The Germanic word for ‘sword’ and delocatival derivation in Proto-Indo-European

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There is no compelling etymology for the Germanic word for sword (OHG swert, OE sweord). This paper argues that this word is related to Cuneiform Luvian ši(h)u辣 ‘dagger’: both words are derived from a stem *sh2/3u- ‘sharp’. Gmc. *suerđa- goes back to a substantivized adjective *sh2/3u-er-tó- ‘sharp’ (with a loss of the laryngeal already in the protolanguage), derived from a locative *sh2/3u-er (compare *gheim-en-tó- ‘wintry’ from *gheim-en ‘in winter’).

1. The problem
The reflexes of Gmc. *suerđa- ‘sword’ are found in West and North Germanic: OHG swert, OS swerd, OE sweord, ON sverð (in Gothic this word was replaced by hairus). This word has no established etymology and the sad dictum of etymological dictionaries is usually “Herkunft unklar” (cf. Holthausen 1934: 335; Vennemann 1984: 109; Kluge-Seebold 2002: 834).

2. Previous scholarship
Previous attempts to explain this form have been few and unsatisfactory. In this section I will critically examine the more serious ones.

2.1 The handbooks usually contain a reference to Falk-Torp 1909 (=1979: 550), where a relationship between Gmc.
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*smerða- and Gk. (“Achaean”1) ádor ‘sword’ was assumed with a further connection with the verbal root of Gk. áeírw ‘to lift’ and Lith. sveñį ‘to weigh’. This idea has had an unfortunate Nachleben and persists in the literature (recently cf. Huld 1993: 225). To begin with, there is a semantic problem, since this etymology presupposes a reference to a weapon hanging at one’s hip: a basic meaning ‘Wehrgehänge’ is not easy to parallel for a word of this meaning; in other words, hanging is simply not a pivotal function of a sword. The formal side of this etymology, too, rests on rather shaky ground: Myc. a-o-rí-me-ne shows that there never was an internal digamma in ádor and so a proto-form *sh₂muor- is out of the question.² Lastly, there is an alternative etymology for ádor: it appears very plausible to trace this word back to *h₂nsi or *h₂nsó, formed from the root of Lat. ènsis (< *h₂nsi- or *h₂nsí-), Pal. ħâšîran ‘dagger’³ and Ved. asís- ‘sacrificial knife, sword’.⁴ By adopting this alternative analysis of ádor we also get a better semantic solution: a word for ‘sword’ is connected to a well-established PIE lexical entry *h₂nsi- of the same meaning.

2.2 While the connection to áeírw fails to account for the formal side of the etymology, other suggestions are equally uncertain, mostly for semantic reasons.

1bT scholion ad § 385: καὶ Ἄρκαδες καὶ Αἰτωλοί πάν ὀπλον ἄδωρ καλοῦσιν; the “Achaean” provenance is further confirmed by reliable γλώσσαι κατὰ πολέμ. 

²It should also be noted that the short /a/ in ádor speaks against *sm-suor (long /a/ in the oblique forms òdor, òdora in Homer is due to a metrical lengthening). The Corcyrean form Ἀχοροί, mentioned by Minon (1999: 1379), is irrelevant: Corcyra is a Corinthian colony and hypercorrect use of digamma is well attested in Corinth, cf. the participles ἰφώω, ἐφώ (SEG XV, 389, 390), Gen.Sg. -ασω (also in Corcyrean Τλασιαμέω IG IX 1, 867, 1) or personal names Ποτέδαμων, Διδαμέων, Ὀριών.

³The Palaeic word is a hapax in an unclear passage of the Zaparwa ritual (KBo 19.152 Vs. 1 12’) and its relationship to PIE *h₂nsi-, *h₂nséj (suggested in Eichner 1980: 127, Fn. 30) is unfortunately not assured, other options being available and the development of *ŋ in Palaeic being debatable. For an alternative solution (which is merely a possibility!) see Vine ἀνδὲ Melchert 2007: 257, Fn. 12.

⁴A relic of this i-stem is also possibly found in Myc. PN a-i-φώ- ‘killing with a sword’; on the details of Greek phonology (restriction of Rix’ Law before nasals) see Nikolaev 2005 (plus a note by Matasović 2007: 32-33); Nikolaev 2007: 164-165. The alleged Avestan aŋhu- ‘sword’ (Yt. 13, 46 ᵒahtaiyār pāro aŋhuiiāt) is unreliable: the context suggests ‘bowstring’.

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2.2.1 Lidén (1891) suggested a comparison to Lat. *sorbus*, f. 'service tree' which was enthusiastically supported by Pipping (1925: 38-39); however, the semantic pattern which Lidén sought to establish (names of trees as basis for designations of various kinds of weapons) while possible in case of bows and spears (Gk. τοξον and αἰγανή, Lat. *ornus* and *fraxinus*) remains unfounded in the case of metal weaponry.

Krogmann (1932) assumed a relationship with a root *suer-* which he glossed as 'stechen, schneiden'. His reasons for this reconstruction of the semantics are unclear, since the only meaning attested for the continuants of this root is 'to ache, to suffer pain': OHG *swero* m. 'pain, ulcer', *sweran* 'to fester', Slavic *xvor*/*xyr* 'ailings', YAv. *x'ara*- n. 'wound' (Y 57.10, etc.). Moreover, the morphology of the alleged *suer-đa* - Gegenstand zum Stechen, Schneiden' is less than assured: if *suer-đa* goes back to *suer-tô*, a full grade unaccented vowel in the root is not easy to account for. If *-đa* is from PIE *-dhh₁-o-*, the pre-Germanic place of accent is irrelevant, but the desired meaning of an agent noun (*suer-đa*-pain-inflicter) is hardly compatible with what is otherwise known about PIE formations of this type.

Schrader (1917-1929: I,160) put forth a comparison to Slavic *svrdlu* 'borer, drill' (supported by Trubačev 1966); but given the nature of the tool, the alternative etymology

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6Note also that Lat. *sorbus* finds a perfect comparandum in the Lithuanian name for currant *serbentà*.

7Sperber (1915: 39-40) suggested that *suerđo* originally referred to a weapon made of wood and advocated a relationship with Gmc. *syrdu*- 'flitch'; however, in my opinion, Sperber's ethno-chronological parallels are not convincing, especially since the evidence for a putative semantic change from 'a side of meat' to 'a side section of a piece of wood' in this group of words is limited precisely to *suerđo* (none of the reflexes of Gmc. *syrdu*- in mediaeval Germanic languages refers to wood).

8Modern Iranian cognates: Ossetic (Iron) *xerà* 'to itch', Kurdish (Kurmanji) *xàrin* 'to scratch', etc. Čop (1956: 111) has further compared Hittite *sarr-*, (the stem of which should rather be set up as *sâr*/*sarr-* 'to divide up, to split, to separate', but the development of initial *su-* to *s* is without support (compare *suâr-*, - 'strong, weighty' related to Lith. *svarûs* 'heavy'). Olnd. *svar-* 'to torment' cited by Klein (1971: 736) is non-existent.

If *suerđo* is analyzed as a substantivized *-to* participle, one would expect an initial accent, compare *suerđa*-price (Goth. *waifþ* < *yerto*-derived from *yerto*).

9For instance, *suer(d₁)-d(h₁)o* means 'word' (Lat. *serbum*), not 'speaker' (importantly, Gmc. *suerđo*- is a neuter noun).
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proposed for the Slavic word by Hirt (1899: 253) and independently by Mladenov (1941: 573) is more likely (*svrûb-dlû- from PIE *kuerp- ‘to turn’, OHG werben ‘to turn’, ON huerfa ‘to turn round’). 10

2.2.4 Finally, Levickij (1998: 215) compared our word to the family of OE sweard, Modern High German Schwarte; despite his efforts to connect ‘skin’ and ‘sword’ it is hard to see any real connection between them and any similarity is certainly fortuitous.

2.3 Thus it appears that an alternative etymology for *suerda- is desirable. Strictly speaking, archaeological findings do not allow positing the existence of metallic swords in PIE times (see Mallory 1991; Mallory–Adams 1997: 561), but a meaning like ‘dagger’ or ‘(sacrificial) knife’, which for instance Ved. asî-still has, can be securely assumed; therefore, a search for potential cognates with the same or similar meaning is methodologically warranted. I am going to employ the same simple method, the efficiency of which was demonstrated above on Gk. ἀργός, and look for more ‘knives’ and ‘swords’ in other Indo-European branches; furthermore I will use one of the recent additions to the armory of Indo-European morphologists, namely the theory of delocatival derivation. In the following section an outline of this theory will be presented.

3. Delocatival derivation in Proto-Indo-European

Briefly sketched in (Nussbaum 1986: 187, 235-238) and further elaborated in (Nussbaum 1998a), the model of delocatival derivation is a part of a larger theory of decasative derivation, which predicts the existence of adnominal stems, based on case forms (Loc., Instr., Gen.) with a suffix. Let us outline the essential points of the theory in question. Adnominal use of locative forms was arguably not allowed in the protolanguage, therefore some strategy other than a relative clause was required for structures like “X at/in Y is...”.

10Note that this etymology is not compatible with the connection between Gmc. *hwerfa and Tocharian AB kârp- ‘to descend, to come down’ endorsed in LHII 393; however, the semantic link between the two has never been sufficiently explained and Adams (1999: 154) provides an alternative etymology for Tocharian kârp, comparing it to ON hrâpa ‘to rush on, to fall’ and Mr. crib ‘quick’, PIE *kerb.
Two such derivational strategies were in fact available: an external one (hypostasis) and an internal one.

3.1 External (suffixal) derivatives from locative case forms are well known; for instance, the wide-spread suffix *(i)io- is (at least, partly) based on delocatival hypostases:

\[ *h_{on}-i / -n, \text{ Loc. } *h_{on-e}i-‘in a dream’ \]
\[ \Rightarrow *h_{on-e}i-o-‘what is in a dream’ > Gk. ὠνειπς ‘vision’. \]

A similar derivational process accounts for the origin of thematic vi/ddhi-formations (J. Schindler’s term “proto-vrddhi”):

\[ *po/ed-, \text{ Loc. } *pêd ‘at the bottom’ \]
\[ (OIr. is ‘below, under’, Alb. -posh in pêrposh ‘under’) \]
\[ \Rightarrow *pêd-o-‘what is at the bottom’ > Gk. πηδός ‘oar end’ \]
\[ (Nussbaum 2004: 1). \]

In such cases the resulting stem has an exocentric meaning vis-à-vis its basis.

3.2 Another possibility was to derive a secondary stem via internal derivation:

\[ *h₂us- is ‘dawn’ (Ved. usāh, Hom. ἡώς) \]
\[ \text{ Loc. Sg. } *h₂us-s-ér(i) (Ved. usar-(b)udh), \text{ possibly Hom. ἦπι) } \]
\[ \Rightarrow *h₂us-s-ér ‘what is at dawn’ > Gk. ἀὔρ ‘mist’. \]

This derivation is best exemplified by the family of the Indo-European designations of ‘man, earthing’ (* ‘he who is on the earth’) derived from *d\( \hat{e} \)g\( \hat{e} \)m- ‘earth’:

\[ \text{ Loc. } *d\( \hat{e} \)g\( \hat{e} \)m-én-en is the source of OLat. hemō; } \]
\[ \text{ Loc. } *d\( \hat{e} \)g\( \hat{e} \)-m-én gave rise to OLith. žmuō. \]

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\[ ^{11}\text{For the suffix see Balles 1997.}\]

\[ ^{12}\text{Unless both the Lithuanian and the Old Latin form go back to *(d)\( \hat{e} \)g\( \hat{e} \)-m(m)-on, hemō being secondary and the first syllable of homō being the expected reflex of a zero-grade *\( \hat{e} \)m- (see Vine 1993: 247 and Livingston 2004: 33-36; according to Nishimura 2004 an accented *-\( \hat{e} \)mV gave -omV, while an unaccented *-\( \hat{e} \)mV resulted in *-omV). }\]

\[ ^{13}\text{Note the same semantic model realized by external morphology in OIr. duine < *d\( \hat{e} \)g\( \hat{e} \)-om-(i)io- (based on Loc. *d\( \hat{e} \)g\( \hat{e} \)-ém-i > Skt. kshítí) and NPhryg. ζύμελος from delocatival *d\( \hat{e} \)g\( \hat{e} \)-ém-el-o. }\]
Rau (2007) has added a new example:

\[ \textbf{*uēt/} \text{ ut-}, \text{ Loc. uet-er ‘during the year’} \]
\[ \Rightarrow \text{ *uēt-‘what is in/of the year’ (whence ‘yearling’)} \]
\[ \text{ > Indo-Iranian } \text{ *vatār ‘calf’ (Ved. savātārau ‘having the same calf’)} \]

### 3.2.1

This process should be distinguished from the reinterpretation of locative formations with the suffixes *-er, *-en and *-el\(^{14}\) as endingless locatives of *-r or *-n stems, a process which results in a back-formed fully declined -r- or -n-stem that has the same meaning as its basis:

\[ \text{ *kēsep ‘night’ (Ved. kṣāp, Av. xāp), Loc. Sg. *kēsep-en} \]
\[ \Rightarrow \text{ *kēsep-ēn, *kēsep(o)p-n-ēs > YAv. xṣāpar, xśāfr, f. ‘night’;} \]
\[ \text{ *h₂udūsōs, *h₂udūs-s-ē ‘dawn’, Loc. Sg. *h₂udūs-s-ē[?] ‘dawn’} \]
\[ \Rightarrow \text{ *h₂ud(u)s-ēr, *h₂ud(u)s-s-ēs > Ved. yāsar/ yṣr m./f. ‘dawn’}. \]

Another possible example of this process is Indo-Iranian

\[ \text{ *ad̮uán-}, \text{ m. ‘road, way’:} \]
\[ \text{ *h₂o/endh-u- ‘going, moving’}^{16} \]
\[ \Rightarrow \text{ *h₂o/endh-u-ro- > OIcel. ondurr ‘ski’} \]

\(^{13}\)See also Nikolaev 2007: 165 for a similar analysis of Gk. ἀκήρ ‘car of (grain)’ and ἀνάκρασ ‘chin’ as delocational formations ultimately based on a locative *h₂uēd-er ‘in a projecting spot’.

\(^{14}\)Differently from *-er and *-en locatives, locatives with a suffix *-el are not attested as such and their reconstruction is inferred from adnominal formations in *-lo- or *-lā that could in theory be subject to other explanations. Nevertheless, it seems very likely that (at least, some of) such formations should be viewed as locatival (and not genitival) secondary derivatives. For instance, the semantics of Gk. χρωμαλός ‘low, close to the ground’ clearly make a delocational analysis preferable (Loc. *dēe-m el ‘on the ground’; χρωμαλός < *kēomel-w with a vowel assimilation); another important example is the Greek compound εὐδήλως ‘very clear, far seen’ (an epithet of Ithaca), the second member of which can only be meaningfully explained if a locatival allomorph *dēel from *dēl-w, *dēl-ēs ‘clear sky’ is reconstructed (Peters 1997[2002]: 108-109). Explanatory benefits of this analysis of some formations in *-lo- seem to make it preferable to other analyses.

\(^{15}\)Nussbaum 1986: 235-238.

\(^{16}\)A deverbal u-stem abstract of the type Ved. jāsu- ‘exhaustion’ or Gk. τίφνυς ‘ruination’ (see Nussbaum 1997). The verbal root *h₂ned- ‘to move (out)’ is that of Gk. perf. ἀνέναιαν Il. 11.266 (also u.l. ad Od. 17.270) and Doric and Arcadian aor. ἀνέναι (where the root vocalism is perhaps analogical to ἀνέναι; the root may also be reconstructed as *h₁ned- if the perf. ἀνέναι is a result of a haplogaphic simplification of *h₂neño). Adverbial OInd. adhunā ‘now’ may be a fossilized form of exactly such an acrostic u-stem as reconstructed.
3.3 The theory of delocatival derivation is thus able to account for some hitherto unexplained phenomena, both of form and meaning. On the one hand, the application of this derivational model results in a better semantic interpretation of the structure of a postulated preform: for instance, the semantic attractions of deriving the word for ‘human being’ from a locative with the meaning ‘on the earth’ (instead of an oblique stem ‘earth’) are hard to deny. On the other hand, there are cases which receive a better formal interpretation in the light of this theory. Therefore, before returning to Germanic ‘sword’, it might be appropriate to briefly address the potential contribution of the theory of delocatival derivation to the problems of formal reconstruction that will become relevant in this paper. The question is: what might be a formal token by which alleged delocatival derivatives can be recognized?  

3.4 The major characteristic feature here is the Schwebeablaut, which was a distinctive property of archaic Indo-European locatives with suffixal *-en, *-er, *-el. The only other place where one systematically finds Schwebeablaut are comparatives; outside these two morphological categories there is no evidence for regularly “misplaced” full grades in PIE athematic nouns. The prime example is of course Nom. *gʰ(i)jēm vs. the above (for the zero ablaut grade in the suffix compare Loc. Sg. āyuni ‘in lifetime’ or Dat. Sg. mādhune ‘to sweetness’).

17Interestingly, Ved. adhvār- ‘sacrifice’ and adhvaryú-, a title of a sacrificer, seem to offer evidence for *adhvar- and, therefore, for an *-er locative *h₂dʰu-er ‘en route (for the heavenly regions)’ (?).

18Rau (2007) uses this model to account for Proto-Gk. *uετ-ερ ‘year’ (attested in compounds of the structure X-(W)ετhρος ‘having X years’); according to Rau, *uετ- is a hysterokinetic neuter back-formed to the loc. *uετ-er ‘during the year’ (see above in the main text).

19This is the reason why I cannot accept the arguments presented in the chapter V of Widmer 2004, where the author seeks to motivate Schwebeablaut in internal derivation: in my opinion, the majority of his arguments entail delocatival hypostases and therefore Schwebeablaut should be seen as a property of the derivational basis and not as a part of the morphological derivation (see Nikolaev 2008: 545-551).
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locative *gêímen 'in the winter' (as evidenced by Ved. héman (YV, TS, Br), which was studied in depth by Nussbaum (1986: 52, Fn. 11; 189); Nussbaum has shown that Gk. χείμα 'winter' and YAv. zaiian- 'id.' are indirect offshoots of this locative, based on its reinterpretation as the locative of a *-(me)n- stem noun. A similar example is, possibly, Toch. A wse, B yššēye 'night' which Hilmarsen (1989: 91) traced back to a hysterokinetic nominative *h₂mehén.

This paradigm can have originated in a locative *h₂uēs-(s)-en 'at dawn' (i.e. 'time of twilight') by virtue of the mechanism just discussed; the locative *h₂uēs-s-en belonged to the paradigm *h₂ēus-ōs, *h₂us-s-ēs 'dawn' where it apparently coexisted with another locative with two full grades *h₂uēs-(s)-er 'at dawn' (Ved. varā-hán- 'striking early', básri RV 1, 120, 12 < *h₂uēs-s-r-i), see Nussbaum 1986: 190, 289-292. 21

3.4.2A Well-known case is presented by the words for 'nub' and 'belly'. Belly is situated by the navel and following others I think that a delocatival analysis does the trick here, too: if the doubtful ṭr̥gyedic form nàbh- (RV 9, 74, 6) together with the vṛddhi-derivative *h₃nēb-o- evidenced by Arm. aniw 'wheel' suffice to set up a root noun *h₃nēbh- (which seems to be a likely analysis anyway), then it is from this noun that a locative *h₃nēbh-en was formed. From the form *h₃nēbh-en an amphikinetic n-stem *h₃nēbh-on- 'that what is at the nub' was internally derived (type II above, .iOS), hence OS āmbón 'abdomina, belly' (Acc. Pl). And if *h₃nēbh-en was indeed a locative of a root noun, then it is much easier to take Gk. όμφαλος 'navel, knob, boss of a shield' as an endocentric derivative of a co-existing locative form *h₃nēbh-el (of the same type as *d₃éem-el, probably reflected by NPhryg. tsèfalos and Gk. χαμαλος). 24 There are more examples of secondary

20See also Pinault 2008: 480.
21*h₂us-s-ēr > ǵēřp mist' discussed above is yet another offshoot of the same paradigm.
22Note, however, that the following scenario differs from the ones proposed by Nussbaum (1986: 191) and Widmer (2004: 110).
23Note that if this solution is adopted, the word can no longer be used to support Rix's law before nasals in Greek, in fact, I believe that the law was only operative before liquids (see above Fn.5 and Vine 2005).
24Another interesting case may be mentioned here, namely Arm. getin 'earth, Erdboden': the origin of this n-stem can be accounted for in two ways, both involving delocatival derivation, but differing as to the root connection. According to one view, the preform of getin is *h₂yēd-en and one is dealing
amphi- and hysterokinetic *-n- and *-r- stems, created on the basis of locative formations and recognizable as such by the ablaut of the root and the meaning, that can be added to the dossier assembled by Nussbaum. More work needs to be done in this direction, but we can be reasonably certain that the morphological process of creating secondary stems on the basis of locative case forms should be reconstructed for the proto-language.

4. Back to Germanic *suerđa-

Equipped with this knowledge we can return to Gmc. *suerđa- 'sword'. I believe that the theoretical framework

with a locative of a root noun *h₁o-uð-, *h₁o-uð-és 'ground, earth' (Gk. ὄδως, oúdei), reintroduced as a locative of an n-stem (this etymological connection is pursued by Peters (1997 [2002]: 109, Fn. 23)); the Hittite word for 'land' ut-ne-e, ut-ni-i-a, a textbook example of a hysterokinetic i-stem, can be related to this word via *h₁uð-n-ē, a collective of *h₁uð-en-i (not *h₁uð/ed-en-i, since there is no evidence for syncope in this environment), internally derived abstract of a *h₁uð-en-o, itself an external derivative from *h₁uð-n-ēi, a collective of *h₁uð/ed-en-ō (as Jeremy Rau points out to me, the failure of assimilation -dn- > -nn- can be accounted for, for instance, by analogy to a stem allomorph *h₁uð/ed-en-ew elsewhere in the paradigm). A different root connection has been argued for by Oettinger (2000) who suggests starting with *uodō, *uodē 'water' (the morphological details are largely the same: Oettinger’s idea implies *uod-en-o 'what is in the water', hence *uod-en-ēi in Armenian pace Widmer (2004: 117), whose reconstruction *h₂uós-ō/ν- ‘Hellwerden’ with an initial *h₂ (Ved. vasantá, OCorn. guaintoin, OCS vesna, Lat. üer, Gk. ἕαρ (Alcm. ὑρ), Lith. vásara) is misleading since there is no proof that the word for ‘spring’ is derivationally related to the word for ‘dawn’ and there is no independent evidence in favor of an initial *h₂ in ‘spring’). What is important here is the existence of a n-stem side by side with a root noun, be it *h₁o-uð or *uod- (Hittite uith).

Regarding *h₁o-uð, the following remarks are in order. Whatever the precise analysis of oúdei should be, the assumption of an old root noun is supported by the dative oúdei which is disyllabic 11 times out of the whole of its 14 Homeric attestations - ei is located either in arsis or in the thesis of the last foot and resolution is ruled out in || πατρός ει oúdei (E 734, Θ 385), || οὐ γάρ π’ oúdei (T 92), || οὔ oúdei τε πέλαγσαι (Y 719). These statistics are not reconcilable with the usual behavior of n-stem datives: oúdei, ἄργει, ἔμχει, ἠλει, κάλλει, κύδει, πένθει, etc. are all dactylic (—). Thus in this particular case ei could represent not a contraction product from *-ee after intervocalic -h (< *-e) is lost, but an old athematic dative ending *-ei (see Meister 1921: 133-134).


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4.1 I would like to suggest a comparison of \(^*\text{suerda-}\) with CLuv. \(^{(\text{UKUD})}\) \(\text{si}(\text{h})\text{yal-}\), n. This word is attested four times; the variants include Nom.-Acc. Sg. \(\text{si-\text{u-\text{a-\text{a}}}}\) (KUB 44.4 Vo 26) with a characteristic Luvian loss of \(\text{h}\) before \(\text{u}\) (also \(\text{si-\text{u-\text{a-\text{a}}}}\) of unclear form found in KUB 44.4 Vo 28) and Nom.-Acc. Sg. \(\text{se-\text{\text{h-u-y-a-a}}-\text{al}}\) (KUB 35.145 iii 19). This comparison has not been made before and the reason is above all that the meaning of \(\text{si(\%)}\text{u\text{al}}\) is problematic: in an influential article Starke 1981(1982) argued that the meaning should be established as ‘lamp’ (pursuing a further connection with PIE \(*\text{seh2}_2\text{u\text{lop}}\), Gen. Sg. \(*\text{sh2u\text{ens}}\) ‘sun’). The crucial context is KUB 44.4 Vo 28 where \(\text{si\text{ua\text{al}}}\) is construed with a verb \(\text{ta-\text{si-\text{u-\text{a-a}}-\text{du}}\) ‘to make blind’. However, it is not very credible that a feeble Anatolian lamp in the 2 millenium BCE would have had enough wattage to blind a person. From another attestation we learn that \(\text{si(h)}\text{yal(a)}\) is heavy (\(\text{ta\text{ssu}}\)) and is made of bronze; moreover, this word is found side by side with ‘axe’.\(^{26}\) Thus \(\text{si(h)}\text{yal}\) is likely to represent some kind of weapon.\(^{27}\)

4.2 The morphology of \(\text{si(h)}\text{yal}\) can be interpreted in two ways: 1) it could continue a thematic noun (\(\text{vṛddhi-derivative}\) \(*\text{sēh2}_2\text{u\text{lop}}\) which was dethematized either by a common-Anatolian syncope in the final syllable (Melchert 1993b) or in analogy to other Luvian nomina instrumenti in -\(\text{al}\) (\(\text{hūpal}\) ‘hunting net’, \(\text{ග\text{sin\text{yal}}\) ‘cradle’, \(\text{winal}\) ‘stick’ to name a few); 2) if really archaic, \(\text{si(h)}\text{yal}\) could be a reflex of an athematic \(*\text{sēh2}_2\text{u\text{lop}}\), a derivative in \(*\text{olo}\)- from a stem \(*\text{sēh2}_2\text{u\text{lop}}\). In either case, \(\text{si(h)}\text{yal}\) has a stem \(*\text{sēh2}_2\text{u\text{lop}}\) in its derivational prehistory from which a stem \(*\text{sēh2}_2\text{u\text{lop}}\) or \(*\text{sēh2}_2\text{u\text{lop}}\) (with a further derivative \(*\text{sēh2}_2\text{u\text{lop\text{lop}}\)}\) was formed.\(^{28}\) A morphological parallel can be found in CLuv. \(\text{āddu\text{w\text{al}}\) ‘evil’ (subst.) and its Hittite cognate \(\text{idātu\text{w}}\) (with further suffixation): the reconstruction of a PIE form \(*\text{h}_1\text{ed\text{-\text{u-\text{b\text{lop}}}\}}\) is

\(^{26}\) 198/1 + HFAC 13.10. See Beckman 1983: 196; Rieken 1999: 450.


\(^{28}\) An inner-Luvian derivation \(\text{si(h)}\text{yal\text{-a}}\Rightarrow \text{si(h)}\text{yal\text{-al}}\) cannot really be excluded. However, \(\text{āddu\text{w\text{al}}\Rightarrow \text{āddu\text{w\text{al}}\text{-al}}\) would be the only parallel, and so there is some probability that in \(\text{si(h)}\text{yal\text{-al}}\) we are actually dealing with an inherited secondary stem in \(*\text{-al}\), based on a \(*\text{-t\text{e}}\text{stem.}
supported by traces of the *h₁o/ed-u-, *h₁ed-u- quake and *h₁ed-u-öm, studied by Schindler (1976), as well as by Toch. B yolo ‘evil’.\footnote{I am grateful to Craig Melchert who kindly reminded me about the Tocharian form.}

The stem *sēh₂/₃u- is indirectly reflected in Luvian by the thematic stem ših₂/₃u/i ‘bitter, sour’ (with -i- from *e).\footnote{Nom.-Acc. Pl. še-e-u (KBo 13.260 iii 11) plus an -iya- derivative Nom. Pl. comm. ši-e-huua-en-iž (ibid.), see Starke 1987: 250, Fn. 26 and for morphology Melchert 1993a: 193. According to Starke, the name of a river-nymph TČ-Ši-ua-an-na-aš (KBo 2.13 rev. 23) may belong here, too. Starke further compared ši-hu/i with problematic Hittite (Luvoid) ši-ua-c[aš] (KBo 17.4 ii 17) which is (mis)constructed with acc.pl. hanšauši, so the meaning is probably ‘sour thick-breads’, and ši-ú-i-na (KUB 31.110 3), but the exact meaning of the latter form remains a mystery.}

Under the assumption that ši(h)ua/i- and ši(h)ual are related, the basic meaning of the underlying root is likely to be ‘sharp’ and the adjective ši(h)ua/i- shows a synaesthetic transfer ‘sharp’ > ‘sharp on the tongue’ > ‘bitter, sour’.\footnote{Compare similar semantic developments in Lat. acidus ‘having a sour, bitter flavor’ and acŭtus ‘sharp; pointed’ and ‘acrid’ (ācer ‘sharp’), in English sharp (cf. Chaucer Prol. 352 ‘Wo was his cook, but if his sauce were Poynaunt and sharp’) or in German scharf (as in “Das Essen ist mir zu scharf”, cf. Rückert, “Einführung in die Speisekammer”: “scharf ist gut im haus am essig, scharf allein nicht übermäszig, dasz man ihn auch kosten darf”).}

CLuv. ši(h)ua/i- is a derivative of the type *ser-u-o- (Welsh herw ‘raid’): *soru- (Hitt. šarru ‘booty’) or *yet-s-o- (Skt. vatsa- ‘calf’): *yte/weo- ‘year’ (Gk. ἔτος). This derivational model produces possessive formations; therefore, by glossing *sēh₂/₃u- as ‘having sharpness’ (viz. ‘sharp’), we arrive at a reconstruction of an acrostatic u-stem *sēh₂/₃u- ‘sharpness’.\footnote{I leave open the question whether such acrostatic *šēh₂/₃u- ‘sharpness’ should be considered an adjective abstract (i.e. a neuter) of a proterokinetic adjective *šēh₂/₃u- ‘sharp’, compare proterokinetic *mēgχ₂- ‘big’, neut. acrostatic *moğχ₂- > Toch. B. māka, A māk (see Widmer 2004: 155-170).}

4.3 Now, how exactly will the comparison with Gmc. *syerðā-work? A workable scenario is provided within the framework of Nussbaum’s delocatival derivation; as was mentioned above, in some cases when an *-n- or *-r- stem is back-formed to a locative form, the meaning of the resulting substantive is the same as that of the base (*kʷsep-én- ‘night’, Ved. uṣār-/ uṣār- ‘dawn’), but in some cases the locative form undergoes a kind of internal derivation and the new paradigm has an exocentric meaning ‘one at/in X’ vis-à-vis its basis (*dh-)geman ‘he who is on/of the earth’, *h₂us(s)er- ‘that which is at/of dawn’).
as a locative of an acrostatic stem *sēh₂/₃u- different forms come to mind: *s(e)h₂/₃u-en, *s(e)h₂/₃u-el, *s(e)h₂/₃u-er and *s₂/₃u-e(-i). As a parallel to this diverse picture recall once again the locatives from the Indo-European word for ‘earth’ *dʰegʰ-m, *dʰegʰ-m-es: *(dʰ)egʰ-er (YAv. žmär-gúz), *dʰegʰ-ém-i (Skt. ksámi), *dʰegʰ-ém-en (if this should be the source of OLat. hemo, see note 12), *dʰegʰ-m-én ‘on the earth’ (the source of OLith. žmuō), *dʰegʰ-ém-el (the source of NPhryg. ζεκλός and probably Gk. χιλιαλός with vowel assimilation). The following developments can be sketched:

1) The locative *s(e)h₂/₃u-el (remade to *sēh₂/₃u-el with an analogical leveling of root ablaut throughout the paradigm) gives rise to a back-formed holokinetic paradigm with Nom.-Acc. *sēh₂/₃u-ol. No change of the meaning takes place apart from concretization of the abstract noun: ‘sharpness’ > ‘a sharp thing’. A perfect parallel to this case is Gk. χειμών, χώνος ‘winter’, built to a Scharnierform Loc. *gʰeimen ‘in the winter’ or *nokʰtór ‘night’ (Gk. adverb νυκτόρ ‘by night’), built to a Loc. *nokʰter ‘at night’ from a t-stem *no/ekʰt-. For natural semantic reasons this word preserves a variety of locatival forms. A generalization of the é-grade in the root from the strong case forms throughout the paradigm of *sēh₂/₃u- is not a costly assumption, but in any event an alternative should be signaled: one could also operate with an inner Luvian endocentric derivation sēh₂/₃u-la- (under assumption that Luv. s(i)₃u(₃a)- was originally thematic).

2) The locative *s(e)h₂/₃u-er (type *(dʰ)egʰ-er)34 serves as a derivational base for a secondary t-stem *s(h₂/₃u)-er-t- ‘that
which is in/of sharpness' (subst.)37; from the latter an adjectival *s(h2/3)-er-t-ó- 'sharp' is further derived which is lastly substantivized via a transfer to neuter gender giving Gmc. *suérda-, n. 'sword'. Again, the words for 'winter' provide parallels for each step of this derivation: consider the classic couple Ved. hemantá- vs. Hitt. gimmant- 'winter':

Loc. *gheïmen- ‘in winter’38
⇒ *gheimen-t- ‘what is in winter’ (Hitt. gimmant-)39
⇒ *gheimen-t-o- ‘wintry’ (> Ved. hemantá- ‘winter’).40

moist earth’); for this etymology see Sturtevant 1936: 184 and recently le Feuvre 2007 (I am grateful to Craig Melchert for the latter reference). Smoczyński 2006: 160 prefers to connect the Balto-Slavic and Germanic words with the root *suh2-in Gk. òeï ‘rains’, Hitt. šuhha‘scatters, pours’, Toch. AB se/- swîs ‘rains’ (but the meaning ‘bitter’ remains unexplained). It seems that among the reflexes of *suh2-r-o- we need to distinguish two groups of words: on the one hand, the words for ‘wet’ where a connection to Hitt. šêhar ‘urine’ and Osl. saur ‘urine’ and OInd. vîr ‘to rain’, Hitt. šarîsa- ‘shower rain’ or Latin urina ‘urine’ and OInd. vîr ‘water’, Luvian va-a-ar(–sa) ‘id.’, but also supported by formulaic equations studied by le Feuvre 2007; on the other hand, a distinct *suh2-r-o- ‘sour’ related to the root studied in this paper (in other words, ‘wet’ and ‘sour’ do not have to belong together).

37On the use of the suffix *-(e/o)t- in derivational models that produce substantives see Nussbaum 2004.

38Ved. héman (YV, TS, Br), indirect offshoots Gk. χιώμα ‘winter’, YAv. zaiian- ‘id.’.

39See Nussbaum 2004. Another example of a delocatival *-en-t- stem is Hitt. isîpan- ‘night’ from *k’sp-en-t- (derived from *k’sep-, Loc. Sg. *k’sep-en, see above). The gemination in Hitt. gimmant- (attested from OS onwards) remains, however, troubling and an inner-Hittite analysis in terms of an “inviduating” suffix -ant- may need to be preferred (unless the geminate was imported from the coexisting stem in *-men- / *-mîn-).

40Another example of delocatival *-to- stem, cited by Nussbaum (2004), is Vedic Instr. Sg. (adv.) sâsvârta (RV 7, 58, 5), derived from sâsvâr ‘secretly’ (= YAv. hobby); however there is no evidence for a putative *so/esu- ‘sleeping’ from the verbal root *ser-. Note that both sâsvârta and hemantâ- in theory also allow analysis in terms of delocatival derivation with *-to-.

One may also want to recall Nussbaum’s (1998a) interpretation of Gk. ðâma(to) -, which he traces back to *dêmh,er-t ‘the one in the house’ from a locative *dêmh,er ‘in the house’; and yet this extremely attractive analysis is slightly problematic for those, who believe, as I do, that the Indo-European verbal root ‘to build’ was anit (Nikolaev 2006).
Thus both \( *s(h_{3/2})u\)-er-\( t \)-\( o \)-\( n \) and \( *s\h_{3/2}u\)\( t \)-\( o \) (transponates) mean the same and are both based on locative forms of an \( *u \)-stem with the meaning 'sharpness'.

5. Loss of the laryngeal

There is a phonological issue involved which requires clarification, namely the loss of the laryngeal between initial \( *s \)- and the following \( *u \)-, a development that is needed to explain the Germanic form since this dialect normally shows a vocalic reflex of PIE "schwa" in the initial syllable.\(^{41}\) A brief sketch of this sound change will be in order, since the fate of a laryngeal after initial \( *s \) remains a controversial issue. Bypassing the part of the problem concerning \( *sHxV \)-sequences\(^{42}\), I want to turn to the presumed loss of the laryngeal after \( s \)-mobile before a non-syllabic.\(^{43}\)

5.1 There are a few reliable examples that support the rule in question. These examples (some of which have been assembled by Southern (1999: 107-113)) are pairs of cognates displaying an alternation \( *HxC \)- vs. \( *sC \)-. This alternation is best interpreted as a result of an earlier \( *HxC \sim \*)sHxC \)- (the latter with \( s \)-mobile as an optional onset of a laryngeal-initial root), where the laryngeal is lost after \( *s \).\(^{44}\)

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\(^{41}\)If OIr. \( s_eh \) and Welsh \( chweu \) 'bitter' belong to the same root (see above, Fn. 36), the development of \( *s\h_{3/2}u\)-er-\( u \)-\( o \)-\( n \) in Celtic presents the same problem.

\(^{42}\)See Hoenigswald 1952 and Hoenigswald 1992; Beebes 1969: 82-86.

\(^{43}\)Originally suggested by Nikitina (1962). See also Mayrhofer 1986: 150 (Mayrhofer refers to Peters 1980: 172, Fn. 124, where 71, Fn. 34 is to be consulted as well); García-Ramón 1992: 190-191; Southern 1999: 93. I am disregarding the word-internal position although the familiar equation between Ved. \( asn\h \) and Hitt. \( én\h s \) 'blood' (Gen. Sg.) is a very strong piece of evidence in favor of a general loss of laryngeal between \( *s \) and a resonant. It is unclear at present whether this sound change should be extended to all contexts where a sequence \( *sHx \) was followed by a consonant (the presence of laryngeal reflexes in \( *s\h_{3/2}o \)-derivatives from laryngeal final roots, such as \( *s\h_{3/2}o\)\( t \)-tied' > Ved. \( sít\h \)-\( o \), Av. \( hit\h \) or \( *s\h_{3/2}o \)-'satiated' > Goth. \( sá\h o \), Gk. \( é\h ato\h s \), does not disprove this assumption, since in these cases the final consonant of the root may have been analogically restored). This question lies outside the scope of the present paper, since the chief interest here is specifically the development of the sequence \( *sHx \).

\(^{44}\)Predictably, allomorphs with initial \( *HxC \)- are reconstructed mostly based on evidence from Greek. It must be noted in this connection that none of the Greek examples, cited by Southern, shows any trace of an initial structure of the type \( *\h/\h/\h/\h/\h \)-\( R \)-\( R \)-\( R \)-\( R \)-\( R \)-\( R \)-\( R \)-\( R \)-\( R \) (with aspiration resulting from \( *s \)), thus rendering the presence of an initial \( *s > h \) before a laryngeal improbable.
Let us cite two examples in which the sequence *sHux-gives *su- as in our case:

1) *h2uver vs. *suver: Gk. ἁείρω ‘lift’ (*ἁείρω, cf. ἀνερμέναι Alcm. 1.63 (Davies)45 vs. Modern High German schwer, Pal. šuvaru (KUB 32.18 i 5’), Hitt. (Pal.) šuvaru, Lith. švurės ‘heavy’, světė ‘to weigh’ and Alb. vjer ‘to lift’.46

2) *h2uel vs. *suel: Hsch. ἀέλλω· οἱ ἀέλλαις γυναῖκας ἐσφυκότες (< PGk. *ueileio) vs. εἷλινες ‘id.’ Pollux 3, 32 (< PGk. *huelion)47, ON pl. svilar ‘brothers in law whose wives are sisters’.48

Based on these examples, it may be concluded that if a root with an initial *Hux- had an allomorph with an s-mobile, a special rule deleted the laryngeal trapped between *s- and *-u. Although I am not aware of examples of a sequence *sHux- where initial *s- is not an s-mobile, it is not unreasonable to assume that a syllable onset *sHux- (of whatever origin) was generally disallowed in Proto-Indo-European.49

5.2 The evidence of Anatolian, which could shed some light on the outcome of PIE initial *sHxC-, is, however, hard to evaluate. According to Oettinger (1976: 93-97) Hitt. ışhwunawar goes back to *sh2nó with laryngeal between *s-

45P. Louvre E. 3320/R 56 ἀείρεμένω – late Laconian spelling.
46If initial *suv > Alb. v- (as, for instance, in vjehërrë ‘father-in-law’ < *suusuro-); now that diëll ‘sun’ has been explained away (from *g’el-uo- ‘tawny, yellow’, Lith. želvas, according to Orel 2000: 81), the main piece of evidence for *suv > d- remains dìrsë ‘sweat’ which Pedersen (1900: 286) traced back to *suidrotjá.
47Pollux labels the word as poetic (παρὰ τοῖς ποιηταῖς), in which case initial ε- is likely to be a result of a metrical lengthening.
48Note, however, that the initial ε- of ἀέλλω may also be a reflex of *sm- and since we are not informed about the length of this vowel (no information about the dialect is provided and the word does not have to be Attic or Ionic), it may be the case that ἀέλλω actually continues *sm-ueilio- (with a compensatory lengthening *Vsv > *Vvυ > *Vυ of the preceding vowel). For the comparison between the Greek and the Germanic words see Hermann (1918: 222) and Polomé (1986: 192).
49An important case not discussed by Southern is the Indo-European word for ‘sun’ *seh2uÒ, *sh2uens. In my opinion, the most economical way to account for the notorious disyllabicity of OAv. x’ing, (Y)Av. kā < *huuánh would be to derive these forms from a Lindeman variant *suwen- after a regular loss of laryngeal in a proto-form *sh2uen- (this solution eliminates the need to assume an otherwise poorly supported development of Indo-Iranian *e (from *h1/2/3 / C_C) into *-u and not *-i in the vicinity of *u).
and another consonant still in place; Isebaert 1982-83, however, argues against this reconstruction, by showing that this form means ‘upper arm’ (and not ‘string of a bow’) and claiming that *išunaunau is a secondary nonce formation back-formed to the au-stem Gen.Sg. išunaunauas.50 Gk. ʰνεώπα, Arm. ʰναῦρα thus cannot be used as a piece of evidence for an h-loss between *s and consonant. As to Hitt. ʰυαίς ‘bird’ (KBo 26.34 rev. i 15’), a likely Anatolian cognate of Lat. avis, Gk. ἄετός, Arm. ḫaw (*h2mei-), it seems best to regard it as an outcome of *suois (not a Lindeman variant, since otherwise a †sumais would have been expected) with a laryngeal loss due to Saussure’s Law (*sh2suois > *suois)51; under these circumstances the word cannot be used as evidence for the sound change discussed.

5.3 Summing up, there is conclusive (if meager) evidence for a laryngeal loss between *s and a consonant, particularly in the position between an initial *s- and a *-u-, and a similar loss can be assumed in the preform *sh2/3u-er-tó to give Gmc. *suerdær.

6. The prehistory of *sēh2/3u-

Now it is time to attempt a more principled account of the derivational basis *sēh2/3u- posited above. As we have seen, it is possible to gloss *sēh2/3u- as ‘sharp(ness)’, hence ‘sour(ness)’52, posit a root * seh₂ or * seh₃ and stop at this point. Nevertheless, one question remains: is there a relationship between this u-stem and the PIE word for ‘sun’? I would like briefly to offer, in this last part, a few speculative suggestions on this subject.

The PIE word for ‘sun’ is currently reconstructed as a proterokinetic stem *sēh₂uél, Gen. Sg. *sēh₂uëns, n. with two holokinetic animate derivatives *sēh₂uöl and *sēh₂udın.53 Can we make any more detailed guess about just how a u-stem *sēh₂u- might be related to the heteroclite stem *sēh₂u-/n? Such an analysis presupposes rather vague semantics of the sort ‘to be hot, to burn’ for the base root and the details of the semantic

50Isebaert suggests an etymological relationship with Skt. sán- ‘back’ (see also Rieken 1999: 360-361), but the origin of the medial /u/ in išuna- remains unclear (išuna- can be mechanically reconstructed as *sh₂/3au-nu-).


52See above on the semantic development of CLuv. sī(h)uə- and especially Fn. 36 for indirect evidence for a locative *sh₂/3u-er.

53See Nikolaev forthcoming.
evolution remain a matter of speculation (1. ‘hot’ > ‘hot on the tongue’, hence ‘sour, acid’, and independently 2. ‘hot’ > ‘sharp’).

Nevertheless, a nice parallel is furnished by the descendants of the PIE root *gwher- (English warm, Greek ὅθρος): while the primary meaning of this root is ‘to be hot, to burn’ and some of the cognates — quite expectedly — refer to the sun (OIr. grían, Gen.Sg. gréine ‘sun’, OInd. ghramśāḥ ‘heat of the sun’), Old Irish adjective goirt has a wide range of meanings including ‘bitter, sour, salty’ (cf. the compound goirtbíad ‘salt food’), but also ‘sharp’! Consider the following examples: tene derg duaibsech lemnech letarthach langoirt ‘red, dreadful, agile, wounding, fully piercing fire’ (IT i 191.13), saigti gera goirti ‘keen, sharp arrows’ (Cog. 158.17) or is iat nemnecha faeburgoirti ‘deadly sharp blades’ (LL 189b17). Lastly, OCS gorikû ‘bitter’ comes from the same root. Thus among the descendants of the same root we find both semantic developments that we need: ‘hot’ > ‘sharp’ (OIr. goirt) and ‘hot’ > ‘bitter’ (OCS gorikû).

54 For the semantic change ‘hot’ > ‘sour’ or ‘bitter’ compare Skt. sūkt-, Dard. sût and Khot. suttā ‘sour’ that continue Indo-Iranian *cuk-to- from the root *cuk- ‘to burn’ (Skt. sóc). Another parallel to this semantic development can be found in Bulgarian kisel, Polish kisły ‘sour’ from the root of OInd. kváthati ‘boils’, Latv. kûsā ‘to boil’ (Mallory–Adams 1997: 199 gloss PIE *kwaṭ(h)₂-as ‘ferment’).

55 OIr. guirid ‘warms, burns’, fo·geir ‘heats’, OCS goritû ‘burns’.

56 Even if grían < *ghreinā does not belong to the root *gwher- (see Meid 1970: 96 for different options), one may still cite OIr. gris ‘heat, fire, embers’ (< *gwhreisā) which is used of the sun’s heat, e.g. 7-o-gris imurcrach na-gréine ‘and from the excessive heat of the sun’ (see Mac Mathúna 1990: 286).

57 E.g. RV 5.34.3 yō asmai ghramśā utā va yā údhani sómaṃ sunóti ‘wer ihm bei Sonnenglut oder wer bei Nachtkühle Soma presst’ (trans. Geldner).

58 Another parallel to the semantic development ‘hot’ or ‘burn’ > ‘sun’ (pointed out to me by the anonymous reviewer) is Toch. B kaṃ ‘sun’ which likely goes back to the root *keh₂u- of Gk. καῖο, aor. ἐκή a ‘burn’ (Adams 1999: 211).

59 Rieken 1999: 451 cites OIr. goirt in the meaning ‘bitter, sour’ in order to support the development ‘hot’ > ‘acid’, but she leaves the meaning ‘sharp’ out of the picture.

60 According to Gerasimov (2005), a trace of an allomorph of the word for ‘sun’ that does not contain either of the heteroclitic formants can be found in Welsh huan ‘sun, sunlight’. This word may go back either to *souono- (Vendryes 1974: 202) or to *suono- (Schrijver 1995: 334); under the latter analysis the proto-form may be revised as *suh₂ono-, where *suh₂ is a zero-grade allomorph of a *u-stem *seh₂u-. However, this analysis is extremely uncertain. As far as I can see, an alternative would be to assume that *suono- is
More importantly, an analysis that brings together *sēh₂u- 'sharpness' and *sēh₂u₂-/n- 'sun' seems to be possible from the formal point of view; again, the theory of delocatival derivation does the trick.

There is evidence in favor of a derivational process, by which stems with heteroclite stem alternation could be derived from (or built to) locative case forms in exactly the same way as it was shown above for the simple -n- and -r- stems. To my knowledge, this evidence has not figured in the literature. For illustration purposes I will briefly discuss one interesting case. A starting point for Lat. femur, feminis/femoris ‘thigh’ will be a u-stem *dʰa/emu- ‘thickness’, an internal derivative of which can be reconstructed as *dʰém-, *dʰému- on the evidence of the Greek adjective θαμύς ‘thick’ (Hom. Nom. Pl. θαμύες).61

The locative of this u-stem had the shape *dʰμé’n ‘in thickness’ and when reinterpreted as a locative of an *-r-/n-stem it gave rise to proterokinetic *dʰemr/-n- ‘thick muscle, thigh’, whence Lat. femur.62 For a semantic parallel compare another designation of a body part, namely Greek (Aeolic 63) ἐμφήν ‘neck’ (Theocr. 30, 28), αὐχήν, -ένος in other Greek dialects64, which is cognate with Arm. awjik ‘περιστόμον, a thematized version of an animate amphikinetic *s(h₂)uón ‘having sunlight’ (Lindeman variant *suwón after the loss of the laryngeal), an internal derivative of *sēh₂u₁, Gen. Sg. *sēh₂uós (compare Latin sōl from *sh₂uól > *suól).

61When the idea of a comparison between Gk. θαμύς* and Lat. femur first occurred to me I was surprised not to find it in any of the handbooks; however, Alan Nussbaum mentioned this connection to me once in a private conversation.

62Another possibility would be to regard *dʰemr/-n- as a Caland substitute for a *-s stem *θιμός, but there is no evidence for the latter; moreover, the complex suffix *-u²/-n- makes this assumption even less plausible.

Lat. femen Paul. Fest. 92 could in theory be a neuter n-stem back-formed to the locative *dʰμé’n, but this form is unreliable.

63 This is one of Theocritus’ idylls written in Aeolic meters and in an imitation of Aeolic dialect (note the place of the accent in ἐμφήν); the “Aeolic” form αὐχήν is a grammarian’s fiction.

64The Armenian form goes back to a proto-form *an’gu-iá which (just as Greek αὐχήν) shows a curious anticipation of the labial feature before a labiovelar (another instance of the same phenomenon is found in Toch. B auk m., Pl. Obl. aukâm ‘kind of snake’ < *an’gu²-iá and its Armenian cognate awj ‘id.’). No mention of this sound change is in the handbooks and an investigation of these and other cases (such as *-Vns > -Vus in Acc. Pl. ending in Cypr. ki-ya-nu-se) is a desideratum.

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collar’ (Plurale tantum) and further with PIE adjective ‘narrow’ (Ved. anuh- (bhéd)-, Go. aggwe-).  

Similar derivational histories can be suggested for other cases which cannot be discussed here in sufficient detail. Instances of *-r/-n- as an exocentric derivational formant in Indo-European are exceedingly rare; I would like to propose, rather, that at some stage of the protolanguage *-r/-n- and

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65See Nikolaev 2005: 47.
66Indo-Iranian *dānu- ‘bow’ may well go back to the same paradigm *dānu-/nc; prerequisites are 1) a dissimilation of labials (*dānu- < *d-anuy-) and 2) a semantic change of ‘thigh’ > ‘something bent’ (quasi ‘tournure’) > ‘bow’ (a connection of this Indo-Iranian word with Lat. femur was put forth by D. Steinbauer apud Mayrhofer 1992-1996, Bd. I 774; a different treatment in Janda 1998).
67For instance, a comparable prehistory may be envisaged for the Indo-European word for ‘well, fountain’ which is reconstructible as *bhr-®/®- or *bhreh1u-®/®- on the basis of Gk. ϕρή-, Nom. Pl. φρέατα (Φ 197, mss. φρέατα), Arm. abiuw and Go. brunna, m. No further analysis of these words is presented in the literature, although a highly compelling comparandum was noticed long ago, namely the “root” *bhr- ‘to boil, to flutter’, attested in Lat. fervere, fervere ‘to be boiling hot, to boil, ferment, glow’ (which is used of water, e.g.: ferverit aqua, Lucil. ap. Quint. 1, 6, 8; omnem excitat turbo ingenti sonitu mare, fervere cogens, Lucr. 6, 442) and defrētum, -i, n. ‘what must be boiled down’, as well as in Welsh berw-. The semantic attractions of this comparison are obvious, but from the formal point of view it is all but easy to reconcile the root shapes *bêru- and *bhreh1u- and account for the u-extension. And yet I believe that it is possible to pursue this connection within the framework of the delocatival analysis. There is evidence for a nominal stem in *-u- with acrostic apophony in the root which has to my knowledge hitherto passed unnoticed: in Hesychius one finds a gloss φῷρδ ξακτύλιος ὁ κατὰ τὴν ἔδραν (unless the gloss is Pamphylian, this word is a -u-stem with an added -s) and the same o-grade is found in denominative verbs φορόνω, φορίσσω ‘to spoil, defile’. The form and the meaning, especially that of the substantive, suggest or at least do not contradict a reconstruction of a verbal abstract *bêru-/erh1u- ‘flowing, gushing’ from the root *bêru- (which may have formed a u-present). Assuming that this stem had a locative *bêru/-erh1u- with Schwebeablaut as discussed above one could stipulate that an *-r/-n- stem *bêru/-erh1u- was built to it. Thus it becomes possible to tie up the loose ends and to subsume Italo-Celtic verbs meaning ‘to boil’ (ferv-, berw-) and the PIE word for ‘well, fountain’ under a common denominator *bêru/. (Note that Italic and Celtic forms are compatible with this reconstruction: (1) fervere may go back to *bêru/-erh1u- > *fer- with an early syncope of V / L after a light preceding syllable (as in salutus, coruus); (2) Lat. defrētum is found at Pl. Pseud. 741 with a long -u- (frē- < *fruh1); (3) the short vowel in OIr. bruth ‘Hitze, Wut’ (as well as in ON broð, n. ‘Brühe’) can be explained as a super-zero-grade generated by a proportional analogy to other proterokinetic *-tu- stems (for OIr. cf. guth ‘voice’ from *guh1)).
*-l-/n- stems could also be produced as back-formations, based on the locatives in *-er, -el, and *-en. That there is some relationship between the heteroclites and the locative formants has been surmised long ago, but now it is possible to give a more principled account of what is going on.69

It is thus possible that a u-stem *sēh₂u- could in fact have served as a derivational basis for *sēh₂u¿, Gen. Sg. *sh₂tēns ‘sun’.

7. Conclusion

In this paper I have argued that Gmc. *suerda¬n ‘sword’ is cognate with CLuv. śi(h)ual ‘dagger’ via a derivational chain which involves delocatival derivation:

\[*sēh₂u- ‘sharp(ness)’, Loc. *sh₂u-er\]
\[\Rightarrow *s(h₂)u-er-t\]
\[\Rightarrow *s(h₂)u-er-tō (adj.)\]
\[\Rightarrow *s(h₂)u-er-tō¬ (subst.) > *suerda-, n.\]

Another locative from the same stem, *s(e)h₂u-el gives rise to a back-formed holokinetic paradigm with Nom.-Acc. *sēh₂u-öl which is the source of CLuv. śi(h)ual.

The phonological side of this analysis becomes possible under the assumption that a laryngeal between an initial *ś- and a following *u was lost already in Proto-Indo-European. A study of the mechanism of delocatival derivation undertaken in this paper has shown that *-r-/n- and *-l-/n- stems with an exocentric meaning could have been back formed to locative case forms in exactly the same way *-r- and *-n- stems could.

Since the delocatival theory is to a large extent a new terrain, these suggestions will inevitably seem risky; they are open to revisions and doubts. These results have to be evaluated against the accumulated formal and semasiological benefits they bring. It is important to emphasize that in

69In this connection one wonders whether PIE *u0/ed/-n- ‘water’, the flagship example of a heteroclite noun, is in any sort of derivational relationship with the root noun *u0/ed- ‘water’ (Hitt. uik, Gk. υμει Hes. Op. 61 (with the old dative ending -ei), indirectly supported by Olcel. vātr ‘wet’ < *uēdo) that had both *u0-en and *u0-er as its locatives (Ved. udān RV I, 104, 3, udān; *u0-rō > Ved. udā-, Gk. νυμος, OHG ottar). Space limitations prevent pursuing this idea here any further.
addition to new etymologies and morphological analyses brought by the tool of delocatival derivation a part of the gain is something which is not always considered important by the Indo-Europeanists, namely, a possibility to unveil the “inner form” of PIE words, their structure and relations in the lexicon.

Abbreviations


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