypothesis that “Early European Neolithic language” was related to Basque and North Caucasian. More weight is supplied by the fact that a similar phenomenon – the presence or absence of these types of vocalic prefixes – can be observed synchronically within Basque. For example, the Basque word for ‘smoke’, cited above as **e=kē* / **kē* ‘smoke’, is attested as standard (EB) *ke*, and variants of this in most of western and northern Basque (*ké, kée, keé, kái, ki, khe*, etc.), but in large parts of High Navarre (AN) and sporadically in Low Navarre (BN) there is a prefix *e-* or *i-* (*éke, eké, iké*, etc.).⁴³ Similarly:

Basque **geHeti* / **i=keta* / **o=keti/a*: (L-arc) *geheli* ‘fresh beef’, (B) *geeli* ‘(fresh) beef, fresh meat’, (B, R, Bzt) *geli* ‘lean meat’ / (BN) *ikhel* ‘fattened ox’, (AN) *ikela* id., (B, Z) *okela* ‘meat’, (L) *okhela, okheli* ‘meat; piece (of meat, cheese), morsel’, etc.; cf. Dargwa *q^{al}*, Lak *ul* ‘cow’, etc. < PEC **qhwētV* / **qwēthV* ‘large female domestic animal (cow, mare)’ (BCR P.12; NCED 917)

Basque **purdi* / **e=purdi*: (Bzt, BN-Aldude) *purdi* ‘buttocks, arse’, (AN) *epurdi*, (L) *iphurdi*, (Z) *iphürdi*, (A, G, Sal, B-Markina, Oñate) *ipurdi*, (B-arc) *ipirdi*, (B) *eperdi*, id.; cf. Archi *pärtⁱ* ‘one of the large intestines’, etc. < PEC **pHVrtwV* ‘some inner organ’ (BCR A.45; NCED 871)⁴⁴

Basque **gai* / **e=kai*: (B-arc) *gei* ‘thing’, (B, Z, R) *gei* ‘material, subject’, (G, AN, BN, L) *gai*, (BN-Garazi) *kai*, (BN-arc, L-arc) *ekhai, ekai*, (BN) *ekhei*, (Z) *ekhái* id.; cf. Avar *q^{ayí}* ‘thing(s), possession(s)’, etc. < PEC **qwäyē* ‘thing(s), possession(s), household’ (BCR L.13; NCED 930)

These variants seem to reflect a time, long before Basque was a written language, when fossilized class prefixes (stage III articles) were in free variation, and eventually each dialect generalized, in different ways, either the prefixed or unprefixing form, or sometimes both. In other words it can be called the reorganization of allomorphs.

In North Caucasian traces of a similar trend are found sporadically, mainly in the East Caucasian branch. In one of the words for ‘snow’ Lezgian languages (Lezgi *žiw*, Tabasaran *yif*, Agul *ibx*) reflect PEC **yřwλV* ‘snow’, which also appears to include an incorporated **y=* (II-class) prefix analogous to **e=* in the Basque word **e=thu-ř* ‘snow’, i.e. **yřwλV* < **y(i)=łřwV*; on the other hand the synonymous Nakh words (Chechen *lō ~ lūo*, Ingush *lō ~ loa*, Batsbi *law*) stem from the unprefixing PEC form **łřwV* ‘snow’ (BCR G.17; NCED 684).⁴⁵ Thus it is proposed that PEC **łřwV* / **y(i)=łřwV* ‘snow’, with a regional reorganization of allomorphs, is parallel to the Basque cases like **kē* / **e=kē* ‘smoke’ cited above. Consider also:

⁴² BCR C.26; NCED 983. The semantic differences may be based on ‘plant used in making brooms’: some types of sedge are suitable for this. Broom and sedge are both under the order *Poales*.

⁴³ These patterns are shown quite clearly in the Basque dialect atlas (EHHA map 1026).

⁴⁴ For semantic typology cf. Old Indic *gudá-* ‘intestine, bowels, anus’ > Pali *guda* ‘anus’, Sindhi *guī* ‘anus, posterior’, etc. (Turner 1962, lemma 4194).

⁴⁵ Perhaps also in Basque **lu-* / **e=thu-*: (Sal, Bzt, AN-Lezaka) *lauso* ‘avalanche of snow’ / (BN) *elhauso* id., compounds of Basque **lu-* / **e=thu-* ‘snow’ + **auśo* ‘fall (of snow, rain)’ (BCR G.11), the latter related to Basque **e=auśi* ‘to fall’; cf. PEC **ũśV* ‘to descend, fall, be scattered’ (NCED 1011; BCR V.20).

PEC **λwilV* / **y(i)=λwilV* ‘elbow’:⁴⁶ Tsezi *horu* ‘elbow’, Hunzib *hɔru*, Khwarshi *hal*; Agul *q:ar-xil* ‘elbow’⁴⁷ (< Proto-Lezgian **λwil*) / (with prefix) Akhwakh *eλelo* (*et̪elo*) ‘elbow’ (NCED 770); compared with Basque **be=thau*n / **be=thaur-* ‘knee’ (BCR A.74).

Examples of prefixed and unprefixed nouns can also be found involving the fossilized prefix (article) **be=* / **bi=*:

Basque **hac* ‘finger, paw’ / **be=hac* ‘thumb, toe’: (BN, L) *hatz* ‘paw’, *be-hatz* ‘finger, thumb’; (B) *atz* ‘finger, inch’, *be-atz* ‘toe’, etc., with many more meanings depending on dialect (BCR A.68); cf. Avar *kwac̣ʰ* ‘paw’, Batsbi *kʰač* ‘foot, leg’ (a slighting expression), etc. < PEC **kwāčĕ* (NCED 704)

Basque **herde*, **helde-ř* / **bilde-ř* (< **bi=helde-ř*): (BN, L) *herde* ‘drool(ing), slobber, slaver’, (AN, Bzt, Sal) *erde* id.; (with **ř-* suffix and dissim.) **helde-ř* id. > (BN, L) *helder*, *heldor*, (L, BN-Baigorri, R-Uztárróz) *elder*, (Z) *élder* ‘drop of spittle that falls from the lips’; (G-Gabiria, Iziar) *bilder*, (G-Zestoa) *bildar* ‘drool, saliva’ (BCR A.80); cf. Karata *hanlʼa* ‘sweat’, Akhwakh *āt̪ʼa* id., etc. < PEC **hāmλă* (NCED 509)

The Basque prefix **m=* / **ma=* / **mo=* is far less frequent than **be=* / **bi=*, and may have been a nasalized variant of the latter. Both Michelena and Trask accepted the reality of the **m=* prefix.⁴⁸ Besides Basque **ma=dari* / **u=dari* ‘pear’, discussed above, consider the following examples.

Basque **mo=kol(o)* / **a=kal* / (reduplicated) **kakol*: (B) *mokol* ‘shell (of egg, nut), husk (of maize)’, *mokolo* ‘husk (of maize)’ / (Bzt) *akal* ‘empty (of a chestnut shell)’ / (B) *kakol* ‘shell’ (BCR C.38); cf. Akhwakh *qʰoli* ‘crust, rind’, Tsezi *qʰul* ‘bark’, Bezhta *qʰeqʰel-ba* ‘birch bark’, etc. < PEC **q̄wātV* ‘bark, crust’ (NCED 931)

Basque **ma=kac*, **ma=keć* / **a=kać* / **o=koc* : (G) *makatz* ‘nick, scratch’, (G) *makets* ‘deformed or defective thing’, / (B, G) *akats* ‘cut, nick, notch, scratch; fault, defect’ / (B) *okotz* ‘chin, snout’ / (with reduplication) (AN) *kokots* ‘chin, nape’, (BN) *kokots*, *kokotz* ‘chin’, (L) *kokots*, *kokotz* ‘chin’, (Z) *kokots* ‘chin’ (BCR A.15, L.1); cf. Lezgi *qʰac* ‘notch, nick’, Khwarshi *qʰacʼa* ‘slice (of bread)’, Rutul, Tsakhur *qʰac* ‘chin’; Lak *qʰac* ‘bite, mouth’. etc. < PEC **q̄āčĕ* / **q̄āčŭ* (NCED 907)⁴⁹

Basque **ma=gal* / **e=gal*: (R, Sal) *magal* ‘wing’ / (AN) *egal* ‘wing, fin’, (BN, L) *hegal*, (Z) *hégal* id., (B) *egal* ‘loin, flank (of cow)’ (BCR A.63);⁵⁰ cf. Lak *qa* ‘wing’, Lezgi, Agul *vil* ‘hand’, Archi *χol* id., Bezhta *χaro* ‘elbow’, etc. < PEC **q̄ilʔi* ‘elbow, arm, wing’ (NCED 895)

Turning now to North Caucasian, there are many cases in which fused or lexicalized class prefixes are attested in some languages, often with a different class prefix, or no prefix, in other languages:

⁴⁶ NCED cites the reconstruction as *(*Hi*)*λwilV* ‘elbow’; **λwilV* / **y(i)=λwilV* is Bengtson’s reinterpretation.

⁴⁷ The Agul word is “a compound with some not quite clear first component (is it a distorted [Proto-Lezgian] **χ:il* ‘hand’? or **q:lun* ‘arm’?)” (NCED).

⁴⁸ “No se puede poner en duda, por el contrario, la realidad de un prefijo nominal *m(a)-* ...” (FHV 271). It was also mentioned by Trask, along with a long list of “expressive” Basque words with initial *m-* (Trask 1997: 257–58; EDB 273–78).

⁴⁹ Semantic changes (‘cut’ or ‘bite’ > ‘notch, nick’ or ‘mouth, chin’) are parallel in Basque and NC. Glosses in Lezgian languages are 1 ‘bit, slice’ (Tabasaran, Agul), 2 ‘notch, nick’ (Lezgi), 3 ‘(biting part) > chin’ (Rutul, Tsakhur).

⁵⁰ It has been suggested that an original Basque **e=gal* ‘wing, fin, loin, flank’ (corresponding to PEC *(*y=*)*q̄ilʔi* ‘elbow, arm, wing’) later contaminated with the originally distinct **hega-* ‘to fly’ (BCR V.43) to produce the blended form *hegal* in northern Basque.

Tsakhur *wu(=)xun* ‘belly’, Rutul *u(=)xun* id.; Avar *ma(=)xá* ‘abomasum’ < **bV=xwVn* (III-class prefix) / Lezgi *ru(=)fun* ‘belly’ (IV-class prefix)⁵¹ / (unprefixed) Agul *fun*, Dargwa *k^(w)ani* ‘belly’, etc. < PEC **λwĩnʔi* (NCED 771)

Godoberi *re(=)vil* ‘leg’, Botlikh *re(=)vil* ‘thigh’ (IV-class prefix) / (unprefixed) Tsakhur *q:el* ‘foot, leg’, Rutul *vil* id., etc. < PEC **gētu* (NCED 455)⁵²

Avar *mi(=)tír* ‘wing’⁵³ / Andi *tíru* ‘feather, wing’, Tsezi *lel* ‘wing’, etc. < PEC **lila* ‘wing’ (NCED 762)

PNC **bēmʔV* (< **b=fwemʔV*) > Hunzib *bət’i* ‘worm’, Bezhta *bet’e-la* id., Lezgi *büt’-rük* ‘larva’, Abkhaz *á-mat* ‘snake’, etc. (NCED 290) / PNC **fiwe(m)ʔi* > Avar *hut’* ‘worm’, Bezhta *hat’o-la*, Lak *yət’i*, etc. (NCED 535)

In the last set the opposition of Bezhta *hat’o-la* ‘worm, helminth’ vs. *bet’e-la* ‘worm’ is typologically parallel to the opposition of Basque (BN, L) *helder* ‘drool, saliva’ vs. (G) *bilder* id. (see above). In each case the second word, with initial *b-*, incorporates the former class prefix. According to NCED there is a color adjective **fiwVmʔV* ‘red’ that is related to the two words for ‘worm’, and there is a familiar pattern here too: Agul *b(=)at’-ar-* ‘beautiful, handsome’, which incorporates the class prefix, vs. Khwarshi *ut’ey* ‘red’, Dargwa *hunt’-ena* id., etc. (NCED 541).⁵⁴

The morphological patterns described for Basque and North Caucasian, of bare noun stems alternating with (fused or lexicalized) CLASS PREFIX + NOUN stem (e.g., Basque **kē* / **e=kē* ‘smoke’; PEC **λiʔwV* / **yĩwλV* < **y(i)=λiʔwV* ‘snow’) are consistent with the Pre-Greek hypothesized by Beekes and others, in which noun stems with no initial vowel alternate with those with prothetic vowels (e.g., Greek κόρις ‘bedbug’ / ἀκαρί ‘mite’), and with the postulated “Early European Neolithic language” which shows a similar pattern, e.g., Latin *merula* ‘black-bird’ < **mesl-* / Old High German *amsala* id. < **a-msl-* (Iversen & Kroonen 2017: 517).

Ablaut: Beekes (49: 754) mentions another Pre-Greek feature in the remark that “I would rather think that κόρις is cognate [with ἀκαρί], as a substrate word, with prothetic vowel and α/o interchange.” Another example of α/o alternation may be found in the apparent derivatives of καλιᾶ, as reported by Hesychius: καλύβη ‘hut, cabin’ and κόλυβος ‘farmstead’. Beekes cites some other examples, e.g. κάβασ ‘crafty, knavish’ and κόβακτρα ‘pieces of flat-tery, knavery’ (both from Hesychius); λυκάφος ‘name of a poisonous plant’ / λύκοψος id.

Ablaut, according to NCED, was a productive feature of Proto-North Caucasian, including an alternation of **o* and **a*, as in PNC **fiðçV* / **fiǎçV* ‘full, to fill’ (NCED 525), reflected in Proto-Nakh **=uç-* ‘to be filled, satiated’ / **=aç-i(n)* ‘heavy’ (> Chechen =üz-na ‘full’ / =eza ‘heavy’). It has been proposed that there is a relic of this ablaut in the Basque adjective **ośo* ‘whole, complete’ and the verb **aśe* ‘to be filled, satiated’ (BCR R.65, V.66). It was also suggested that this **a*/**o* ablaut could account for some cases in which Basque has **a* versus PNC **o*,

⁵¹ Note that Lezgi retains the fossilized *ru=* (orig. IV-class prefix) even though the language (like Agul and Udi) has lost class or gender as a grammatical category.

⁵² “However, there are two possible reconstructions: a) the one proposed above — in this case we must consider **r-* in PA and PTs as a former class prefix (which raises some doubts); b) we can reconstruct **Gēlu* (with **l*) and a metathesized variant **lēGV* > PA **rivi-*, PC **riçi-* (with a rather frequent *-IV extension). At present it is hard to choose one of these solutions only” (NCED).

⁵³ “The origin of the initial *m(i)-* is not clear (perhaps, analogy with names for body parts like *mehéd* ‘breast’ etc.?)” (NCED).

⁵⁴ The semantic link of ‘red’ ~ ‘beautiful’ is common: cf. Czech *krásný* ‘beautiful’ ~ Russian *krasnyj* ‘red’; Latin *pulcher* ‘beautiful’ ~ Middle Irish *erc* ‘gay-colored, red’, etc. (Buck 16.81); for ‘red’ ~ ‘worm’ cf. Old Church Slavonic *črŭvŭnŭ* (чръвнѣ) ‘red’ < **čirvi* ‘worm’; French *vermeil* < Latin *vermiculus* ‘little worm’ (Buck 15.66).

or vice-versa. Basque **gari* / **gal-* ‘wheat’ = PEC **ǭlʔe* ‘wheat’ (BCR O.1), beside Basque **goše* ‘hunger, hungry’ = PNC **gašē* ‘hunger’ (BCR R.30); if so, this could reflect reorganizations of allomorphs, i.e. that Basque selected one allomorph (with either **a* or **o*) and PNC (or individual NC languages) selected another.

Another possible trace of Euskaro-Caucasian ablaut is seen in the vowel alternation NEK- / NIK- in (Pre-)Greek **νέκταρ** / **νικάρ-**, Basque **nega-ř* / **niga-ř*, and PEC **nēwǭ* / **nīwǭ*Ÿ-. Only in PEC is the variation explained as a morphologically significant ablaut alternation, in which /e/ is associated with direct stems and /i/ with oblique (NCED 81–82). It has been suggested (BCR 105–110) that there are traces of this and other North Caucasian ablaut alternations in Basque; in the case of Basque **nega-ř* / **niga-ř* ‘tears’ the allomorphs have apparently been redistributed as regional variants, generally, (south-)western /e/ vs. (north-) eastern /i/. Beekes (2010: xxx) calls attention to an apparent alternation of /ε/ with /ι/ in Pre-Greek words.

Suffixes: Beekes (xxxvii, xxxix) cites the suffixes **-ιλ-** and **-υλ-** as indicators of Pre-Greek words, and among the words cited above these suffixes figure in two words connected with fruits: **μέσπιλον** ‘medlar, medlar tree’ and **σταφυλή** ‘bunch of grapes, grape’. Greek **σταφυλή** (cf. **ἀσταφίς** ~ **ὄσταφίς** ~ **σταφίς** ‘dried grapes, raisins’) has a close formal match in Avar *c’ibil* ‘grape’, also with a lateral suffix. Other NC languages have a form with no suffix (e.g. Rutul *c’ib* ‘juniper’) or a form with a different suffix (Lezgi *c’p:-az* ‘blackberry’); Basque **šapa-ř* ‘thicket, bramble’ has been proposed as a cognate, with a common fossilized plural suffix **-ř*. In a Sino-Caucasian perspective Pre-Greek **μέσπιλον** may have a remote cognate in Burushaski **mičil* / **bičil* ‘pomegranate’ (SCG 267), also with a suffix **-il* (cf. Khinalug *mič* ‘apple’ and Abkhaz *a-báč* ‘medlar’ for convergent phonetic developments). Other Euskaro-Caucasian words for plants and trees with fruits or berries and a suffix **-al-/*-il-/*-ul-* include:

Basque (AN) *magauri*, *maguri*, (AN-Erratzu) *mauli* ‘strawberry’, (Bzt) *mauri* id. < ? **mag-uli*;⁵⁵ cf. NC: Akhwakh *muq’ali* ‘blackberry’ < PEC **niwǭV* (EHHA, map 572; BCR P.20; NCED 854)

Basque (B) *zumel* ‘cornel; kermes oak; holm oak’, (B-Gernika) *zumel* ‘Mediterranean buckthorn (*Rhamnus alaternus*)’; **sumal* in the personal name Pero Gonçalves de *Çumalburu* (1293 CE); NC: Budukh *žumal* ‘cornel’, Lezgi *č:umal*, Avar *žulám* / *žulán* (< **žum-al*) ‘cornel’, etc. (OEH ZUMEL; BCR C.2; NCED 1107)

NC: Archi *t’ummul* ‘grape’, Rutul *t’imil*, Tsakhur *t’umil* id., Budukh *t’ombul* ‘plum’ (< Proto-Lezgian **tum(:)-ul*), beside suffixless Chechen *t’um* ‘marrow; kernel of fruit, nut’, Abkhaz *a-t’amá* ‘peach’, etc. < PNC **tūmhV* ‘kernel, nut, fruit-stone; marrow’ (NCED 1004; SCG 205).⁵⁶

NC: Batsbi *kumel* ‘raspberry’; Bezhta *gemalo* ‘a kind of berry’; beside suffixless Chamali *g^wab* ‘raspberry’, Karata *gobe* ‘strawberry’, etc. < PEC **gwǭmpV* ‘raspberry’ (NCED 443)

Other possible suffix parallels could be explored, e.g. **-ιγξ**, **-ιγγος**, identified as typical Pre-Greek suffixes by Beekes (xxxvii), in **σῦριγξ**, **σῦριγγος** ‘quill, flute, syrinx, windpipe’, etc., which is evocative of Basque *-inko* ~ *-ingo*, e.g. in eastern Basque *gorrinko*, western Basque *gorringo* ‘egg yolk’ (*gorri* ‘red’); (R) *baratxinko* / *baračinko* ‘cuadrado de un huerto’ < **barace* ‘garden, orchard’ = PEC **bārǭV* ‘enclosure’ (BCR Q.8; NCED 1039). **ἄνθρωπος** ‘man’ = Mycenaean

⁵⁵ Basque regional words for ‘strawberry’ are exceedingly diverse, many with initial *ma-* but probably of diverse origins (BCR P.18, P.19, P.20; EHHA map 572).

⁵⁶ From a Sino-Caucasian perspective, cf. Bur **tumáy* ‘shell of nut, fruit stone’, with the distinctive lateral-glide-retroflex /y/ sound (SCG 205; Bengtson & Blažek 2011: 29–30).

a-to-ro-ḡo /ant^hrōk^wos/ is close in formation to Western Basque *andrako*, *andreko* ‘little woman; doll’, with the frequent diminutive suffix *-ko*; cf. (EB) *otso-ko* ‘wolf cub’ (*o^o ‘wolf’), (G) *musu-ko* ‘muzzle’; in North Caucasian: Avar *yasi-k’o* ‘little girl, doll’ (*yas* ‘girl, daughter’), *wac:a-ko* ‘little brother’ (*wac*: ‘brother’), etc. (BCR 56).

The comparison involving Pre-Greek **νέκταο** also calls attention to a putative suffix *-αο*, which Beekes (again following Furnée) cites as a characteristic Pre-Greek element; note also *-αο(α)*, *-αο(ος)*, *-εο*, *-ηο*, *-ηο-*, *-οο-*, etc. (Beekes 2010: xxxvi–xxxviii). The suffix **-r̥* is very common in Basque nouns, especially those with an underlying plural or collective meaning, e.g., **nega-r̥* / **niga-r̥* ‘tears’, **lega-r̥* ‘small stones, gravel’, **itha-r̥* ‘peas, beans’, **lance-r̥* ‘drizzle’, **moko-r̥* ‘buttocks’ etc.: see BCR 77–78.⁵⁷ In East Caucasian there has been a similar development in which the well-known plural suffix **-r*, attested in all branches of North Caucasian, has been lexicalized, with bleaching of the plural meaning, in a significant number of words, e.g. Avar *bucú-r* ‘fortification, dike’, Tabasaran *marca-r* ‘hearth’ (historical plurals of PNC **bōlcĒ*: NCED 308). In several cases the historical plural form has replaced the original singular, e.g. Agul *ib-ur*, Rutul *ub-ur*, Budukh *ib-ir* ‘ear’, historically ‘ears’ (plural of Proto-Lezgian **?Iam*: < PEC **ɣwānɿV* ‘ear’: NCED 240); Khinalug *cul-oz* ‘tooth’ (< *-or*: PNC **cīfhV̄* ‘tooth’: NCED 326) has replaced the original singular, etc. Besides **νέκταο**, it would be important to discover other Pre-Greek words with these *-ο-* suffixes and Basque and/or North Caucasian cognates. It is tempting to consider, for example, **σπινθήρ** ‘spark’, designated as (Pre-Greek?) by Beekes (2010: 1383), possibly connected with Basque (AN) *pintar*, (BN, L, Z) *p(h)indar*, beside (L) *pinta*, (BN, L, Z) *p(h)inda* ‘chispa, centella / étincelle, flammèche’ (‘spark, flash’) (A&T XV: 910; OEH PINDAR).

Conclusions: As mentioned at the beginning, the putative Pre-Greek examples discussed here were selected with three constraints: (a) Pre-Greek status, or questionable IE etymology, according to Beekes, and the presence of (b) putative North Caucasian cognates, and/or (c) putative Basque cognates. Comparing Pre-Greek specimens only with North Caucasian cognates (as with Nikolaev), or comparing Pre-Greek only with Basque might reveal larger numbers of etymologies. Altogether these would form a corpus of Euskaro-Caucasian etymologies from three branches: the still extant Basque and North Caucasian languages, and the extinct Pre-Greek language recoverable from numerous substratal loanwords. The material analyzed above is summarized below in table form.

Greek	Basque parallel	North Caucasian parallel
ἀκαρί ‘mite’ κόρις ‘bug, bedbug’	* <i>kara</i> -/ * <i>karkaṛ</i> - ‘beetle’	PEC * <i>ḡārā</i> ‘mosquito, gadfly’, etc.
ἀλωή ‘threshing floor, garden’	* <i>larain</i> ‘threshing floor’	PEC <i>*=ṼrĒV</i> ‘to thresh’
ἄνθρωπος ‘man’; Mycenean <i>a-to-ro-ḡo</i> /ant ^h rōk ^w os/	* <i>andere</i> ‘lady; young lady; woman; wife’; (B) <i>andrako</i> , <i>andreko</i> ‘little woman; doll’	–
δοκός, δόκανα ‘beam’	* <i>tako</i> , * <i>tak-et</i> ‘stake, post’, etc.	PNC <i>*dwiḡ(w)Ṽ</i> ‘log, stump’ Tabasaran <i>duḡ’an</i> ‘pole, small beam’
ζέφυρος ‘west wind’	–	PNC <i>*cōjwīhV</i> ‘autumn, winter (rainy season)’

⁵⁷ This suffix has traditionally been described as *-ar*, but the examples cited here show that vowels other than /a/ could precede the **-r̥*, e.g. Basque **moko-r̥* ‘buttocks, backside’ = Hinukh *moko-li* ‘back’ < PNC **bōnḡō* ‘back’ (NCED 310; BCR A.44).

Greek	Basque parallel	North Caucasian parallel
ἰκτίν ~ ἰκτινός 'kite'	*śaie 'vulture, eagle'	PEC *čwāmŕǃ 'eagle, vulture'
καλιᾶ 'wooden dwelling, hut'	*o=kefu 'stable, hall, corner', etc.	PEC *qǎlǃ 'house, hut'
κόμη 'hair, mane'	*kima 'mane (of horse); bristles (of swine)'	PNC *ǵ(w)ǎmŕǃ 'plait, mane; hair'
μάδρουα ~ ἀμάδρουα ~ βάδρουα ~ ἄδρουα 'plums, sloes'	*ma=dari ~ *u=dari 'pear'	–
μάλκη 'numbness from cold'	*mal-goī 'numb (from cold)'	PEC *mhēlǎe 'cold'
μαστός ~ μασδός ~ μασθός ~ μαζός 'teat, woman's breast'	*mośu 'nose, snout, face, lip, kiss, point, tip'; *muś-ko 'nipple' (Z) <i>müskúa</i> '(the) nipple'	PEC *mhǎrcū 'point, edge, protruding part'; Akhwakh <i>mic'o</i> 'teat, nipple'
μέσπ-ιλ-ον 'medlar'	*mahać 'grape(s)'	PNC *ǵǎmćo 'apple; medlar'
μικρός ~ σμικρός ~ μικκός ~ μικός 'small, short, little'	*miko 'a little, a little bit'	PEC *miǵwV 'small, young one'
μύλλον 'lip'	–	PEC *mVhwVli / *hwVmVli 'mouth, face'
μύσταξ ~ βύσταξ 'upper lip, mustache'	*bisa-ī 'beard'	PEC *bilǵV 'beard'; Tindi <i>miža-tu id.</i>
νέκταρ 'nectar, drink of the gods' νεκτάριον 'medicine, eye-salve' νικάριον 'eye-salve'	*nega-ī / *niga-ī 'tears, weeping' *nega-l 'herpes, rash, scurf'	PEC *nēwǵū / *niwǵǃ- 'tear(s); pus'
ξύλον ~ σύλον ~ σύλινος 'wood, timber'	–	PEC *čhwǎlū 'beam, log, pole'
ὄγχνη ~ ὄχνη 'pear, pear tree'	*ok-(arhan) 'plum, sloe'	PEC *ǵēqV 'grape; fruit; orchard, vineyard'
	*ar-han 'plum'	PEC *ǵonǃV 'pear'
ῥάχis 'spine, backbone, back; (mountain) ridge'	*e=řeka 'gully, ravine'	PNC *riǵwǎ 'mountain, rock; cave' Tindi <i>řek:a</i> 'gorge, ravine' Chechen <i>duq</i> 'mountain ridge'
σαλαμάνδρα 'salamander'	*śuge-mandil 'lizard'	PEC *šVIVǃV 'lizard'; Lezgi <i>šarat'ul</i> 'lizard'
σιρός ~ σιρός ~ σειρός 'pit or vessel for keeping corn, silo' σύριγξ, σύριγγος 'quill, flute, syringe; windpipe, blood vessel' σωλήν 'pipe, channel'; 'grooved tile'	*suffio 'hole, cave; (anatomical) tube' (G) <i>eztar-zulo</i> 'pharynx'; (Z) <i>südü-r-xilo</i> 'nostril', (B) <i>sama-zulo</i> 'gullet'	PEC *šwōǃV 'hollow tube' Chamali <i>na-s:ul</i> 'tubular bone'; Lezgi <i>sulu-r</i> 'throat'
σταφυλή 'bunch of grapes, 'grape'; ἄσταφίς ~ ὄσταφίς ~ σταφίς 'raisins'	*śapa-ī '(blackberry-)bramble, thicket'	PEC *čibV 'a kind of berry'; Avar <i>c':ibil</i> 'grape'
ψυχή 'aspiration, breath, life, vitality, soul, spirit'	*bi=si (noun) 'life; lifetime', (adj.) 'alive'	PNC *(b=)šǎHwV 'breath; to breathe'

It is important to emphasize that authentic Pre-Greek words, if they are of a more or less 'basic' nature, are not loans directly from North Caucasian (as framed by Nikolaev), but instead substratal remnants of a Euskaro-Caucasian language related to (Proto-)North Caucasian, but surely not identical with it. These substratal words should be separated from later

cultural loans.⁵⁸ From among the Pre-Greek words discussed above, this caveat seems to apply especially to, e.g., ὄγχνη ~ ὄχνη ‘pear tree; pear’, for which there are several possible sources. Words for fruits and fruit trees are not among the most basic, and there was active trade in such items in the Mediterranean regions. (See also μάδρουα ~ βάδρουα ‘plums, sloes’; μέσπιλον ‘medlar’.)

On the other hand, words like ἀκαρί ‘mite’, μαστός ‘breast, teat’, μύλλον ‘lip’, β/μύσταξ ‘upper lip, mustache’, ξύλον ‘wood, timber’, ῥάχιν ‘spine, back, ridge’, and ψῦχή ‘breath’ are far more basic and much less likely to be counted among cultural loans. They could reflect genuine relics of a Euskaro-Caucasian Pre-Greek language. The two dozen examples discussed here are probably part of a much larger subset that a thorough study of Furnée’s and Beekes’ total list of “Pre-Greek” words might yield.

Abbreviations: languages and dialects

AN	Alto Navarro = High Navarrese (Basque dialect)
arc	Archaic or obsolete form
B	Bizkaian = Biscayan (Basque dialect)
Bzt	Baztanese (Basque dialect)
BN	Bas-navarrais = Low Navarrese (Basque dialect)
EB	Euskara Batua (standard Basque)
EC	East Caucasian (= Northeast Caucasian = Nakh-Daghestanian)
G	Gipuzkoan (Basque dialect)
L	Lapurdián = Labourdin (Basque dialect)
NC	North Caucasian
PEC	Proto-East Caucasian
PNC	Proto-North Caucasian
PWC	Proto-West Caucasian
R	Roncalese (Basque dialect)
Sal	Salazarese (Basque dialect)
WC	West Caucasian (= Northwest Caucasian = Abkhaz-Adyghe[an])
Z	Zuberoan = Souletin (Basque dialect)

References

- A&T = Agud, Manuel, Antonio Tovar. 1988–1995. *Materiales para un diccionario etimológico de la lengua vasca. Anuario del Seminario de Filología Vasca ‘Julio de Urquijo’*.
- Ashcroft, Frances M. 2000. *Life at the extremes*. Berkeley: University of California Press.
- Azkue, Resurrección María de. 1905–1906. *Diccionario vasco-español-francés / Dictionnaire basque-espagnol-français*. Bilbao/Paris: The Author / Paul Geuthner.
- Barnhart, Robert K., Sol Steinmetz (eds.). 1988. *Barnhart Dictionary of Etymology*. New York: H.W. Wilson Co.
- BCR = Bengtson, John D. 2017. *Basque and its Closest Relatives: A New Paradigm*. Cambridge, Mass.: Mother Tongue Press.
- Beekes, Robert. 2014. *Pre-Greek: Phonology, Morphology, Lexicon. Brill Introductions to Indo-European Languages, vol. 2*. Leiden: Brill.

⁵⁸ “The cultural words frequently discussed by Furnée have usually been recorded in relatively late sources (Hesychius, etc.) and so they could represent also relatively late loans from various cultural languages of the East Mediterranean. If there is witness from both North Caucasian and Northwest Semitic & Akkadian, the most probable donor-language was Hurrian, used not only in North Mesopotamia, but also in Syria, Asia Minor and Cyprus” (V. Blažek, p.c. 06/06/2020).

- Beekes, Robert, Lucien van Beek. 2010. *Etymological Dictionary of Greek. Leiden Indo-European Etymological Dictionary Series, vol 10/1*. Leiden: Brill.
- Bengtson, John D. 1994. On the Genetic Classification of Basque. *Mother Tongue Newsletter* 22: 31–36.
- Bengtson, John D. 2017. The Anthropological Context of Euskaro-Caucasian. *Iran and the Caucasus* 21(1): 75–91.
- Bengtson, John D., Václav Blažek. 2011. On the Burushaski–Indo-European Hypothesis by I. Čašule. *Journal of Language Relationship* 6: 25–63.
- Benveniste, Émile. 1929. Le nom d'un animal indien chez Elien. In: St. W. J. Teeuwen (ed.). *Donum natalicium Schrijnen: verzameling van opstellen door oudleerlingen en bevriende yaggenooten, opgedragen aan Mgr. Prof Dr. Jos. Schrijnen bij gelegenheid van zijn zestigsten verjaardag*: 371–376. Nijmegen / Utrecht: N. V. Dekker en Van de Vegt.
- BER = Vladimir I. Georgiev, Ivan Gălăbov, Jordan D. Zaimov. 1971–2017. *Bălgarskii etimologičen rečnik*. Sofija: Bălgarskata akademija na naukite.
- Bernar, Rože. 1982. *Bălgaristični izsledvanija*. Sofia: Nauka i izkustvo.
- Bezljaj, France. 1977–2007. *Etimološki slovar slovenskega jezika*. Ljubljana: Mladinska knjiga.
- Blažek, Václav. 2014. Etymologizing ‘Unetymologizable’ Greek Dendronyms. *Graeco-Latina Brunensia* 19(1): 41–50.
- Bouda, Karl. 1948. Baskisch und Kaukasisch. *Zeitschrift für Phonetik* 2: 182–202, 336–352.
- Buck = Buck, Carl Darling. 1949. *A Dictionary of Selected Synonyms in the Principal Indo-European Languages*. University of Chicago Press.
- CDA = Black, Jeremy, Andrew George, Nicholas Postage (eds.). 2000. *A Concise Dictionary of Akkadian*. Wiesbaden: Harrassowitz.
- Derksen, Rick. 2008. *Etymological dictionary of the Slavic inherited lexicon*. Leiden: Brill.
- Diakonoff, Igor M., Sergei A. Starostin. 1986. *Hurro-Urartian as an Eastern Caucasian Language. Münchener Studien zur Sprachwissenschaft, Beiheft, N. F. 12*. München: R. Kitzinger.
- Dicc = Real Academia Española. 2001. *Diccionario de la lengua española de la Real Academia Española*. 22nd Ed. Available online at: dle.rae.es.
- Džidalaev, Nurislam S. 1990. *T'urkizmy v Dagestanskix jazykax. Opyt istoriko-etimologičeskogo analiza [Turkisms in Dagestani languages. An experiment in historical and etymological analysis.]* Moscow: Nauka.
- EDB = Trask, R. L. 2008. *Etymological Dictionary of Basque. Ed. by Max W. Wheeler*. University of Sussex. Available online at: <http://www.sussex.ac.uk/linguistics/1-4-1-2.html>.
- EHHA = Bidegain, Xarles, Adolfo Arejita et al. N.d. *Euskararen Herri Hizkeren Atlas / Atlas linguistique du Pays basque*. Euskaltzaindia / Real Academia de la Lengua Vasca / Académie de la Langue Basque. Bilbao. Available online at: euskaltzaindia.eus.
- Ehret, Christopher. 2015. Agricultural origins: What linguistic evidence reveals. In: G. Barker, C. Goucher (eds.). *The Cambridge World History. Volume 2: A World with Agriculture, 12,000 BCE–500 CE*: pp. 26–54. Cambridge University Press.
- FHV = Michelena, Luis. 1961. *Fonética histórica vasca*. San Sebastián: Diputación Provincial de Guipúzcoa.
- Flexner, Stuart Berg (ed.). 2001. *The Random House Dictionary of the English Language, Unabridged. 2nd edition*. New York: Random House.
- Furnée, Edzard J. 1972. *Die wichtigsten konsonantischen Erscheinungen des Vorgriechischen. Mit einem Appendix über den Vokalismus*. The Hague: Mouton.
- Garnier, Romain. 2008. Nouvelles réflexions étymologiques autour du grec ἄνθρωπος. *Bulletin de la Société de Linguistique de Paris* 102(1): 131–154.
- Georgiev, Vladimir. 1937. *Die Träger der Kretisch-Mykenischen Kultur, ihre Herkunft und ihre Sprache. I Teil. Urgriechen und Urillyrier (Thrako-illyrier)*. *Annuaire de l'Université de Sofia. Faculté Historico-Philologique, Tome xxxiii.4*. Sofia: Imprimerie de la Cour.
- Georgiev, Vladimir. 1941. *Vorgriechische Sprachwissenschaft. Annuaire de l'Université de Sofia. Faculté Historico-Philologique, Tome xxxvi*. Sofia: Imprimerie de l'Université.
- Hamp, Eric. 1983. Prehellenic ἄχρον “chaff, awn”. *Živa Antika* 33(1): 22.
- Hamp, Eric. 1985. Notes on Indo-European dialects. *Indogermanische Forschungen* 90: 70–71.
- Hamp, Eric. 1989a. Prehellenica 5–6. *Živa Antika* 39(1–4): 54.
- Hamp, Eric. 1989b. Prehellenica 7: Words derived from IE. *gher-. *Živa Antika* 39(1–4): 75–76.
- Hubschmid, Johannes. 1960. *Mediterrane Substrate: mit besonderer Berücksichtigung des Baskischen und der westöstlichen Sprachbeziehungen*. Bern: A. Francke.
- Iversen, Rune, Guus Kroonen. 2017. Talking Neolithic: Linguistic and Archaeological Perspectives on How Indo-European Was Implemented in Southern Scandinavia. *American Journal of Archaeology* 121(4): 511–525.

- Klimov, Georgij A., Madzhid Š. Xalilov. 2003. *Slovar' kavkazskix jazykov: Sopostavlenie osnovnoj leksiki* [Dictionary of Caucasian Languages: comparison of the principal lexis]. Moscow: Vostočnaja literatura.
- Kronasser, Heinz (ed.). 1956. *Μνήμησ χάριν: Gedenkschrift Paul Kretschmer, 2 Mai 1866 – 9 März 1956*. Wien: Wiener Sprachgesellschaft.
- Kroonen, Guus. 2013. *Etymological Dictionary of Proto-Germanic*. Leiden Indo-European Etymological Dictionary Series 11. Leiden / Boston: Brill.
- Kuiper, Franciscus Bernardus Jacobus. 1956. The etymology of ἄνθρωπος. In: Kronasser (ed.) 1956: 211–226.
- Landucci, Niccolò. 1958. *Dictionarium linguae cantabrigiae (1562)*. Critical ed. by M. Agud & L. Michelena. San Sebastián: Diputación de Guipúzcoa.
- Leschber, Corinna. 2011. Zeitliche Tiefe etymologischer Bezüge. In: *Linguistique balkanique* 50(2–3): 75–82.
- Leschber, Corinna. 2012. Latin tree names and the European Substratum. *Studia linguistica Universitatis Jagellonicae Cracoviensis* 129: 117–125.
- Martirosyan, Hrach. 2021. *Lexical agreement between Armenian and Balto-Slavic in the domain of the physical world*. PowerPoint presentation: Conference Sub-Indo-European Europe – Problems, Methods and Evidence. Leiden University, August 30–31, 2021.
- Mihaylova, Biliana. 2017. The Pre-Greek substratum revisited. In: Bjarne Simmelkjær Sandgaard Hansen, Benedicte Nielsen Whitehead, Thomas Olander, Birgit Anette Olsen (eds.). *Etymology and the European Lexicon. Proceedings of the 14th Fachtagung der Indogermanischen Gesellschaft, 17–22 September 2012, Copenhagen*: 307–317. Wiesbaden: Reichert Verlag.
- Militarev, Alexander. 2006. Semitic Etymological Database. Available online at: starling.rinet.ru (Tower of Babel project).
- Militarev, Alexander Yu. 2020. Ancient Egyptian – Arabic contacts in lexicon: clue to Arabic Urheimat? *Orientalistica* 3(3): 783–798.
- NCED = Nikolaev, Sergei L., Sergei A. Starostin. 1994. *A North Caucasian Etymological Dictionary*. Moscow: Asterisk Press.
- Nikolaev = Nikolaev, Sergei L. 1985. Severokavkazskie zaimstvovaniya v xettskom i drevnegrečeskom [North Caucasian loanwords in Hittite and Ancient Greek]. In: B. B. Piotrovskij, Vyach. Vs. Ivanov, V. G. Ardzinba (eds.). *Drevn'aya Anatolija*: 60–73. Moscow: Vostočnaja literatura.
- OEH = Michelena, Luis [Koldo Mitxelena]. 1987–. *Orotariko Euskal Hiztegia / Diccionario General Vasco*. Bilbao: Euskaltzaindia. [Edited since Michelena's death by Ibon Sarasola.]
- Pellegrini, Giovan Battista. 1999. A proposito di *musu- e *busu-. *La ricerca folklorica* 39: 131–134.
- Pfeifer, Wolfgang. 1997. *Etymologisches Wörterbuch des Deutschen*. München / Berlin: Zentralinstitut für Sprachwissenschaft.
- REW = Meyer-Lübke, Wilhelm. 1911. *Romanisches etymologisches Wörterbuch*. Heidelberg: Carl Winter.
- Roscher, Wilhelm Heinrich. 1883. *Nektar und Ambrosia*. Leipzig: Teubner.
- SCG = Starostin, Sergei A. 2005. *Sino-Caucasian: Comparative Glossary*. Available online at: starling.rinet.ru/Texts/glossary.pdf.
- Skeat, Walter W. 1963. *An Etymological Dictionary of the English Language*. (Reprint of revised edition, 1909.) London: Oxford Clarendon Press.
- Skok = Skok, Petar. 1971–1974. *Etimologijski rječnik hrvatskoga ili srpskoga jezika I–IV*. Zagreb: JAZU.
- Snoj, Marko. 2003. *Slovenski etimološki slovar*. Ljubljana: Modrijan.
- Starostin, Sergei A. 1988. Indoeuropejsko-severnokavkazskie izoglossy [Indo-European-North Caucasian Isoglosses]. In: G. M. Bongard-Levin, V. G. Ardzinba (eds.). *Drevnij Vostok: etnokul'turnye so'azi* [The Ancient East: ethnocultural connections]: 112–163. Moscow: Nauka.
- Starostin, Sergei A. 1996. Comments on the Basque-Dene-Caucasian Comparisons. *Mother Tongue* 2: 101–109.
- Starostin, Sergei A. 2007a. *Trudy po jazykoznaniju* [Works on linguistics]. Ed. by G. S. Starostin. Moscow: Jazyki slav'anskix kul'tur.
- Starostin, Sergei A. 2007b. Indoeuropejsko-severnokavkazskie izoglossy [Indo-European-North Caucasian Isoglosses]. In: Starostin 2007a: 312–358. [Reprint of Starostin 1988].
- Starostin, Sergei A. 2009. Indo-European-North Caucasian Isoglosses. Transl. by Ronald W. Thornton. *Mother Tongue* 14: 77–135. [Translation of Starostin 1988].
- Trask, R. L. 1996. Response to Starostin [1996]. *Mother Tongue* 2: 111–117.
- Trask, R. L. 1997. *The History of Basque*. London / New York: Routledge.

- Trombetti, Alfredo. 1925. *Le origini della lingua basca*. Bologna: Azzoguidi.
- Turner, Ralph L. 1962–1966. *A comparative dictionary of Indo-Aryan languages*. London: Oxford University Press.
- Vaan, Michiel de. 2008. *Etymological Dictionary of Latin and the Other Italic Languages*. *Leiden Indo-European Etymological Dictionary Series 7*. Leiden / Boston: Brill.
- Vennemann, Theo. 1998. Andromeda and the apples of the Hesperides. In: K. Jones-Bley, A. Della Volpe, M. Robbins Dexter, M. E. Huld (eds.). *Proceedings of the Ninth Annual UCLA Indo-European Conference, Los Angeles, May 23, 24, 1997*: 1–68. Washington, D.C.: The Institute for the Study of Man.
- Walde, Alois. 1910. *Lateinisches etymologisches Wörterbuch*. Heidelberg: Winter.
- Witzel, Michael. 2015. The Central Asian substrate in Old Iranian. *Mother Tongue* 20: 149–178.

Джон Бенгтсон, Коринна Лешбер. О возможном эускаро-кавказском (баскско-северокавказском) происхождении некоторых субстратных лексических элементов в греческом языке.

Широко распространено представление о том, что в греческом языке, относящемся к индоевропейской семье, содержится немало «догреческих» субстратных элементов; при этом нет оснований утверждать, что существовал всего один «догреческий» язык, поскольку область распространения греческого языка вполне могла быть многоязычной. В настоящем исследовании проведен анализ ряда лексических элементов, которые могут свидетельствовать о влиянии некоторого эускаро-кавказского языка (или языковой семьи), носители которого попали в Грецию вместе с распространением земледелия из Анатолии. Такие греческие слова, как *ἄκαρῖ* ‘клец’, *μαστός* ‘грудь, сосок’, *β/μύσταξ* ‘верхняя губа, усы’, *ξύλον* ‘древесина, дрова’, и *ψῦχή* ‘дыхание’ относятся скорее к разряду базисной лексики и скорее отражают эускаро-кавказский догреческий субстрат, чем более поздние культурные заимствования. Анализируемые случаи, скорее всего, представляют собой лишь часть более обширного лексического слоя, идентификация которого требует детального анализа списка «догреческих» слов, составленного Фюрне и Беекесом.

Ключевые слова: баскский язык; северокавказские языки; эускаро-кавказская гипотеза; догреческий язык; языковые субстраты.