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## ON THE ANATOLIAN ORIGIN OF ANCIENT GREEK ΣΙΑΗ

*The comparison of Greek words for ‘pomegranate, Punica granatum L.’ (Gk. σίδᾱ, σίδη, σίβδᾱ, σίβδη, ξίμβᾱ f.) with Hittite <sup>GI</sup>šsaddu(wa)- ‘a kind of fruit-tree’ indicates a possible borrowing of the Greek forms from an Anatolian source.*

**Key words:** *Greek botanical terminology, pomegranate, borrowings, Anatolian languages.*

In this article we want to continue the analysis initiated in our article *Ancient Greek σίδη as a Borrowing from a Pre-Greek Substratum* (WITCZAK – ZADKA 2014: 113–126). The Greek word σίδη f. ‘pomegranate’ is attested in many dialectal forms, which differ a lot from each other what cause some difficulties in determining the possible origin of σίδη. The phonetic structure of the word without a doubt is not of Hellenic origin and it is rather a loan word. It also seems to be related to some Anatolian forms, but this similarity corresponds to a lack of the exact attested words for ‘pomegranate’ in Anatolian languages.

### 1. A Semitic hypothesis

No Semitic explanation of Gk. σίδη is possible. The Semitic term for ‘pomegranate’, \**rimān-*, is perfectly attested in Assyrian *armānu*, Akkadian *lurmu*, Hebrew *rimmōn*, Arabic *rummān* ‘id.’<sup>1</sup>, see also Egyptian (NK)

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<sup>1</sup> A Semitic name appears in the codex Parisinus Graecus 2419 (26, 18): ποῖρουμᾱν · ἢ ροῖᾱ ‘pomegranate’ (DELATTE 1930: 84) < Arabic *rummān* ‘id.’. This Byzantine

*rrm.t* ‘a kind of fruit’, Coptic *erman*, *herman* ‘pomegranate’ (supposedly from Afro-Asiatic \**riman-* ‘fruit’, esp. ‘pomegranate’; OREL – STOLBOVA 1995: 450).

The exact meaning of the Akkadian terms *šibru* ‘a plant’ (a word from a plant list) and *si’du* (or *se’du*) ‘a plant’ (BRINKMAN – CIVIL 1992: 382, 234) remains completely unclear. It is worth emphasizing that ROSÓŁ (2013) does not introduce Gk. σίδη into his list of early Hellenic loanwords borrowed from a Semitic source, though he discusses (negatively) the Semitic origin of Myc. Gk. *ro-a*, Aeolic ῥόα, Doric ῥοά, Attic ῥοιά, ῥοά, Ionic ῥοιή f. ‘pomegranate’, see ROSÓŁ (2013: 202).

## 2. Remarks on an Anatolian origin

The Anatolian toponymy strongly suggests that the substrate term for ‘pomegranate’, including Ionic Greek σίδη and its numerous variants, may be treated as a borrowing from ancient Anatolian languages, see WITCZAK – ZADKA (2014: 118–119). In fact, the existing of the Carian town Σίβδα suggests that the Carians called thus the pomegranate tree (and fruit). The Sidetic (?) form Σίγγυα, referring to the Pamphylian town Side (‘pomegranate’), seems to indicate a native term of Anatolian origin.

The Anatolian terminology denoting both wild and cultivated trees is relatively scarce. No term for ‘pomegranate’ is given in the Anatolian lexica, cf. WEEKS (1985). The most similar word appears in Hittite <sup>GIŠ</sup>*šaddu(wa)-* ‘a kind of tree/wood plant’, where GIŠ is an ideogram denoting TREE or WOOD, see GÜTERBOCK – HOFFNER – VAN DEN HOUT (2005: 314). FRIEDRICH (1991: 188) believes that it represents a domesticated plant (‘eine Nutzpflanze?’), whereas TISCHLER (2001: 147) explains <sup>GIŠ</sup>*šadduwa-* simply as ‘a plant’ (‘eine Pflanze’). The Hittite term in question is claimed to be etymologically unclear (“Etymologisch unklar”, according to TISCHLER 2004: 958).

The Hittite term <sup>GIŠ</sup>*šaddu(wa)-* denotes a tree, as the attestation in KBo 24.114, registering 10 GUN <sup>GIŠ</sup>*šaddu-* ‘ten talents of *šaddu*-wood’, seems to demonstrate that the *šaddu-* “in this context is timber” (GÜTERBOCK – HOFFNER – VAN DEN HOUT 2005: 314), though the context does not exclude a reference to fruits (‘ten talents of *šaddu*-fruits’). We believe that <sup>GIŠ</sup>*šadduwa-* should be translated as ‘a fruit-tree’, as a derivative (compound noun) <sup>GIŠ</sup>*šaddupala-* denoting ‘ein pflanzisches Produkt’ (TISCHLER 2004:

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codex, created in the 15th century AD by Georgios Midiates, is a medieval copy of an earlier botanical lexicon (DELATTE 1930: 59).

958) must refer to a fruit of the  $G^{i\check{s}}\check{s}addu(wa)$ - than a different part of a plant. The second part of the Hittite compound *-pala-* is to be compared with Old Indic (RV) *phála-* n. ‘fruit (esp. of trees)’, also ‘the kernel or seed of a fruit’ (MONIER-WILLIAMS 1999: 716). What is more, the Hittite compound noun  $G^{i\check{s}}\check{s}addu-pala-$  seems to include the same parts which appear in the reverse order in the Sanskrit compound *phala-sāḍava-*, also *phala-sāḍava-* m. ‘pomegranate tree’ (MONIER-WILLIAMS 1999: 717)<sup>2</sup>. If this comparison is correctly established, then the Hittite appellative  $G^{i\check{s}}\check{s}addu(wa)$ - may mean nothing other than ‘pomegranate’.

The Carian and Sidetic place names in question (Σίβδα vs. Σίγγοα), as well as the appellatives for ‘pomegranate’ attested in the Ancient Greek and Albanian vocabulary (Anc. Gk. σίβδα, Ionic σίδη, Alb. *shegë*) seem to demonstrate reflexes of an original labiovelar stop. Unfortunately, the Hittite appellative  $G^{i\check{s}}\check{s}addu(wa)$ - (with the suggested meaning ‘pomegranate tree’) gives no evidence for such a phoneme. It cannot be excluded, however, that the Hittite name in question represents a borrowing from the Luwoid languages and the phoneme *-w-* in  $G^{i\check{s}}\check{s}adduwa-$  reflects the Indo-Hittite  $*g^w$ . For the strong Luwoid influence in the Hittite vocabulary, see e.g. Hitt. *aku(wa)kuwa-* c. ‘spider, tarantula’ vs. Hitt. (Luwian loan-word) *auwawa-* ‘spider’ (PUHVEL 1984: 26), Hitt. *lalakwešsar* n. ‘ant-colony, ant invasion’ vs. Hitt. (a borrowing from Luwian) *lalaueša-* ‘ant, emmet’ (PUHVEL 2001: 44–45). The *a*-vocalism of  $G^{i\check{s}}\check{s}adduwa-$  may be explained as a Luwian reflex of Anatolian  $*e$ .

Taking into account the Hittite (perhaps Luwian) term  $G^{i\check{s}}\check{s}addu(wa)$ - we can reconstruct the Anatolian protoform as  $*sedgwa-$  (or  $*sadwa-$  in the Luwoid subgroup of the Anatolian languages). The discussed bunch of Greek appellatives denoting ‘pomegranate’ was borrowed from an undetermined Anatolian source. Of course, the Greeks must have borrowed the term(s) in question from a West Anatolian variety and not directly from the Hittite language. An exact source cannot be clearly indicated, as the Greeks made an early contact with different Anatolian nations, among them the Carians, the Lycians, the Lydians and also the Sidetians, later with the Cappadocians, the Isaurians, the Pisidians and so on.

The suggested connection between Hittite  $G^{i\check{s}}\check{s}addu(wa)$ - (probably from Anat.  $*sedg^w a-$ ) and Ancient Greek σίβδᾶ, σίδᾶ f. ‘pomegranate’ (<  $*σίδβᾶ$

<sup>2</sup> See also OInd. *kalka-phala-* m. ‘the pomegranate plant’, *kuca-phala-* ‘the pomegranate’ (orig. ‘having its fruit like the female breast’), *dāḍima-phala-* ‘the kernel of a pomegranate’ (cf. *dāḍima-* ‘the pomegranate tree’), *vṛtta-phala-* m. ‘the pomegranate’, *sat-phala-* m. ‘the pomegranate or any tree producing good fruit’, *su-phala-* m. ‘the pomegranate’, orig. ‘having a good fruit’ (MONIER-WILLIAMS 1999: 262, 287 etc.).

or \*σίδῤῥᾱ) is possible from the phonological point of view. The consonants in the Hittite (Anatolian) and Ancient Greek forms seem to represent three different phonemes: the sibilant \*s in the initial position (cf. Hitt. š- = Gk. σ-), the dental stop \*d in the medial position (Hitt. -dd- = Gk. -δ-) and a labiovelar stop \*gʷ (or its later reflex \*w) in the final syllable (Hitt. -w- = Gk. -β- or zero).

The observed root vocalism in Hittite and Greek is different (Hitt. -a- remains in opposition to Gk. -i-). However, the development of \*e to a in Hittite (and especially in the Luwoid languages) is well known. On the other hand, the change of the short vowel \*ē to ĭ was quite common in early Greek loan words (FURNÉE 1972: 353–355)<sup>3</sup>, and sometimes even in indigenous Greek lexicon (see e.g. Mycenaean Greek *i-go* ‘horse’, Anc. Gk. ἵππος, Doric Greek ἶκκος m. ‘id.’ < IE. \*h<sub>1</sub>ekʷos).

The dialectal form σίλβᾱ f. ‘pomegranate’, attested both in the Hesychian lexicon (σίλβαι · ῥοιαί) and Modern Greek dialects, e.g. Pontic σίλβᾱ ‘eine Pflanze mit roten Früchten an der Blättern’, Samian το σιλβί ‘Pappel’, Rhodian (PN) οἱ Σίρβες, Chian (PN) ἡ Σίρβα (ANDRIOTIS 1974: 492; WITCZAK – ZADKA 2014: 116, 117, 124–125), represents the same archetype \*σίδῤῥᾱ (or \*σίδῤῥᾱ). The alternation of λ with dental plosives (δ or θ) is a feature of the Greek vocabulary of substrate origin (FURNÉE 1972: 387–388), e.g. Anc. Gk. λαβύρινθος vs. Myc. Gk. *da-pu<sub>2</sub>-ri-to-jo po-ti-ni-ja /daburinthojo potnia/*. The same alternation is registered in certain Ancient Greek dialects, especially in the Pamphylian and Cretan ones, e.g.

- (1) Pamph. Gk. (in the speech of the town Perge) λάφνη · δάφνη. Περγαῖοι (Hsch., λ-433), see Attic-Ionic Gk. δάφνη f. ‘laurel’, Cypr., Thess. δαύγνᾱ f. ‘id.’. In his poem Nicander of Colophon introduces a dialectal form δαυχμός f. ‘laurel’ (HESTER 1965: 352).
- (2) Cret. Gk. (in the speech of the town Polyrrhenia) λάπτα · μυῖα. Πολυρρήνιοι (Hsch., λ-409) < \*δάπτᾱ f. ‘fly’ (BROWN 1985: 77; WITCZAK 1995: 21–22), cf. Cret. Gk. θάπτα f. ‘fly’, Attic Gk. δάπτης m. ‘gnat’.
- (3) Gk. dial. λίσκος · δίσκος (Hsch., λ-11116).

The Aeolian term ξίμβᾱ f. ‘pomegranate’, registered in the plural form ξίμβαι · ῥοιαί. Αἰολεῖς by Hesychius of Alexandria, seems to demonstrate an initial guttural stop, as well as a nasal against of a dental plosive, see

<sup>3</sup> The alternation between *e* and *i* in the Greek borrowings of foreign (esp. Aegean) origin is registered as early as in the Mycenaean times, e.g. Myc. Gk. *di-pa /dipas/* ‘a large vessel’ vs. Anc. Gk. δέπας n. ‘goblet’, Myc. Gk. *ku-te-so /kutesos/* vs. Anc. Gk. κύτισος m. (f.) ‘bastard ebony, *Laburnum vulgare* L.’, see VENTRIS – CHADWICK (1956: 390, 399; CHADWICK – BAUMBACH (1963: 183, 215).

WITCZAK – ZADKA (2014: 123). A guttural consonant appears initially in the Hesychian gloss κυσήγη · ροιά and probably also in the Albanian term *shegë* f. ‘pomegranate’. The alternation of a nasal and a dental stop is well recognized in the Anatolian languages, e.g. Hitt. *nepiš-* n. ‘sky, heaven’ vs. Luw. *tappaš-* ‘id.’. The dialectal form ῥίμβα ‘great pomegranate’ seems unclear, as an ancient etymology, which derives it from Aeolian ξίμβα, cannot be verified.

The relation of all the forms beginning with a guttural stop (perhaps a labiovelar *\*kʷ*)<sup>4</sup> to the above-mentioned items with initial *\*s-* (e.g. Anc. Gk. σίβδα, σίδη, σίλβα) remains disputable. The Indo-European prefix *\*kʷu-* with the augmentative or pejorative meaning (originally derived from the pronominal interrogative stem *\*kʷi-*, *\*kʷo-*, *\*kʷu-*) seems the most likely hypothesis (SCHULZE 1895: 243–244; LEUMANN, LEUMANN 1907: 63; SCHULZE 1966: 400; MAYRHOFER 1992: 359)<sup>5</sup>. This type of derivation is perfectly attested in Sanskrit and other Indo-Aryan languages<sup>6</sup>. The following examples containing the prefixes in question are clearly motivated by the principal items: OInd. *ku-bhartar-* m. ‘bad husband, bad man’ vs. *bhartar-* m. ‘man’; OInd. *ku-cela-* n. ‘a wretched garment’ vs. *cela-* n. ‘clothes, garment’; OInd. *ku-kāvya-* m. ‘a bad poem’ vs. *kāvya-* n. ‘poem, inspiration, wisdom’; OInd. *ku-plava-* m. ‘unsafe boat’ vs. *plavá-* m. ‘boat, skiff’; OInd. *ku-putra-* m. ‘bad son’ vs. *putrá-* m. ‘son, child’. The same prefix is preserved residually in other Indo-European languages as well,

<sup>4</sup> Note that the original labiovelar stop *\*kʷ*, preserved in the Mycenaean times, was simplified before *\*s* in the Classical Greek dialects, cf. Myc. *qi-si-pe-e* [kʷsiph<sup>h</sup>e] du. ‘two swords’ (CHADWICK, BAUMBACH 1963: 225; AURA JORRO 1993: 205–206; BARTONÉK 2003: 138, 261, 597) vs. Gk. Hom. ζίφος n. *es*-stem ‘sword with a straight, double-edged blade’, Aeolic σκίφος n. ‘sword’ (CHANTRAINE 1974: 766; BEEKES 2010: 1036–1037).

<sup>5</sup> The sceptical position, expressed by SCHMIDT (1987: 358–361) with reference to Iranian lexical data, is not motivated, see ЭДЕЛЬМАН (2011: 159–161, 407–409). Note that the pronominal interrogative stem *\*kʷi-*, *\*kʷo-*, *\*kʷu-* is very well attested in all the Indo-European languages (POKORNY 1959: 644–648), including the Anatolian group, cf. Hitt. *kuiš*, *kuit* ‘who? what?’, *kuwat* ‘why?’, *kuwattan* ‘where? whither?’, *kuwatta* adv. ‘in every way’, *kuššanka* indef. adv. ‘anytime, ever’; Palaic *kuiš*, *kuit* (rel. and interog. pron.) ‘who, what’, *kuiša* ‘every’; Luwian *kuiš*, *kuit* (rel. and interog. pron.) ‘who, what’, *kuišha* indef. pron. ‘someone, anyone’; Hieroglyphic Luw. *kwi-* ‘who, what’, *kuman(a)* adv. ‘because’; Lydian *qi-* ‘who, what’, *quida* ‘whoever, whatever’, *kud* rel. adv. ‘where’, *kot* rel. adv. ‘as’; Lycian *ti* ‘who, which’, *tike* indef. pron. ‘someone, anyone’ (KLOEKHORST 2008: 488–491).

<sup>6</sup> Numerous examples are quoted in the etymological and comparative dictionaries of the Indo-Aryan languages (LEUMANN, LEUMANN 1907: 63; TURNER 1966: 163–164; MAYRHOFER 1992: 359).

namely in Dardic, Iranian, Baltic, Germanic and Slavic<sup>7</sup>. In some cases the prefix in question seems to represent only one phoneme *k-* (originally PIE. *\*k<sup>w</sup>-*) rather than the syllable *ku-* (< PIE. *k<sup>w</sup>u-*), e.g. Latin *costa* f. ‘rib’, Old Church Slavic *kostь* ‘bone’, Cz. *kost*, Pol. *kość* ‘id.’ (MEILLET 1905: 262; MEILLET 1921: 1–2; DERKSEN 2008: 239) vs. Slovak *ost’* ‘fishbone, awn, thorn’, Pol. *ość* ‘id.’ (< PIE. *\*H<sub>2</sub>ost-* ‘bone’); OInd. *khadati* ‘to eat’, *khādati* ‘id.’, also Parth. *x’z-* ‘to devour’, Khot. *khaś-* ‘to eat, drink’, Bal. *khāδ-* ‘to chew’ < Iran. *\*xād-* ‘to devour, eat, gorge’ (CHEUNG 2007: 445) vs. OInd. *átti* ‘to eat, consume, devour’, Lat. *edō* ‘to eat’ (< PIE. *\*H<sub>1</sub>ed-* ‘to eat’); OInd. *kharjuram* n. ‘silver’ (MONIER-WILLIAMS 1999: 337) vs. PIE. *\*H<sub>2</sub>erǵuro-* ‘silver’, cf. Gk. ἄργυρος m. ‘id.’, Messapic *argorian* n. ‘silver’ and (with a different suffix *\*-na-*) OInd. *árjuna-* adj. ‘white, clear; made of silver’ (MILEWSKI 1965: 205; MILEWSKI 1969: 204). The Indo-Iranian examples are highly interesting, as the initial guttural *\*k-* coalesces with the original laryngeal (PIE. *\*H*), yielding a new phoneme *kh-*. The form of the Old Indic term *kharjuram* shows that it originates from *\*k<sup>w</sup>harǵuro-* < *\*k<sup>w</sup>-H<sub>2</sub>erǵuro-* < *\*k<sup>w</sup>u-H<sub>2</sub>erǵuro-* (orig. ‘what kind of silver!’).

The expressive and augmentative function of the prefix *\*k<sup>w</sup>u-* appears to be confirmed by the lexical data. It is unclear, however, whether or not the pejorative function of the same prefix, which seems to dominate in the Indo-Aryan languages, should be reconstructed as an Indo-European feature, as suggested by SCHULZE (1895: 243–244; 1966: 400). The Hesychian gloss ῥίμβαι · ῥοταί μεγάλαι. ἄμεινον δὲ διὰ τοῦ Ξ ζίμβαι (Hsch., ρ-324) demonstrates clearly that the Greek word ζίμβαι, dial. ῥίμβαι f. pl. denotes ‘great pomegranate trees, great pomegranate fruits’, perhaps even ‘over-great pomegranates / ῥοταί μεγάλαι’<sup>8</sup>, whereas other forms (e.g. Ionic σίδη or σίβδη, Doric (Cyrenaean) σίβδᾶ f., Boeotian σίδᾶ f.) refer to pomegranates of normal size. The expression ‘what a pomegranate!’ is securely motivated in case of an abnormal size of the pomegranate fruit (or tree). This is why that the prefix *\*k<sup>w</sup>(u)-* is very likely in the case of Aeolic ζίμβᾶ, dial. ῥίμβᾶ ‘great pomegranate (fruit or tree)’. The Hesychian term κυσήγη ·

<sup>7</sup> See e.g. Avestan *kuruyā-* f. ‘a kind of disease / Name einer Krankheit’ (BARTHOLOMAE 1904: 474) < Iran. *\*ku-ruga-* vs. OInd. *ruj-* m. ‘pain, illness, disease’, *rōga-* m. ‘disease, infirmity, sickness’ (MONIER-WILLIAMS 1999: 882, 888); Lith. *kumelỹs* m. ‘stallion’, also ‘foal, colt’, Latv. *kumelš* m. ‘foal, colt’ < Baltic *\*ku-melias* (STALMASZCZYK – WITCZAK 2001: 29–32) < IE. *\*mélȳos* m. ‘stallion’, cf. OInd. *máryah* m. ‘stallion’, Shumashti *mair* ‘male ibex’ (< Dardic *\*marya-*), OIr. *meile* m. ‘horse, stallion, gelding’ (< Celtic *\*melyos*).

<sup>8</sup> Note that the Greek adjective μέγας in a bad sense means ‘over-great’ (LIDDELL, SCOTT 1996: 1088).

ροιά, compared with Albanian term *shegë* f. ‘pomegranate’, seems to demonstrate the Indo-European prefix *\*k<sup>w</sup>u-* as well.

### 3. Conclusions

Our final results, which refer also to our earlier paper on Gk. σίδη (WITCZAK – ZADKA 2014: 113–126), can thus be summed up as follows:

1. The attested Ancient Greek terms for ‘pomegranate’, σιδᾶ, σίδη, σίβδᾶ, σίβδη, σίλβα, ξίμβρα, ρίμβρα, are related to each other and they demonstrate a number of Pre-Greek features, as correctly stressed by FURNÉE (1972: 286).

2. At least three Ancient Greek forms (σιδᾶ, σίδη, σίλβα) are securely reflected in the vocabulary of modern dialects (see ANDRIOTIS 1974: 492; ROHLFS 1964: 454–455).

3. The attested Ancient and Modern Greek forms can be reconstructed as *\*siCg<sup>w</sup>ā* f. ‘pomegranate’ or *\*k<sup>w</sup>(u)-siCg<sup>w</sup>ā* f. ‘great pomegranate’, where *\*C* represents a foreign, non-Greek phoneme, perhaps a dental spirant.

4. The consonant *\*C* was realized in Ancient Greek as a voiced dental stop [D] (cf. σίβδᾶ, σίβδη, secondary forms σιδᾶ, σίδη < *\*siDg<sup>w</sup>ā* by an expected metathesis of consonants) or a liquid [L] (cf. σίλβα < *\*siLg<sup>w</sup>ā*) or a nasal [N] (cf. ξίμβρα, ρίμβρα < *\*k<sup>w</sup>(u)-siNg<sup>w</sup>ā*).

5. Within the Semitic vocabulary no concrete source of all possible borrowings can be determined.

6. The Hittite term <sup>GI8</sup>*saddu(wa)-* seems to denote a kind of fruit-tree, perhaps ‘the pomegranate tree’. This term is related to the Greek bunch of appellatives, but no direct borrowing is possible.

7. The Anatolian origin of Gk. σίδη and related forms seems acceptable.

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