Studies in the languages and language contact in Pre-Hellenistic Anatolia

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The Lycian toponym Κάδρεμα and the Anatolian wheat[*]

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1. *Introduction*

In the *Ethnika* of Stephanus of Byzantium (6th c. CE), the Lycian city name Κάδρεμα is attested, currently identified with the modern settlement of Gedelma.[1] Here follows the text, from the most recent edition by Billerbeck (2014: 8):

Κάδρεμα, πόλις Λυκίας, ἄποικος Ὀλβίων. ἑρμηνεύεται δὲ σίτου φρυγμὸς ἡ πόλις. τὸ ἐθνικὸν Καδρεμεύς.
'Kadrema: city of Lycia, colony of the Olbians. The city is explained as "grain parching". The ethnicon is *Kadremeus*.'

Although the text does not explicitly say that Κάδρεμα is a Lycian name, it seems reasonable to assume it.[2] According to Stephanus, the meaning of this city name has to do with 'grain' (σῖτος), but a philological problem involves the head

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1. 12 km west of Kemer; cf. Şahin (2001: 147-151), Çevik (2008: 207).
2. See Kretschmer (1896: 322-323). Kalinka (1901: 114) also included Κάδρεμα in his index of Lycian words.

noun φρυγμός. Manuscripts[3] have the reading φυγμός, mistakenly replaced by φιγμός[4] in the Aldina edition (Manuzio 1502), also reprinted in the Giuntina (Giunta 1521) and in Xylander's edition (1568: 153). The correction φρυγμός 'parching, roasting', found in van Berkel (1694: 434),[5] de Pinedo (1725: 343),[6] Dindorf (1825: 229), Westermann (1839: 153), Meineke (1849: 346), and Billerbeck (2014: 8), was first suggested by Salmasius (*apud* van Berkel 1694).[7]

A different correction was suggested later by Neumann (1962: 207), who thought of ὀρυγμός 'excavation, pit, mine', assuming that the initial sequence ορ- may have been corrupted in φ, because the meaning "Getreideröstung" seems to be unusual for a toponym and the practice of storing grain in pits was common in ancient Asia Minor.

In what follows, I will first try to clarify the origin of this toponym, based on the Anatolian data currently available and considering the different etymologies suggested. I will then return to the text of Stephanus in the conclusion.[8]

2. *Κάδρεμα and Hitt.* kant- *'wheat'*

Based on the meaning given by Stephanus of Byzantium, which concerns 'grain', the element καδ- in the toponym Κάδρεμα is compared by Neumann (1962: 207-208) with the Hittite noun *kant-* 'Einkorn wheat',[9] assuming a "Na-

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3. On the tradition of Stephanus of Byzantium, cf. Diller (1938) and Billerbeck (2006: 5*-49*).

4. Not φριγμός, as mistakenly noted by Meineke (1849: 346) and reported by Neumann (1962: 207), Tischler (1977-1983/K: 486), and Zgusta (1984: 211 fn. 217). The Aldina edition (Manuzio 1502) is treated as *codicis instar* by Meineke, but its text seems to depend on manuscript N (= Neapolitanus III.AA.18; cf. Billerbeck 2006: 24*-25*).

5. Also cf. his Latin translation: "CADREMA, urbs Lyciae, Olbiorum colonia. Nomen Urbis frumenti siccitatem denotat. Gentile, Cadramensis".

6. The text has φιγμός, but with the note "Lege σίτου φρυγμός", hence the Latin translation: "CADREMA, urbs Lyciae, Olbiorum colonia: interpretatur vero *frumenti siccitas*. Civitas. Gentile, Cadremeus".

7. Cf. van Berkel (1694: 434-435 fn. 25): "Pessimo errore in omnibus vulgatis excusum legitur φιγμός, sed meliorem vocem ex MSS revocavimus". Also note Holste (1684: 153-154): "MSS. pro φιγμὸς legunt φυγμός. Unde Cl. Salmasius putabat legendum, φρυγμὸς. Saltem aliquo sensu: nam in vulgata est nullus".

8. I will not consider in this paper the mount name *Cadra* occurring in Tac. *Ann.* 6.41 (cf. Zgusta 1984: 212).

9. See Hoffner (1974: 69-73) for the meaning. The etymology of Hitt. *kant-* is controversial and it is generally regarded as an Indo-Iranian loanword or a *Wanderwort* (cf. Avest. *gaṇtuma* 'wheat', Skt. *godhū́ma* 'wheat', and possibly Gr. χόνδρος 'wheat groats', Toch. A *kanti* [a kind of bread], and

salreduktion".[10] The final -εμα is explained as an abstract suffix, matching Hitt. -*ima* or Luw. -*ama*-. Because its Greek cognate suffix is -μός, either φρυγμός or ὀρυγμός would also provide a formal match, as far as derivational morphology is concerned (cf. Neumann 1962: 207 fn. 10). The underlying Lycian form might thus be a compound (something like Gr. *σιτοφρυγμός) or a deverbative noun (like Gr. σιτισμός < σιτίζω 'to feed'), although both solutions are regarded as not entirely satisfactory.

However, Neumann's hypothesis presents two major formal problems:[11]

1) the "Nasalreduktion" is problematic, because the outcome of */Vnt/ is regularly /Ṽt/ = [Ṽd] in Lycian,[12] which is adapted as <Vνδ> in Greek.[13] Therefore, were the base of Κάδρεμα connected with the Hittite noun *kant*-, the toponym would be very unlikely to be Lycian, because the Lycian expected base would be *kãt*- (> Gr. κανδ-);[14]

2) the <ρ> remains unexplained: were Κάδρεμα a compound, it should belong to its second member, which is not positively recognisable, while an explanation as a deverbative noun in -εμα would recommend its belonging to the base, which therefore could hardly match Hitt. *kant*-.

Therefore, a different base should probably be posited.

Ugar. *ḫndṛ*), which does not exclude an ultimate Indo-European origin (see especially Tischler 1977-1983/K: 486, Puhvel 1997/K: 56, and Rieken 1999: 45, with references).

10. Neumann (1962: 207 fn. 12, with references) notes that such a phenomenon seems to occur before a dental stop in Pamphylian (e.g. πέντε > πεδε). The same phenomenon would also be attested in the Lycian toponym *xadawãti*- 'Kadyanda', which, according to Neumann (1962: 208), matches Hitt. **kant-want*- 'weizenreich' (see also Neumann 1969: 378, while Rieken 1999: 45 reconstructs a preform **g(ʰ)ont-went*-). See also Tischler (1977-1983/K: 486) and Puhvel (1997/K: 56).

11. See also Schürr (2014: 759).

12. Cf. Melchert (1994: 308-310).

13. See data in Réveilhac (2018: 403-407).

14. The hypothesis of a Pamphylian origin would perhaps remain available, because, according to Stephanus of Byzantium, Kadrema was a colony of Olbia, which was located in western Pamphylia (cf. Zgusta 1984: 211 fn. 216; see also Adak 2006). However, it would be problematic to connect Lyc. *xadawãti*- 'Kadyanda' to the same root: note the regular outcome /ãt/ < */ant/ in the suffix, while Lyc. <d> (= /ð/) in the base should be the outcome of PA */d/ (cf. Melchert 1994: 289). Indeed, according to Melchert (2004: 80), the base of *xadawãti*- rather matches Hitt. **ḫātar* (see below).

3. Κάδρεμα, *Lyc*. xadrñna, *and Hitt*. ḫāt(t)ar

The toponym Κάδρεμα has been connected by Kluge (1910: 115) with the Lycian word *xadrñna*,[15] occurring in the inscription TL 150 from Rhodiapolis, in the following context:

(8) … *xssẽñzijaje : hberuse* (9) *zasāni : xadrñna : uhazata : kumezeine*
'*xadrñna* yearly offerings are due to Xssẽñzija's relatives? to worship.'[16]

Previous interpretations by Torp (1898: 39) and Meriggi (1930: 459)[17] regarded *xadrñna* as a numeral, 'four',[18] while Carruba (1974: 590) suggested a comparison with Hitt. *ḫatrae-* 'to write' ("la quota annuale (fissata per) iscritto"), though not excluding a connection with the stem *hat-* 'to dry up'. According to Melchert (2004: 80), *xadrñna* is explained as an adjective in **-wann*(*i*)- derived from an unattested Lycian noun **xadar*,[19] matching Hitt. **ḫātar*, which should be the reading hidden behind the Sumerographic spelling ZÍZ-*tar* 'spelt',[20] as previously suggested by Watkins (1973: 191-192 fn. 5). Therefore, *xadrñna uhazata* would mean 'yearly offerings of grain' (*vel sim.*).[21]

It should be noted that a Hittite word *ḫāt(t)ar* meaning a kind of cereal actually exists, although it cannot correspond to ZÍZ-*tar*.[22] Such a noun may be regarded

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15. Kluge (1910: 115): "*kadrñna* nur hier [*scil*. in TL 150, 9] St. B. κάδρεμα = (σίτου φρυγμός). (Kal.); der Name ist jedenfalls Eigenname und auch, wenn nicht Stadtname, so doch Ethnikon". The term may also be a place name according to Schürr (2014: 759 fn. 41). See also Carruba (1974: 582 fn. 9).

16. Translation based on the grammatical analysis by Yakubovich in the eDiAna corpus (I. Yakubovich (ed.), Provisional annotation of the Lycian corpus, https://www.ediana.gwi.uni-muenchen.de/corpus.php, visited on 2020-11-03).

17. Cf. his translation: "dem *Kssẽñzija* …… vier (quaterna) *uhazata* zu bezahlen".

18. Meriggi compared *kbisñne/i-* and *trisñne/i-*, currently explained as compounds with *-sñne-* (= Hitt. *zēna-* 'autumn') as second member, i.e. 'two-years-old' and 'three-years-old' respectively (see Melchert 2004: 31, 70, with references).

19. Melchert however adds: "but use of suffix would be unique". A different possibility could involve the Lycian cognate of the Luwian suffix *-anna/i-*, forming both diminutives and possessive adjectives secondarily substantivized, e.g. Luw. *:kantanna/i-* 'having wheat' > 'wheat-field' (cf. Melchert 2003: 196; on Luw. *:kantanna/i-* see also Starke 1995: 116-117 fn. 226). See however Schürr (2014: 759 fn. 41), who tentatively regards *xadrñna* as a toponym: "Der Vergleich mit *Arñna* = Xanthos < *Awarna* könnte aber eine Analyse *χad-rñna* nahelegen".

20. See Melchert (2004: 80) s.v. *Xadawāti-*.

21. The meaning 'of grain' is also dubitatively accepted by Yakubovich in the eDiAna corpus.

22. As Watkins (1975: 185) notes, Hitt. *ḫattar* cannot be the reading of the Sumerogram ZÍZ, which is a heteroclitic *r/n*-stem (attested forms include nom.-acc.sg. ZÍZ-*tar*, gen.sg. ZÍZ-*na-aš*,

as a good comparandum for the base of Lyc. *xadrña*.[23] While the correspondence between Lyc. *x* and Hitt. *ḫ* is not problematic,[24] Lyc. *d* (= /ð/)[25] would require a PA */d/, which cannot be safely reconstructed for the preform of Hitt. *ḫāt(t)ar*. Indeed, for the Hittite word, the following spellings are attested:[26]

ḫa-a-tar-	Bo 3123 iv 6′ (OH/OS)
ḫa-a-a[t-tar-	KBo 25.79 iv[?] 6′ (OH/OS)
*ḫa-a-at-tar*ˡ(KUR)-	IBoT 2.93 rev. 13′ (OH/LNS)
ḫa-at-tar-	KUB 42.107 iii[?] 10′ (OH/NS)
ḫa-at-tar	KBo 11.14 i 6 (OH/NS)
ḫa-a-tar	KBo 13.119 iii 21′ (MH[?]/NS)

As can be seen, this noun is mostly spelled with <tt>, which points to an original voiceless *t* according to the Sturtevant's Law,[27] although two occurrences with single <t> are found.[28] The issue is relevant for the etymology of the word: if the original form was *ḫa-a-tar*, i.e. /ḫadar/, it would be possible to connect this word to the Hittite verb *ḫat-* 'to dry up' (< PIE *h_2od-), consistently spelled with a

dat.sg. ZÍZ-*ni*), because the two nouns occur in the same list of cereals: KBo 11.14 i 6 ZÍZ-*tar še-ep-pí-it pár-ḫu-u-e-na-aš e-wa-an kar-aš ḫa-at-tar* (7) *zi-na-il ku-u-ti-ya-an* (see also Rieken 1999: 315 fn. 1527). As mentioned, before knowing of the existence of the noun *ḫattar*, Watkins (1973: 191-192 fn. 5) himself proposed that *ḫatar* (= Lat. *ador*) could be the Hittite reading of ZÍZ. Note that sometimes *ḫattar* is still indicated as the Hittite reading of ZÍZ; cf. e.g. Tischler (2001: 47, 268), Hagenbuchner (2002: 6), HW² Ḫ: 343 s.v. *ḫaršanant-*, 367 s.v. ᴰᵁᴳ*ḫarši*, 372 s.v. ⁽ᴰᵁᴳ⁾*ḫaršiyalli-* (but not s.v. *ḫat(t)ar* in Lief. 18: *3), and Weeden (2011: 651) (referring to the HW²), besides aforementioned Melchert (2004: 80) s.v. *Xadawãti*. According to the HW² Ḫ s.v. *ḫat(t)ar* (Lief. 18: *3-*5), the noun may correspond instead to the Sumerogram GÚ.TUR 'pea[?], lentil[?]'. On ZÍZ in Anatolia see especially Hoffner (1974: 65-69) and Del Monte (1995: 126-129).

23. See also Neumann (2007: 109).

24. Cf. Melchert (1994: 286). See also Réveilhac (2018: 329-333).

25. Cf. Réveilhac (2018: 312-316).

26. Cf. Tischler (1977-1983/A-K: 220), Puhvel (1991/H: 247), Rieken (1999: 314), HW² Ḫ Lief. 18: *3-*5, Pozza (2011: 173) (but *ḫa-at-ta-ra-an* in KUB 32.117+ iii 16′, 17′ probably does not belong here).

27. I follow the traditional interpretation of the intervocalic single vs. geminate spelling opposition in terms of voice (<VttV> = /t/ < PIE *t* vs. <VtV> = /d/ < PIE *$d^{(h)}$*), as first suggested by Sturtevant (1932). For a different explanation in terms of consonantal length (<VttV> = /tt/ vs. <VtV>) = /t/) see Kloekhorst (2016), recently rejected by Simon (2020).

28. Also note that *ḫa-a-tar* in KBo 13.119 iii 21′ occurs in a very broken and unclear context, so that its belonging here remains uncertain (cf. Berman 1972: 85).

single dental stop.[29] Such a derivation from *ḫat-* would be very attractive because it would allow the connection of Hitt. *ḫāt(t)ar* with the Latin noun *ador* 'coarse grain, spelt', which has been traced back by Watkins (1973) to the same PIE root,[30] given that the Hittite verb *ḫat-* also referred to drying of cereals.[31] However, Watkins (1975: 184-186) himself excluded that Hitt. *ḫattar*, written with <tt>, could match Lat. *ador*, and he envisaged a connection with Lat. *āter* 'black', assuming that Hitt. *ḫattar* may perhaps denote something like black beans. He did not know of the occurrence of *ḫa-a-tar-* in Bo 3123 iv 6′, but only of the one in KBo 13.119 iii 21′, very uncertain due to the fragmentary context.

According to Rieken (1999: 314), the different spellings point to an original form *ḫāttar*, which would exclude a derivation from the verb *ḫat-* 'to dry up'. The connection with Lat. *āter* envisaged by Watkins (1975) is also regarded as a mere "Anklangsetymologie", which cannot be proven until the specific type of cereal is determined. Therefore, she suggests the belonging of *ḫāttar* to Hitt. *ḫatt-* 'to pierce, to strike' (< PIE *$h_2$et-/*$h_2$ot-*), comparing Hitt. *kar(a)š-* 'emmer wheat' < PIE *$ĝ^hers$-* 'to pierce, to bristle' (cf. Lat. *hordeum*).[32]

As to the kind of formation, attested forms do not allow the determination of whether *ḫāt(t)ar* belonged to the *r*-stems or to the heteroclitic *r/n*-class, so that Rieken (1999: 315) reconstructs: (1) on one hand, either *h_2e-h_2t-ro-*, if *ḫāttar* is cognate of Lat. *āter*, or *$h_2$ot-ro-*, if it belongs to *ḫatt-* 'to pierce' (cf. *$ḫatra$-* in *ḫatrae-* 'to write'); (2) on the other hand, either *$h_2éh_2t$-ṛ/-n-* or *$h_2ót$-ṛ/*$h_2ét$-n-*.

In my view, the possibility of a derivation from *ḫat-* 'to dry up' cannot be entirely excluded, because spellings with simple <t> are actually attested, already in OS,[33] although they seem to be less frequent (but we are only dealing with six oc-

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29. Cf. Puhvel (1991/H: 247-248) and Hajnal (1995: 34 n. 20). On Hitt. *ḫat-* see also Tischler (1977-1983/A-K: 213-214), HW² A: 478-482, Kloekhorst (2008: 328-329).

30. See also Poetto (1976) and de Vaan (2008: 25) (with further comparison with Arm. *hat* 'grain', *hačar* 'barley', and Got. *atisk* 'grainfield'). The noun is explained by Watkins (1975: 183) as a collective *$h_2ed-ōr$* 'dry stuff' (cf. *wed-ōr* 'wet stuff' = 'water'), while Poetto (1976: 158-160) reconstructs a neuter *s*-stem *ados*. In de Vaan (2008: 25) both solutions are offered: "Lat. *ador* probably reflects a neuter collective *ad-ōs* or *ad-ōr*".

31. See e.g. 3 *PA*. *eras.* ZÌ.DA ZÍZ *ḫa-a-ta-an-da-aš*, 'three *parīsu* of meal of dried spelt' (IBoT 2.93 obv. 12′) and … Z]Ì.DA-*aš ḫa-a-ta-an ma-al-la-an*, '[… of me]al dried (and) milled' (KBo 16.78+ i 8′).

32. Cf. also Puhvel (1997/K: 75) and Kloekhorst (2008: 444-445), which reconstructs *$ĝ^hersd^h$-*.

33. However, according to Kloekhorst (2014: 263), *ḫa-a-tar* in Bo 3123 should be probably emended to *ḫa-a<-at>-tar*.

currences, to my knowledge).[34] Therefore, as a working hypothesis, I would tentatively assume that the spelling with single <t> may reflect the original form, while the one with <tt> could be a later – although still ancient – development, possibly through para-etymological association with the verb *ḫatt-* 'to pierce', although, of course, there is no evidence of this, and the opposite path – i.e. from original *ḫāttar* to *ḫātar* via possible para-etymological association with *ḫat-* 'to dry up' – would be perfectly conceivable. Such a solution would provide a good cognate for Lat. *ador* as well as a good base for both Lyc. *xadrñna* and Κάδρεμα. Indeed, the element Καδρ- in the Greek form seems to perfectly reflect the Lycian base *xadr°* found in *xadrñna*, given the consistent correspondence between Lyc. <x> and Gr. <κ> and Lyc. <d> and Gr. <δ>.[35] The Lycian toponym may thus be reconstructed as **xadrm̃me*.[36]

Of course, one cannot entirely exclude the possibility that two similar but different Hittite words – *ḫāttar* (= GÚ.TUR?) and **ḫātar* (= ZÍZ-*tar*) – existed, the latter matching the base of the Lycian words we are dealing with, but such a solution finds no confirmation so far.

Possibly related to the same noun is Lyc. *xθθase* (TL 131, 4), whose form and meaning are, however, not entirely clear. According to Neumann (1974: 113-114), the sequence should be analysed as an adjective *xθθa* < **xadahi-* < **xad(a)-* "Getreide" (= Hitt. *kant-*)[37] and the conjunction *se*, while Carruba (1974: 582) suggested a derivation from **ḫatašši-* "ciò che è secco, disseccato" (> 'fodder') from the root *ḫat-* 'to dry up', without a conclusive explanation for the suffix *-se* (he invoked **ḫatašašt/k/ḫa/i-* or **ḫataššanza* as possible "Luwian" preforms). Hajnal (1995: 34 n. 20) follows Neumann's analysis, but connecting Lyc. **xada-* (i.e. **/ḫad-ā́-/*) to Hitt. *ḫattar*, both < **ḫā́d-ro-* "das getrocknete (sc. Getreide)", with the loss of final *-r* in Lycian. Finally, Melchert (2004: 85) explains *xθθase* as a dat.-

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34. Also consider that, according to some scholars, Sturtevant's Law cannot be regarded as entirely reliable, because some Hittite words show consistent spellings that do not correspond to the expected outcomes, and examples of alternation between single and geminate stops in the same stem can be sometimes found (cf. e.g. Pozza (2011: 700-713), who also recalls Sturtevant's (1932: 1) own remark: "this tendency can rarely be used to determine the truth of an etymology"). However, most of the alleged problematic examples can be explained in different ways (see e.g. Kloekhorst 2014: 543-596), so that this cannot really represent an argument.

35. Cf. Réveilhac (2018: 312-316, 321-323).

36. For -εμα, with vowel <ε>, matching Lyc. *-m̃me* after /r/, cf. Lyc. *Trm̃mile/i* = Gr. Τρεμιλεῖς (besides Τερμίλαι). Also cf. perhaps the Lycian city name **xuxrm̃me*, indirectly attested in the ethnonym *xuxrm̃mezi* in the inscription N 337, which is however connected by Eichner (*apud* Christiansen 2012: 148-151) to the Hittite personal name *Ḫuḫarmati*.

37. Note however that Lyc. *x* usually matches Hitt. *ḫ*.

loc.sg. of an abstract/collective stem *xθθas-* (etymology and meaning not provided).[38]

4. *The suffix -εμα*

Now that we have made it clear that a base matching Hitt. *ḫā(t)tar* is probably more fitting than *kant-*, the issue of the suffix remains to be addressed. As mentioned, according to Neumann (1962: 207), -εμα could represent the Lycian cognate of the Hittite abstract suffix -(*i*)*ma-* and Luwian -(*a*)*ma*/*i-*,[39] but this is not the only possibility.

In fact, the toponym Κάδρεμα, allegedly Lyc. **xadrm̃me*, may theoretically reflect at least three possible formations attested in Luwian:[40]

1) a common gender noun built with the suffix -(*a*)*ma*/*i-* (< *-*mo-*), which forms action nouns from verbs (e.g. *lalama*/*i-* 'receipt' < *lala-* 'to take'), while the corresponding Hittite suffix -(*i*)*ma-* was also extended to adjectival bases (cf. Hoffner – Melchert 2008: 58-59);[41]

2) an original adjective built with the suffix -*ama*/*i-* (< *-*mo-*), which forms adjectives of appurtenance from nouns (e.g. ^{LÚ}*maššanāma*/*i-*, a cultic functionary, lit. 'belonging to god'[42] < *maššana*/*i-* 'god');

3) an original adjective built with the participial suffix -*m*(*m*)*a*/*i-* (Lyc. -*me*/*i-*),[43] which was also secondarily extended to noun bases to form possessive adjectives (e.g. *piḫamma*/*i-* 'imbued with splendour' < **piḫa-* 'splendour').[44]

In my view, the second and the third solutions seem to be the best ones, while I would exclude the first possibility, an abstract noun in -(*a*)*ma*/*i-*. Of these stems,

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38. See also Neumann (2007: 135-136, with further explanations).

39. According to Starke (1990: 296: 1010), Luwic languages do not show a cognate of the Hittite suffix -(*i*)*ma-*, because Luw. -*mman-* and Lyc. -*m̃ma-*, with a geminate nasal, point to a different suffix, which also derives nouns from verbs (see Starke 1990: 243-299). However, Melchert (1993: iv; 2014: 208) rightly pointed out that Luwian actually shows a deverbative animate suffix -(*a*)*ma*/*i-*, with single /m/, matching Hitt. -(*i*)*ma-* (see already Laroche 1956).

40. Cf. Melchert (2003: 195) and Melchert (2014: 206-209).

41. On this suffix, see also Oettinger (2001).

42. See now the entry by A.H. Bauer and Zs. Simon in the eDiAna dictionary (https://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=1278).

43. This suffix is the outcome of *-*mn-a-*, based on the suffix -*mman* (< *-*men*) that forms neuter action nouns from verbs (cf. Melchert 2003: 197, Melchert 2014: 207).

44. A Lycian example may be *Tesm̃mi-*, denoting a divine agent, which, according to Melchert (2004: 64), is probably a "direct denominative to *tese-*, not participle".

Lycian surely shows participles, while the presence of the other two classes is more difficult to assess.

5. *Conclusion*

Taking it for granted that Stephanus' words on the Lycian city Κάδρεμα meaning something connected to grain are reliable, assuming i.e. that it is not a folk etymology,[45] the toponym can be explained as a derivative of the Lycian cognate of Hittite *ḫāt(t)ar* (a kind of cereal), **xada(r)*[46] or the like (probably indirectly attested in the derivative *xadrñna* in TL 150), while previous connections with the Lycian cognate of Hittite *kant-* should be rejected on phonetic grounds, because the lack of expected /n/ in the Greek form and the unexpected presence of /r/ cannot be accounted for.

As to the suffix, at least two possibilities remain available: Κάδρεμα (= **xadrm̃me*) may represent either an original denominative appurtenance adjective in *-ama/i-* ('of grain'), although such a noun class, certainly existing in Luwian, has not been clearly identified in Lycian, or an adjective built with the participial suffix *-m(m)a/i-* (Lyc. *-me/i-*), secondarily extended to a noun base ('having grain').[47]

While the Lycian etymology of Κάδρεμα, although not entirely clear, may be not very problematic, its exact meaning according to Stephanus remains quite questionable because of a philological problem. Φυγμός, transmitted by codices, cannot be accepted. Both Salmasius' φρυγμός 'parching, roasting' and Neumann's ὀρυγμός 'pit' are quite economic amendments, and both words are actually attested, the first one in Hesychius' *Lexicon* (φ 947: φρυγμόν· καῦσιν), the second one in an inscription from Thebes on Mykale, in Ionia (acc.pl. τοὺς ὀρυγμούς, IK Priene 415, mid 4th c. BC), although the most common form is ὄρυγμα, -ατος.

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45. Such a possibility obviously exists. In this case, one should think to a different etymology for Κάδρεμα. Comparison with Hitt. *ḫatrae-* 'to write' may seem attractive, but <t> would be expected in Lycian, which is consistently adapted as <τ> in Greek, except when it follows a nasal, where <δ> is found (cf. Réveilhac 2018: 309-311). In any case, of course, Stephanus' explanation seems to imply the existence of a Lycian word **xada(r)* (*vel sim.*) meaning 'grain' or the like, even if it was not the actual base of the toponym Κάδρεμα.

46. Note that single consonants are generally lost in Lycian in final position (cf. Melchert 1994: 323), but final /r/ may have been preserved in derivative stems like *xadrñna* and **xadrm̃me* = Κάδρεμα (many thanks to H.C. Melchert for this remark).

47. One may also try to explain Κάδρεμα as an action noun directly derived from the Lycian cognate of Hittite verb *ḫat-* (= 'drying'), but the presence of /r/ would remain unexplained.

From a semantic point of view, 'grain pit' may appear as more appropriate for a toponym than 'grain parching', but the physical and climatic characteristics of the area – were the identification with Gedelma correct – rather seem to suggest the latter explanation:

"Eine solche Erklärung des Wortes [*scil*. Neumann's σίτου ὀρυγμός] ist aber wegen des feuchten Bodens des lykisch-pamphylischen Gebiets kaum vorstellbar. Andererseits sind die traditionellen Getreidespeicher dieser Region Holzbauten, die heute im Lande noch überall im Gebrauch sind. Bleiben wir dagegen in der Konjektur σίτου φρυγμός, so würde Gedelma für die Eigenschaft einer 'Getreidedarre' gut in Frage kommen. Denn das Dorf liegt in einem von Felswänden der hohen Bergen umschlossenen Bergkessel […], wo die Luft durch Rückstrahlung der Hitze sehr heiß und ziemlich trocken ist. Ferner weht der Fallwind […] direkt über den Bergkessel von Gedelma hinüber in die Schlucht von Kesme Boğazı hinunter, so daß in dem Ort günstige klimatische Einflüsse entstehen, die dafür sorgen, daß das Getreide in der Aufbewahrung nicht schimmelt, sondern gründlich getrocknet wird (Şahin 2001: 148)."

Furthermore, while I was not able to find any context in which ὄρυγμα is associated with the storage of cereals, the verb φρύγω, base of the derivative φρυγμός, actually means 'to parch' or 'to roast' (despite Hesychius' καῦσιν, which seems to only point to a burning process) and also referred to cereals.[48]

As a final remark, if Hitt. *ḫāt(t)ar*, presumably matching the base of the Lycian city name Κάδρεμα, actually derives from *ḫat*- 'to dry up', one cannot help but notice the curious coincidence that Stephanus' explanation of the toponym as σίτου φρυγμὸς (assuming that Salmasius' emendation is correct) calls into question the parching process. Of course, it could actually be just a coincidence; however, I would not entirely exclude the possibility that a trace of an (alleged) original etymological connection may have survived and been somehow transmitted to Stephanus' sources.

48. Cf. e.g. πεφρυγμένας κριθάς, 'parched barley', in Thuc. 6.22.

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