

# The Germanic word for ‘sword’ and delocative 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 *šī(h)u<sub>al</sub>* ‘dagger’: both words are derived from a stem *\*sh<sub>2/3</sub>u-* ‘sharp’. Gmc. *\*suerða-*<sup>n</sup> goes back to a substantivized adjective *\*sh<sub>2/3</sub>u-er-tó-* ‘sharp’ (with a loss of the laryngeal already in the protolanguage), derived from a locative *\*sh<sub>2/3</sub>u-er* (compare *\*ǵ<sup>h</sup>eim-en-to-* ‘wintry’ from *\*ǵ<sup>h</sup>eim-en* ‘in winter’).

## 1. The problem

The reflexes of Gmc. *\*suerða-*<sup>n</sup> ‘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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\*In this paper I am using a special notational system: → stands for “internally derived from”, ⇒ stands for “externally derived from”, > denotes phonological development and >> stands for all kinds of *nicht lautgesetzlich* development (such as the leveling of ablaut grades within a paradigm). I am grateful to Jay Jasanoff, Craig Melchert, Sergio Neri, Alan Nussbaum, Martin Peters and Jeremy Rau for many helpful comments. I am also grateful to Anatoly Liberman, who kindly sent me a printout from his forthcoming bibliography of English etymology with entries for the word *sword*. Finally, I would like to thank two anonymous referees for careful comments on earlier version of this paper. The responsibility for all errors of fact and judgment is of course entirely mine.

\**suerða-* and Gk. ("Achaean"<sup>1</sup>) ἄορ 'sword' was assumed with a further connection with the verbal root of Gk. ἀείρω 'to lift' and Lith. *sveĩti* '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-ri-me-ne* shows that there never was an internal digamma in ἄορ and so a proto-form \**sh<sub>2</sub>uor-* is out of the question.<sup>2</sup> Lastly, there is an alternative etymology for ἄορ: it appears very plausible to trace this word back to \**h<sub>2</sub>ḡsr̥* or \**h<sub>2</sub>ḡsḡr̥*, formed from the root of Lat. *ēnsis* (< \**h<sub>2</sub>ḡnsi-* or \**h<sub>2</sub>ḡnsi-*), Pal. *ḥašīran* 'dagger'<sup>3</sup> and Ved. *así-* 'sacrificial knife, sword'.<sup>4</sup> By adopting this alternative analysis of ἄορ we also get a better semantic solution: a word for 'sword' is connected to a well-established PIE lexical entry \**h<sub>2</sub>ḡnsi-* of the same meaning.

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

<sup>1</sup>bT scholion *ad* ε 385: καὶ Ἀρκάδες καὶ Αἰτωλοὶ πᾶν ὄπλον ἄορ καλοῦσιν; the "Achaean" provenance is further confirmed by reliable γλῶσσαι κατὰ πολεῖς.

<sup>2</sup>It should also be noted that the short /a/ in ἄορ speaks against \**sm̥-suor* (long /a/ in the oblique forms ἄορι, ἄορα in Homer is due to a metrical lengthening). The Corcyrean form Ἀφοροί, 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 ἰζών, ἐζών (SEG XV, 389, 390), Gen.Sg. -αφο (also in Corcyrean Τλασίαφο IG IX I, 867, 1) or personal names Ποτεῖδαφονι, Διδαιφόν, Οριφόν.

<sup>3</sup>The Palaic word is a hapax in an unclear passage of the *Zaparwa* ritual (KBo 19.152 Vs. 1 12') and its relationship to PIE \**h<sub>2</sub>ensi-*, \**h<sub>2</sub>ḡnsi-* (suggested in Eichner 1980: 127, Fn. 30) is unfortunately not assured, other options being available and the development of \**ḡ* in Palaic being debatable. For an alternative solution (which is merely a possibility!) see Vine *apud* Melchert 2007: 257, Fn. 12.

<sup>4</sup>A relic of this *i*-stem is also possibly found in Myc. PN *a-i-qe-u* '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 *aḡhu-* 'sword' (Yt. 13, 46 *θaxtaiaat̥ parō aḡhūiāat̥*) is unreliable: the context suggests 'bowstring'.

**2.2.1**Lidén (1891) suggested a comparison to Lat. *sorbus*, f. ‘service tree’ which was enthusiastically supported by Pipping (1925: 38-39)<sup>5</sup>; 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. *τόξον* and *αἰγανέη*, Lat. *ornus* and *fraxinus*) remains unfounded in the case of metal weaponry.<sup>6</sup>

**2.2.2**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 *\*xvorŭ* / *\*xyrŭ* ‘ailing’, YAv. *x<sup>v</sup>ara-* n. ‘wound’ (Y 57.10, etc.).<sup>7</sup> Moreover, the morphology of the alleged *\*suer-ḍa-* ‘Gegenstand zum Stechen, Schneiden’ is less than assured: if *\*suer-ḍa-* goes back to *\*suer-tó-*, a full grade unaccented vowel in the root is not easy to account for.<sup>8</sup> If *\*-ḍa-* is from PIE *\*-d<sup>h</sup>h<sub>1</sub>-o-*, the pre-Germanic place of accent is irrelevant, but the desired meaning of an agent noun (*\*suer-d<sup>h</sup>h<sub>1</sub>-o-* ‘pain-inflicter’<sup>9</sup>) is hardly compatible with what is otherwise known about PIE formations of this type.<sup>9</sup>

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

<sup>5</sup>Note also that Lat. *sorbus* finds a perfect comparandum in the Lithuanian name for currant *serbentā*.

<sup>6</sup>Sperber (1915: 39-40) suggested that *\*suerḍa-* originally referred to a weapon made of wood and advocated a relationship with Gmc. *\*suarḍu-* ‘flitch’; however, in my opinion, Sperber’s ethnographic 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 *\*suerḍa-* (none of the reflexes of Gmc. *\*suarḍu-* in mediaeval Germanic languages refers to wood).

<sup>7</sup>Modern Iranian cognates: Ossetic (Iron) *xæryn* ‘to itch’, Kurdish (Kurmanji) *xārin* ‘to scratch’, etc. Čop (1956: 111) has further compared Hittite *šarra-* (the stem of which should rather be set up as *šār-<sup>1</sup>* / *šar-*) ‘to divide up, to split, to separate’, but the development of initial *\*su-* to *š-* is without support (compare *šuwānu-* ‘strong, weighty’ related to Lith. *svarius* ‘heavy’). OInd. *svar-* ‘to torment’ cited by Klein (1971: 736) is non-existent.

<sup>8</sup>If *\*suer-ḍa-* is analyzed as a substantivized *\*-to-* participle, one would expect an initial accent, compare *\*uērþa-* ‘price’ (Goth. *wairþ*) < *\*uértō-* derived from *\*uṛtō-*.

<sup>9</sup>For instance, *\*uer(h<sub>1</sub>)-d<sup>h</sup>(h<sub>1</sub>)-o-* means ‘word’ (Lat. *uerbum*), not ‘speaker’ (importantly, Gmc. *\*suerḍa-* is a neuter noun).

proposed for the Slavic word by Hirt (1899: 253) and independently by Mladenov (1941: 573) is more likely (\*svrūb-dlū- from PIE \**k<sub>2</sub>uerb-* 'to turn', OHG *werben* 'to turn', ON *hverfa* 'to turn round').<sup>10</sup>

**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 \**suerða-* 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. *así-* 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. *ἄορ*, 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 delocative derivation. In the following section an outline of this theory will be presented.

### 3. Delocative derivation in Proto-Indo-European

Briefly sketched in (Nussbaum 1986: 187, 235-238) and further elaborated in (Nussbaum 1998a), the model of delocative derivation is a part of a larger theory of decasulative 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...".

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<sup>10</sup>Note that this etymology is not compatible with the connection between Gmc. \**hverfa-* and Tocharian AB *kārp-* 'to descend, to come down' endorsed in *LIV*<sup>2</sup> 393; however, the semantic link between the two has never been sufficiently explained and Adams (1999: 154) provides an alternative etymology for Tocharian *kārp-*, comparing it to ON *hrapa* '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 delocative hypostases:

$^{*h_x on-r} / -n-$ , Loc.  $^{*h_x on-er-i}$  ‘in a dream’  
 $\Rightarrow$   $^{*h_x on-er-io-}$  ‘what is in a dream’ > Gk.  $\acute{\omicron}νειρος$  ‘vision’.<sup>11</sup>

A similar derivational process accounts for the origin of thematic  $v\ddot{r}ddhi$ -formations (J. Schindler’s term “proto- $v\ddot{r}ddhi$ ”):

$^{*po/ed-}$ , Loc.  $^{*p\acute{e}d}$  ‘at the bottom’  
 (OIr.  $is$  ‘below, under’, Alb.  $-posh$  in  $p\acute{e}rposh$  ‘under’)  
 $\Rightarrow$   $^{*p\acute{e}d-o-}$  ‘what is at the bottom’ > Gk.  $\pi\eta\delta\acute{o}\nu$  ‘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:

$^{*h_2\acute{e}us-\acute{o}s}$  ‘dawn’ (Ved.  $us\acute{a}h$ , Hom.  $\eta\acute{\omega}s$ )  
 Loc. Sg.  $^{*h_2us-s\acute{e}r(i)}$  (Ved.  $usar-(b\acute{u}dh-)$ , possibly Hom.  $\eta\acute{\rho}ι$ )  
 $\Rightarrow$   $^{*h_2us-s\acute{e}r}$  ‘what is at dawn’ > Gk.  $\acute{\alpha}\eta\rho$  ‘mist’.

This derivation is best exemplified by the family of the Indo-European designations of ‘man, earthling’ ( $^{*}$  ‘he who is on the earth’) derived from  $^{*d^h\acute{e}g^h\acute{o}m}$ ,  $^{*d^h\acute{e}g^h m-es}$  ‘earth’:

Loc.  $^{*d^h\acute{e}g^h\acute{e}m-en}$  is the source of OLat.  $hem\acute{o}$ ;  
 Loc.  $^{*d^h\acute{e}g^h m\acute{e}n}$  gave rise to OLith.  $\acute{z}mu\acute{o}$ .<sup>12</sup>

<sup>11</sup>For the suffix see Balles 1997.

<sup>12</sup>Unless both the Lithuanian and the Old Latin form go back to  $^{*(d^h)\acute{e}g^h\acute{m}(m)-om-}$ ,  $hem\acute{o}$  being secondary and the first syllable of  $hom\acute{o}$  being the expected reflex of a zero-grade  $^{*\acute{e}g^h\acute{m}-}$  (see Vine 1993: 247 and Livingston 2004: 33-36; according to Nishimura 2004 an accented  $^{*\acute{e}g^h\acute{m}V}$  gave  $-omV$ , while an unaccented  $^{*\acute{e}g^h\acute{m}V-}$  resulted in  $^{*\acute{e}mV-}$ ).

Note the same semantic model realized by external morphology in OIr.  $duine$  <  $^{*d^h\acute{e}g^h om-(i)io-}$  (based on Loc.  $^{*d^h\acute{e}g^h\acute{e}m-i}$  > Skt.  $kṣ\acute{a}mi$ ) and NPhryg.  $\zeta\epsilon\mu\epsilon\lambda\omega s$  from delocative  $^{*d^h\acute{e}g^h\acute{e}m-el-o-}$ .

Rau (2007) has added a new example:

\**uét-/ ut-*, Loc. *uet-er* 'during the year'  
 ⇒ \**uet-ér* 'what is in/of the year' (whence 'yearling')  
 > Indo-Iranian \**vatár-* 'calf' (Ved. *savátárau* 'having  
 the same calf')<sup>13</sup>

**3.2.1** This process should be distinguished from the reinterpretation of locative formations with the suffixes \*-*er*, \*-*en* and \*-*el*<sup>14</sup> as endlingless 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:

\**k<sup>w</sup>sep-* 'night' (Ved. *ksáp-*, Av. *xšap-*), Loc. Sg. \**k<sup>w</sup>sep-en*  
 ⇒ \**k<sup>w</sup>sep-én*, \**k<sup>w</sup>s(e)p-n-és* > YAv. *xšapan-*, *xšafn-*, f. 'night';  
 \**h<sub>2</sub>éusōs*, \**h<sub>2</sub>us-s-és* 'dawn', Loc. Sg. \**h<sub>2</sub>us-s-ér-[i]* 'dawn'  
 ⇒ \**h<sub>2</sub>u(s)-s-ér*, \**h<sub>2</sub>u(s)-s-r-és* > Ved. *uṣar-/ uṣr-* m./f. 'dawn'.<sup>15</sup>

Another possible example of this process is Indo-Iranian \**ad<sup>h</sup>uan-*, m. 'road, way':

\**h<sub>2</sub>o/end<sup>h</sup>-u-* 'going, moving',<sup>16</sup>  
 (⇒ \**h<sub>2</sub>o/end<sup>h</sup>-u-ro-* > OIcel. *öndurr* 'ski')

<sup>13</sup>See also Nikolaev 2007: 165 for a similar analysis of Gk. ἀθήρ 'ear of (grain)' and ἀνθερεών 'chin' as delocalival formations ultimately based on a locative \**h<sub>2</sub>nd<sup>h</sup>-er* 'in a projecting spot'.

<sup>14</sup>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 locative (and not genitive) secondary derivatives. For instance, the semantics of Gk. χαμαλός 'low, close to the ground' clearly make a delocalival analysis preferable (Loc. \**d<sup>h</sup>g<sup>h</sup>-m-el* 'on the ground'; χαμαλός < \**k<sup>h</sup>t<sup>h</sup>amelo-* with a vowel assimilation); another important example is the Greek compound ἐνδείελος 'very clear, far seen' (an epithet of Ithaca), the second member of which can only be meaningfully explained if a locative allomorph \**deiuel* from \**diēu-s*, \**diu-és* '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.

<sup>15</sup>Nussbaum 1986: 235-238.

<sup>16</sup>A deverbative *u*-stem abstract of the type Ved. *jásu-* 'exhaustion' or Gk. τέρυς 'ruination' (see Nussbaum 1997). The verbal root \**h<sub>2</sub>ned<sup>h</sup>-* 'to move (out)' is that of Gk. perf. ἀνήνοθε *Il.* 11.266 (also *u.l.* ad *Od.* 17.270) and Doric and Arcadian aor. ἐνθείν (where the root vocalism is perhaps analogical to ἐλθείν; the root may also be reconstructed as \**h<sub>1</sub>ned<sup>h</sup>-* if the perf. ἀνήνοθε is a result of a haplological simplification of \**ἀνενήνοθε*). Adverbial OInd. *adhunā* 'now' may be a fossilized form of exactly such an acrostic *u*-stem as reconstructed

Loc. Sg.  $*h_2nd^h u-en$  ‘in moving, on the move’ >> ‘on the way’<sup>17</sup>  
 $\Rightarrow *h_2nd^h u-én, *h_2nd^h u-(e)n-és > \text{Ved. } \acute{a}dhvan-, \text{Av. } aduuan-$  ‘way’.

This model can be referred to as *reinterpretation*.<sup>18</sup>

**3.3** The theory of delocalival 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 delocalival 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 delocalival 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.<sup>19</sup> The prime example is of course Nom.  $*\hat{g}^h(i)\acute{i}\acute{e}m$  vs. the

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above (for the zero ablaut grade in the suffix compare Loc. Sg.  $\acute{a}yuni$  ‘in lifetime’ or Dat. Sg.  $mádhune$  ‘to sweetness’).

<sup>17</sup>Interestingly, Ved.  $adhvará-$  ‘sacrifice’ and  $adhvaryú-$ , a title of a sacrificer, seem to offer evidence for  $*adhvar-$  and, therefore, for an *\*-er* locative  $*h_2nd^h u-er$  ‘en route (for the heavenly regions)’ (?).

<sup>18</sup>Rau (2007) uses this model to account for Proto-Gk.  $*uet-ér$  ‘year’ (attested in compounds of the structure X-( $\epsilon$ ) $\epsilon$  $\tau$  $\eta$  $\rho$  $\sigma$  ‘having X years’): according to Rau,  $*uet-ér$  is a hysterokinetic neuter back-formed to the loc.  $*uet-er$  ‘during the year’ (see above in the main text).

<sup>19</sup>This 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 delocalival 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).

locative  $*\acute{g}^h\acute{e}i\acute{m}en$  'in the winter' (as evidenced by Ved. *h́eman* (YV, TS, Br), which was studied in depth by Nussbaum (1986: 52, Fn. 11; 189); Nussbaum has shown that Gk.  $\chi\acute{\epsilon}i\mu\alpha$  '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 *wše*, B *yšyge* 'night' which Hilmarsson (1989: 91) traced back to a hysterokinetic nominative  $*h_2ues-\acute{e}n$ .<sup>20</sup> This paradigm can have originated in a locative  $*h_2ués-(s)-en$  'at dawn' (i.e. 'time of twilight') by virtue of the mechanism just discussed; the locative  $*h_2ués-s-en$  belonged to the paradigm  $*h_2éus-\acute{o}s$ ,  $*h_2us-s-és$  'dawn' where it apparently coexisted with another locative with two full grades  $*h_2ués-(s)-er$  'at dawn' (Ved. *vasar-hán-* 'striking early', *básri* RV 1, 120, 12 <  $*h_2ués-s-r-i$ ), see Nussbaum 1986: 190, 289-292.<sup>21</sup>

**3.4.2A** A 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 delocalival analysis does the trick here, too<sup>22</sup>: if the doubtful R̥gvedic form *nábh-* (RV 9, 74, 6) together with the *vṛddhi*-derivative  $*h_3néb^h-o-$  evidenced by Arm. *aniw* 'wheel' suffice to set up a root noun  $*h_3neb^h-$  (which seems to be a likely analysis anyway), then it is from this noun that a locative  $*h_3enb^h-en$  was formed. From the form  $*h_3enb^h-en$  an amphikinetic *n*-stem  $*h_3enb^h-on-$  'that what is at the nub' was internally derived (type II above,  $\acute{\alpha}\eta\rho$ ), hence OS *ámbón* 'abdomina, belly' (Acc. Pl.). And if  $*h_3enb^h-en$  was indeed a locative of a root noun, then it is much easier to take Gk.  $\acute{\omicron}\mu\phi\alpha\lambda\acute{o}s$  'navel, knob, boss of a shield' as an endocentric derivative of a co-existing locative form  $*h_3enb^h-el^23$  (of the same type as  $*d^h\acute{g}^h-ém-el$ , probably reflected by NPhryg.  $\zeta\epsilon\mu\epsilon\lambda\omega s$  and Gk.  $\chi\theta\alpha\mu\alpha\lambda\acute{o}s$ ).<sup>24</sup> There are more examples of secondary

<sup>20</sup>See also Pinault 2008: 480.

<sup>21</sup> $*h_2us-s-ér > \acute{\alpha}\eta\rho$  'mist' discussed above is yet another offshoot of the same paradigm.

<sup>22</sup>Note, however, that the following scenario differs from the ones proposed by Nussbaum (1986: 191) and Widmer (2004: 110).

<sup>23</sup>Note 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).

<sup>24</sup>Another 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 delocalival derivation, but differing as to the root connection. According to one view, the preform of *getin* is  $*h_1uéd-en$  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.<sup>25</sup> 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 \**suerða-*

Equipped with this knowledge we can return to Gmc. \**suerða-* ‘sword’. I believe that the theoretical framework

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with a locative of a root noun \**h<sub>1</sub>oud-*, \**h<sub>1</sub>ud-és* ‘ground, earth’ (Gk. *οὔδας, οὔδει*), reinterpreted 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-aš*, a textbook example of a hysterokinetic *i*-stem, can be related to this word via \**h<sub>1</sub>ud-n-é<sub>2</sub>*, a collective of \**h<sub>1</sub>uo/ed-n-i-* (not \**h<sub>1</sub>uo/ed-en-i-*, since there is no evidence for syncope in this environment), internally derived abstract of a \**h<sub>1</sub>ued-en-o-*, itself an external derivative from \**h<sub>1</sub>uéd-en* (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 \**h<sub>1</sub>uéd-en-* elsewhere in the paradigm). A different root connection has been argued for by Oettinger (2000) who suggests starting with \**uod<sub>2</sub>*, \**ued<sub>2</sub>* ‘water’ (the morphological details are largely the same: Oettinger’s idea implies \**ued-en-o-* ‘what is in the water’, hence \**ud-(e)n-é<sub>2</sub>* ‘wateriness’). The treatment of initial \**h<sub>2</sub>u-* vs. \**u-* in Armenian being unclear, I refrain from any judgment on the etymology of *getin* (Arm. *garown* cannot be viewed as a decisive proof for \**h<sub>2</sub>u-* > *g-* in Armenian *pace* Widmer (2004: 117), whose reconstruction \**h<sub>2</sub>ués-*r*-n-* ‘Hellwerden’ with an initial \**h<sub>2</sub>* (Ved. *vasantá-*, OCor. *guaintoin*, OCS *vesna*, Lat. *uēr*, Gk. *ἔαρ* (Alcm. *ἦρ*), Lith. *vāsara*) 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 \**h<sub>2</sub>* in ‘spring’). What is important here is the existence of a *n*-stem side by side with a root noun, be it \**h<sub>1</sub>oud-* or \**uod-* (Hittite *uid-*).

Regarding \**h<sub>1</sub>oud-*, the following remarks are in order. Whatever the precise analysis of *οὔδας* should be, the assumption of an old root noun is supported by the dative *οὔδει* which is disyllabic 11 times out of the whole of its 14 Homeric attestations: *-ει* is located either in arsis or in the thesis of the last foot and resolution is ruled out in || *πατρὸς ἐπ’ οὔδει* # (E 734, Θ 385), || *οὐ γὰρ ἐπ’ οὔδει* # (T 92), || *ἐν Διὸς οὔδει* # (Ω 527), |, *οὔδει τε πέλασσαι* # (Ψ 719). These statistics are not reconcilable with the usual behavior of *s*-stem datives: *ἀνθεῖ*, *Ἄργεῖ*, *ἔρχεῖ*, *ἔλκει*, *κάλλει*, *κύδει*, *πέυθει*, etc. are all dactylic (˘˘˘). Thus in this particular case *-ει* could represent not a contraction product from \**-ee-* after intervocalic *-h-* (< \**-s-*) is lost, but an old athematic dative ending \**-e<sub>i</sub>* (see Meister 1921: 133-134).

<sup>25</sup>See Nikolaev 2005; 2007; *forthcoming*.

described above allows proposing a new etymology for this word.

**4.1** I would like to suggest a comparison of *\*suerða-* with CLuv. <sup>(URUDU)</sup> *ši(h)ual-*, n. This word is attested four times; the variants include Nom.-Acc. Sg. *ši-ua-al* (KUB 44.4 Vo 26) with a characteristic Luvian loss of *h* before *u* (also *ši-ua-la-za-an* of unclear form found in KUB 44.4 Vo 28) and Nom.-Acc. Sg. *še-ḥu-ua-a-al* (KUB 35.145 iii 19). This comparison has not been made before and the reason is above all that the meaning of *ši(h)ual(a)-* is problematic: in an influential article Starke 1981(1982) argued that the meaning should be established as 'lamp' (pursuing a further connection with PIE *\*seh<sub>2</sub>u<sub>3</sub>*, Gen. Sg. *\*sh<sub>2</sub>u<sub>3</sub>éns* 'sun'). The crucial context is KUB 44.4 Vo 28 where *šiual* is construed with a verb *ta-šu-ua-aḥ-du* 'to make blind'. However, it is not very credible that a feeble Anatolian lamp in the 2 millennium BCE would have had enough wattage to blind a person. From another attestation we learn that *ši(h)ual* is heavy (*taššu*) and is made of bronze; moreover, this word is found side by side with 'axe'.<sup>26</sup> Thus *ši(h)ual* is likely to represent some kind of weapon.<sup>27</sup>

**4.2** The morphology of *ši(h)ual* can be interpreted in two ways:

- 1) it could continue a thematic noun (vr̥ddhi-derivative) *\*seh<sub>2/3</sub>u<sub>3</sub>ōl-* which was dethematized either by a common-Anatolian syncope in the final syllable (Melchert 1993b) or in analogy to other Luvian *nomina instrumenti* in *-al* (*hūpal* 'hunting net', <sup>GIS</sup> *niniyal* 'cradle', *winal* 'stick' to name a few);
- 2) if really archaic, *ši(h)ual* could be a reflex of an athematic *\*seh<sub>2/3</sub>u<sub>3</sub>ōl-*, a derivative in *\*-ol-* from a stem *\*seh<sub>2/3</sub>u-*.

In either case, *ši(h)ual* has a stem *\*seh<sub>2/3</sub>u-* in its derivational prehistory from which a stem *\*seh<sub>2/3</sub>u<sub>3</sub>ōl-* or *\*seh<sub>2/3</sub>u<sub>3</sub>ōl-* (with a further derivative *\*seh<sub>2/3</sub>u<sub>3</sub>ōl-*) was formed.<sup>28</sup> A morphological parallel can be found in CLuv. *ādduwal-* 'evil' (subst.) and its Hittite cognate *idālu-* (with further suffixation): the reconstruction of a PIE form *\*h<sub>1</sub>ed-u-ōl* is

<sup>26</sup>199/r + HFAC 13.10. See Beckman 1983: 196; Rieken 1999: 450.

<sup>27</sup>Melchert (1993a: 194) suggests 'stiletto', Beckman (1983: 196) and Soysal (1989: 185) argue for 'dagger', while Rieken (1999: 449-451) is undecided.

<sup>28</sup>An inner-Luvian derivation *ši(h)ua-* ⇒ *ši(h)ual-* cannot really be excluded. However, *ādduua-* ⇒ *ādduual-* would be the only parallel, and so there is some probability that in *ši(h)ual-* we are actually dealing with an inherited secondary stem in *\*-ol-*, based on a *\*-u-* stem.

supported by traces of the *\*h<sub>1</sub>o/ed-u-*, *\*h<sub>1</sub>ed-u-r̥* and *\*h<sub>1</sub>ed-u-ōn*, studied by Schindler (1976), as well as by Toch. B *yolo* ‘evil’.<sup>29</sup>

The stem *\*sēh<sub>2/3</sub>u-* is indirectly reflected in Luvian by the thematic stem *šī(h)ua/i-* ‘bitter, sour’ (with *-i-* from *\*ē*).<sup>30</sup> Under the assumption that *šī(h)ua/i-* and *šī(h)ual* are related, the basic meaning of the underlying root is likely to be ‘sharp’ and the adjective *šī(h)ua/i-* shows a synaesthetic transfer ‘sharp’ > ‘sharp on the tongue’ > ‘bitter, sour’.<sup>31</sup> CLuv. *šī(h)ua/i-* is a derivative of the type *\*ser-u-o-* (Welsh *herw* ‘raid’): *\*soru-* (Hitt. *šāru* ‘booty’) or *\*uet-s-o-* (Skt. *vatsá-* ‘calf’): *\*uete/os-* ‘year’ (Gk. *ἔτος*). This derivational model produces possessive formations; therefore, by glossing *\*sēh<sub>2/3</sub>uo-* as ‘having sharpness’ (viz. ‘sharp’), we arrive at a reconstruction of an acrostatic u-stem *\*sēh<sub>2/3</sub>u-* ‘sharpness’.<sup>32</sup>

**4.3** Now, how exactly will the comparison with Gmc. *\*suerða-* work? A workable scenario is provided within the framework of Nussbaum’s delocative 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 (*\*k<sup>w</sup>sep-ēn-* ‘night’, Ved. *uṣar-/ uṣr-* ‘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 (*\*(d<sup>h</sup>)g<sup>h</sup>emōn-* ‘he who is on/of the earth’, *\*h<sub>2</sub>us(s)ēr-* ‘that which is at/of dawn’). Now,

<sup>29</sup>I am grateful to Craig Melchert who kindly reminded me about the Tocharian form.

<sup>30</sup>Nom.-Acc. Pl. *še-e-ua* (KBo 13.260 iii 11) plus an *-iya-* derivative Nom. Pl. comm. *šī-e-ḫu-ua-en-zi* (*ibid.*), see Starke 1987: 250, Fn. 26 and for morphology Melchert 1993a: 193. According to Starke, the name of a river-nymph <sup>TUL</sup>*Šī-ua-an-na-aš* (KBo 2.13 rev. 23) may belong here, too. Starke further compared *šīḫua/i-* with problematic Hittite (Luvoid) *šī-ua-e-e[š]* (KBo 17.4 ii 17) which is (mis)construed with acc.pl. *ḫaršauš*, so the meaning is probably ‘sour thick-breads’, and *šī-ú-i-na* (KUB 31.110 3), but the exact meaning of the latter form remains a mystery.

<sup>31</sup>Compare similar semantic developments in Lat. *acidus* ‘having a sour, bitter flavor’ and *acūtus* ‘sharp; pointed’ and ‘acid’ (*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 übermässig, dasz man ihn auch kosten darf”).

<sup>32</sup>I leave open the question whether such acrostatic *\*sēh<sub>2/3</sub>u-* ‘sharpness’ should be considered an adjective abstract (i.e. a neuter) of a proterokinetic adjective *\*seh<sub>2/3</sub>u-* ‘sharp’, compare proterokinetic *\*meg<sub>h</sub>₂-* ‘big’, neut. acrostatic *\*moǵ<sub>h</sub>₂ >* Toch. B. *māka*, A *māk* (see Widmer 2004: 155-170).

as a locative of an acrostatic stem  $*s\check{e}h_{2/3}u-$  different forms come to mind:  $*s(e)h_{2/3}u-en$ ,  $*s(e)h_{2/3}u-el$ ,  $*s(e)h_{2/3}u-er$  and  $*sh_{2/3}eu(-i)$ .<sup>33</sup> As a parallel to this diverse picture recall once again the locatives from the Indo-European word for 'earth'  $*d^h e\check{g}^h \check{o}m$ ,  $*d^h \check{g}^h m-es$ <sup>34</sup>:  $*(d^h)\check{g}^h m-er$  (YAv. *zəmar.gūz-*),  $*d^h \check{g}^h -ém-i$  (Skt. *ksāmi*),  $*d^h \check{g}^h -ém-en$  (if this should be the source of OLat. *hemō*, see note 12),  $*d^h \check{g}^h -m-én$  'on the earth' (the source of OLith. *žmuō*),  $*d^h \check{g}^h -ém-el$  (the source of NPhryg.  $\zeta\epsilon\mu\epsilon\lambda\omega\varsigma$  and probably Gk.  $\chi\theta\alpha\mu\alpha\lambda\acute{o}\varsigma$  with vowel assimilation). The following developments can be sketched:

1) The locative  $*s(e)h_{2/3}u-el$  (remade to  $*s\check{e}h_{2/3}u-el$  with an analogical leveling of root ablaut throughout the paradigm) gives rise to a back-formed holokinetic paradigm with Nom.-Acc.  $*s\check{e}h_{2/3}u-ōl$ . 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.  $\chi\epsilon\iota\mu\acute{\omega}\nu$ ,  $\acute{\omega}\nu\omicron\varsigma$  'winter', built to a *Scharnierform* Loc.  $*\check{g}^h e\check{i}men$  'in the winter' or  $*nok^w tōr$  'night' (Gk. adverb  $\nu\acute{\upsilon}\kappa\tau\omega\rho$  'by night'), built to a Loc.  $*nok^w ter$  'at night' from a *t*-stem  $*no/ek^w t$ .<sup>35</sup>

2) The locative  $*s(e)h_{2/3}u-er$  (type  $*(d^h)\check{g}^h m-er$ )<sup>36</sup> serves as a derivational base for a secondary *t*-stem  $*s(h_{2/3})u-er-t$  'that

<sup>33</sup>That a locative of an abstract noun should be viewed as a real form employed by the speakers of the PIE and not as a mechanical construct can be inferred on the one hand from various infinitival formations that often continue locatives of verbal abstracts (e.g. Proto-Greek  $*-eh-en$ , Ved.  $-san(i)$ ), on the other hand, from the so-called "Absenzbildungen" (recently studied by Forssman 1997), viz. adjectival possessive compounds with  $*\eta$  as their first member, used in locative (or instrumental), such as Ved. *ananté* 'in endless (place)': this inherited model is best interpreted semantically as 'in/at X-lessness' where X is an abstract noun (Peters 2007: 165, Fn. 18).

<sup>34</sup>For natural semantic reasons this word preserves a variety of locative forms.

<sup>35</sup>A generalization of the  $\check{e}$ -grade in the root from the strong case forms throughout the paradigm of  $*s\check{e}h_{2/3}u-$  is not a costly assumption, but in any event an alternative should be signaled: one could also operate with an inner Luvian endocentric derivation  $\check{s}ih_{2/3}ua- \Rightarrow *\check{s}ih_{2/3}ua-la-$  (under assumption that Luv.  $\check{s}(h)ual-$  was originally thematic).

<sup>36</sup>It seems possible that the locative  $*sh_{2/3}u-er$  is further found in  $*s(h_{2/3})u-er-uo-$  (with the suffix  $*-uo-$  that we find in Myc. *peru-si-nu-wo* 'last year's', based on loc.  $*per-uti$ ) reflected by OIr. *serb*, Welsh *chwerw* 'bitter'; the meaning of these forms matches nicely that of CLuvian  $\check{s}ih_{2/3}ua/i$  'bitter, sour, sharp'.

Less certain is the comparison with  $*sh_{2/3}u-r-o > *suh_{2/3}r-o-$  (with a laryngeal metathesis) in Balto-Slavic  $*sūro-$  'sour' (Latv. *sūrs* 'salty, bitter', OPruss. *suris* 'cheese', OCS *syrŭ* m. 'id.' and *syrŭ* adj. 'moist') and Gmc.  $*sūrā-$  'id.' (ON *surr*, Modern High German *sauer*). Alternatively, these words have been compared to Hitt. *sēhur* 'urine' (cf. OIsl. *saurr* 'male semen, impurity,

which is in/of sharpness' (subst.)<sup>37</sup>; from the latter an adjectival *\*s(h<sub>2/3</sub>)u-er-t-ó-* 'sharp' is further derived which is lastly substantivized via a transfer to neuter gender giving Gmc. *\*suerða-*, 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. *\*ġ<sup>h</sup>eimen* 'in winter'<sup>38</sup>  
 ⇒ *\*ġ<sup>h</sup>imen-t-* 'what is in winter' (Hitt. *gimmant*)<sup>39</sup>  
 ⇒ *\*ġ<sup>h</sup>eimen-t-o-* 'wintry' (> Ved. *hemantá-* 'winter').<sup>40</sup>

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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 *\*suh<sub>ɣ</sub>-* in Gk. *ῥέει* 'rains', Hitt. *šuh<sub>h</sub>a<sup>i</sup>* 'scatters, pours', Toch. AB *su-/ swās-* 'rains' (but the meaning 'bitter' remains unexplained). It seems that among the reflexes of *\*suh<sub>2/3</sub>r-o-* we need to distinguish two groups of words: on the one hand, the words for 'wet' where a connection to Hitt. *šēhur* 'urine' and OIsl. *saurr* is not only semantically plausible (compare Gk *οὐρέω*, *οὐρον* 'urine' and OInd. *váry-* 'to rain', Hitt. *uarša-* 'shower rain' or Latin *urina* 'urine' and OInd. *vár* 'water', Luvian *wa-a-ar(-ša)* 'id.'). but also supported by formulaic equations studied by le Feuvre 2007; on the other hand, a distinct *\*suh<sub>2/3</sub>r-o-* 'sour' related to the root studied in this paper (in other words, 'wet' and 'sour' do not have to belong together).

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

<sup>38</sup>Ved. *hēman* (YV, TS, Br), indirect offshoots Gk. *χέιμα* 'winter', YAv. *zaiian-* 'id.'.

<sup>39</sup>See Nussbaum 2004. Another example of a delocalative *\*-en-t-* stem is Hitt. *išpant-* 'night' from *\*k<sup>w</sup>sp-en-t-* (derived from *\*k<sup>w</sup>sep-*, Loc. Sg. *\*k<sup>w</sup>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-* / *\*-mn-*).

<sup>40</sup>Another example of delocalative *\*-to-* stem, cited by Nussbaum (2004), is Vedic Instr. Sg. (adv.) *sasvántā* (RV 7, 58, 5), derived from *sasvár* 'secretly' (= YAv. *haṃ<sup>v</sup>harə*); however there is no evidence for a putative *\*so/esu-* 'sleeping' from the verbal root *\*ses-*. Note that both *sasvántā* and *hemantá-* in theory also allow analysis in terms of delocalative derivation with *\*-to-*.

One may also want to recall Nussbaum's (1998a) interpretation of Gk. *δάμαρ(τ)-*, which he traces back to *\*dm<sub>h</sub>er-t* 'the one in the house' from a locative *\*dm<sub>h</sub>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 *aniṭ* (Nikolaev 2006).

Thus both  $*s(h_{2/3})u-er-tó^{-n}$  and  $*sēh_{2/3}uǫl$  (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.<sup>41</sup> 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  $*sH_xV$ -sequences<sup>42</sup>, I want to turn to the presumed loss of the laryngeal after  $s$ -mobile before a non-syllabic.<sup>43</sup>

**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  $\#H_xC$ - vs.  $\#sC$ -. This alternation is best interpreted as a result of an earlier  $\#H_xC$ - ~  $\#sH_xC$ - (the latter with  $s$ -mobile as an optional onset of a laryngeal-initial root), where the laryngeal is lost after  $*s$ -.<sup>44</sup>

<sup>41</sup>If OIr. *serb* and Welsh *chwerw* 'bitter' belong to the same root (see above, Fn. 36), the development of  $*sh_{2/3}u-er-uo-$  in Celtic presents the same problem.

<sup>42</sup>See Hoenigswald 1952 and Hoenigswald 1992; Beekes 1969: 82-86.

<sup>43</sup>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. *asnáh* and Hitt. *ēsnaš* '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  $*sH_x$  was followed by a consonant (the presence of laryngeal reflexes in  $*-to$ - derivatives from laryngeal final roots, such as  $*sh_2to$ - 'tied' > Ved. *sitá*-, Av. *hita*- or  $*sh_2to$ - 'satiated' > Goth. *saps*, Gk. *ἄ-ατος*, 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  $*sH_xu$ -.

<sup>44</sup>Predictably, allomorphs with initial  $\#H_xC$ - 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  $*éR$ -/ $*áR$ -/ $*óR$ - (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  $*sH_xu-$  gives  $*su-$  as in our case:

- 1)  $*h_2uer-$  vs.  $*suer-$ : Gk. ἀείρω ‘lift’ ( $*\acute{a}φείρω$ , cf. ἀνηρομέναι Alc. 1.63 (Davies)<sup>45</sup> vs. Modern High German *schwer*, Pal. *šuwaru* (KUB 32.18 i 5’), Hitt. (Pal.?) *šuwaru*, Lith. *svarūs* ‘heavy’, *sveĩti* ‘to weigh’ and Alb. *vjer* ‘to lift’<sup>46</sup>.
- 2)  $*h_2uel-$  vs.  $*suel-$ : Hsch. ἀέλιοι· οἱ ἀδελφὰς γυναικάς ἐσχηκότες (< PGk.  $*aueliio-$ ) vs. ἐιλίονες ‘id.’ Pollux 3, 32 (< PGk.  $*hueliion-$ )<sup>47</sup>, ON pl. *svilar* ‘brothers in law whose wives are sisters’.<sup>48</sup>

Based on these examples, it may be concluded that if a root with an initial  $*H_xu-$  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  $*sH_xu-$  where initial  $*s-$  is not an *s*-mobile, it is not unreasonable to assume that a syllable onset  $*sH_xu-$  (of whatever origin) was generally disallowed in Proto-Indo-European.<sup>49</sup>

**5.2** The evidence of Anatolian, which could shed some light on the outcome of PIE initial  $*sH_xC-$ , is, however, hard to evaluate. According to Oettinger (1976: 93-97) Hitt. *išhunauuar* goes back to  $*sh_2nóuŕ$  with laryngeal between  $*s-$

<sup>45</sup>P. Louvre E. 3320/R 56 ἀνειρομέναι – late Laconian spelling.

<sup>46</sup>If initial  $*su-$  > Alb. *v-* (as, for instance, in *vjehërrë* ‘father-in-law’ <  $*suesuro-$ ); now that *diell* ‘sun’ has been explained away (from  $*ǵ^h el-uo-$  ‘tawny, yellow’, Lith. *žėivas*, according to Orel 2000: 81), the main piece of evidence for  $*su-$  > *d-* remains *dirsë* ‘sweat’ which Pedersen (1900: 286) traced back to  $*suidrotiā$ .

<sup>47</sup>Pollux labels the word as poetic (παρά τοῖς ποιηταῖς), in which case initial *ei-* is likely to be a result of a metrical lengthening.

<sup>48</sup>Note, however, that the initial *á-* of ἀέλιοι 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 ἀέλιοι actually continues  $*sm-sueliio-$  (with a compensatory lengthening  $*-Vsū- > *-Vhū- > *-V̄ū-$  of the preceding vowel). For the comparison between the Greek and the Germanic words see Hermann (1918: 222) and Polomé (1986: 192).

<sup>49</sup>An important case not discussed by Southern is the Indo-European word for ‘sun’  $*seh_2uŕ$ ,  $*sh_2uens$ . In my opinion, the most economical way to account for the notorious disyllabicity of OAv.  $x^wəng$ , (Y)Av. *hū* <  $*huuánh$  would be to derive these forms from a Lindeman variant  $*suuen-$  after a regular loss of laryngeal in a proto-form  $*sh_2uen-$  (this solution eliminates the need to assume an otherwise poorly supported development of Indo-Iranian  $*ə$  (from  $*h_{1/2/3} / C\_C$ ) 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 *išhunauuar* is a secondary nonce formation back-formed to the *au*-stem Gen.Sg. *išhunauuas*.<sup>50</sup> Gk. *νευρά*, Arm. *neard*, Toch. B *šñor*, *šñaura* thus cannot be used as a piece of evidence for an *h*-loss between \*s and consonant. As to Hitt. *šuuaiš* 'bird'<sup>51</sup> (KBo 26.34 rev. i 15'), a likely Anatolian cognate of Lat. *avis*, Gk. *αἰετός*, Arm. *haw* (\**h<sub>2</sub>uei-*), it seems best to regard it as an outcome of \**suois* (not a Lindeman variant, since otherwise a †*šumaiš* would have been expected) with a laryngeal loss due to Saussure's Law (\**sh<sub>2</sub>uois* > \**suois*)<sup>51</sup>; 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 \**sh<sub>2/3</sub>u-er-tó*<sup>51</sup> to give Gmc. \**suerða-*.

## 6. The prehistory of \**sēh<sub>2/3</sub>u-*

Now it is time to attempt a more principled account of the derivational basis \**sēh<sub>2/3</sub>u-* posited above. As we have seen, it is possible to gloss \**sēh<sub>2/3</sub>u-* as 'sharp(ness)', hence 'sour(ness)'<sup>52</sup>, posit a root \**seh<sub>ɣ</sub>* or \**seh<sub>ɣ</sub>* 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 \**séh<sub>2</sub>u<sub>ḡ</sub>*, Gen. Sg. \**sh<sub>2</sub>uéns*, n. with two holokinetic animate derivatives \**séh<sub>2</sub>uōl* and \**séh<sub>2</sub>uōn*.<sup>53</sup> Can we make any more detailed guess about just how a *u*-stem \**sēh<sub>2</sub>u-* might be related to the heteroclitic stem \**séh<sub>2</sub>u<sub>ḡ</sub>/-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

<sup>50</sup>Isebaert suggests an etymological relationship with Skt. *sānu-* 'back' (see also Rieken 1999: 360-361), but the origin of the medial /u/ in *išhunau-* remains unclear (*išhunau-* can be mechanically reconstructed as \**sh<sub>2/3</sub>un-ou-*).

<sup>51</sup>See Melchert 1994: 49-51; on *šuuaiš* cf. Rößle (2004) who is skeptical as to its Indo-European origin.

<sup>52</sup>See above on the semantic development of CLuv. *šū(h)ua-* and especially Fn. 36 for indirect evidence for a locative \**sh<sub>2/3</sub>u-er*.

<sup>53</sup>See Nikolaev *forthcoming*.



evolution remain a matter of speculation (1. ‘hot’ > ‘hot on the tongue’, hence ‘sour, acid’<sup>54</sup>, and independently 2. ‘hot’ > ‘sharp’).

Nevertheless, a nice parallel is furnished by the descendants of the PIE root *\*g<sup>wh</sup>er-* (English *warm*, Greek *θερμός*): while the primary meaning of this root is ‘to be hot, to burn’<sup>55</sup> and some of the cognates — quite expectedly — refer to the sun (OIr. *grían*, Gen.Sg. *gréine* ‘sun’<sup>56</sup>, OInd. *ghraṁsáh* ‘heat of the sun’<sup>57</sup>), Old Irish adjective *goirt* has a wide range of meanings including ‘bitter, sour, salty’ (cf. the compound *goirtbíad* ‘salt food’), but also ‘sharp’!<sup>59</sup> 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 *gorikŭ* ‘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 *gorikŭ*).<sup>60</sup>

<sup>54</sup>For the semantic change ‘hot’ > ‘sour’ or ‘bitter’ compare Skt. *śuktá-*, Dard. *śut* and Khot. *suttā* ‘sour’ that continue Indo-Iranian *\*čuk-ta-* from the root *\*čauk-* ‘to burn’ (Skt. *śoc-*). Another parallel to this semantic development can be found in Bulgarian *kisel*, Polish *kisty* ‘sour’ from the root of OInd. *kváthati* ‘boils’, Latv. *kūsāt* ‘to boil’ (Mallory–Adams 1997: 199 gloss PIE *\*k<sub>u</sub>at(h)<sub>2</sub>-* as ‘ferment’).

<sup>55</sup>OIr. *guirid* ‘warms, burns’, *fo-geir* ‘heats’, OCS *goritŭ* ‘burns’.

<sup>56</sup>Even if *grían* < *\*ghreínā* does not belong to the root *\*g<sup>wh</sup>er-* (see Meid 1970: 96 for different options), one may still cite OIr. *grís* ‘heat, fire, embers’ (< *\*g<sup>wh</sup>rēnsā*) which is used of the sun’s heat, e.g. *7-o-gríis imurcrach na-gréine* ‘and from the excessive heat of the sun’ (see Mac Mathúna 1990: 286).

<sup>57</sup>E.g. RV 5.34.3 *yó asmai ghraṁsá utá vā yá údhani sómaṁ sunóti* ‘wer ihm bei Sonnenglut oder wer bei Nachtkühle Soma presst’ (trans. Geldner).

<sup>58</sup>Another parallel to the semantic development ‘hot’ or ‘burn’ > ‘sun’ (pointed out to me by the anonymous reviewer) is Toch. B *kaum* ‘sun’ which likely goes back to the root *\*keh<sub>2</sub>u-* of Gk. *καίω*, aor. *ἔκρηα* ‘burn’ (Adams 1999: 211).

<sup>59</sup>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.

<sup>60</sup>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 *\*suh<sub>2</sub>-ono-*, where *\*suh<sub>2</sub>-* is a zero-grade allomorph of a *u*-stem *\*seh<sub>2</sub>u-*. 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 *\*sēh<sub>2</sub>u-* 'sharpness' and *\*sēh<sub>2</sub>u<sub>l̥</sub>/-n-* 'sun' seems to be possible from the formal point of view; again, the theory of delocative derivation does the trick.

There is evidence in favor of a derivational process, by which stems with heteroclitite 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 *\*d<sup>h</sup>o/emu-* 'thickness', an internal derivative of which can be reconstructed as *\*d<sup>h</sup>ému-*, *\*d<sup>h</sup>méu-s* on the evidence of the Greek adjective *θαμύς* 'thick' (Hom. Nom. Pl. *θαμέες*).<sup>61</sup> The locative of this *u*-stem had the shape *\*d<sup>h</sup>μηέν* 'in thickness' and when reinterpreted as a locative of an *\*-r/-n-* stem it gave rise to proterokinetic *\*d<sup>h</sup>emur/-n-* 'thick muscle, thigh', whence Lat. *femur*.<sup>62</sup> For a semantic parallel compare another designation of a body part, namely Greek (Aeolic<sup>63</sup>) *ἄμφην* 'neck' (Theocr. 30, 28), *ἀρχήν*, *-ένος* in other Greek dialects<sup>64</sup>, which is cognate with Arm. *awjik* 'περιστόμιον,

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a thematized version of an animate amphikinetic *\*s(h<sub>2</sub>)uōn* 'having sunlight' (Lindeman variant *\*suōn* after the loss of the laryngeal), an internal derivative of *\*sēh<sub>2</sub>u<sub>l̥</sub>*, Gen. Sg. *\*sh<sub>2</sub>uéns* (compare Latin *sōl* from *\*sh<sub>2</sub>uōl* > *\*suōl*).

<sup>61</sup>When 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.

<sup>62</sup>Another possibility would be to regard *\*d<sup>h</sup>emur/-n-* as a Caland substitute for a *\*-s-* stem *\*θάμος*, but there is no evidence for the latter; moreover, the complex suffix *\*-ur/-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 *\*d<sup>h</sup>μηέν*, but this form is unreliable.

<sup>63</sup>This is one of Theocritus' idylls written in Aeolic meters and in an imitation of Aeolic dialect (note the place of the accent in *ἄμφην*); the "Aeolic" form *ἀφέννα* (Jo. Gramm. *Comp.* III.16) is a grammarian's fiction.

<sup>64</sup>The Armenian form goes back to a proto-form *\*an<sup>w</sup>g<sup>h</sup>u-iiā* which (just as Greek *ἀρχήν*) 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. *aukām* 'kind of snake' < *\*an<sup>w</sup>g<sup>wh</sup>i-* < *\*h<sub>2</sub>eng<sup>wh</sup>i-* 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-yo-na-u-se*) is a desideratum.

collar' (Plurale tantum) and further with PIE adjective 'narrow' (Ved. *aṃhū-* (*bhēdi-*), Go. *aggwu-*).<sup>65, 66</sup>

Similar derivational histories can be suggested for other cases which cannot be discussed here in sufficient detail.<sup>67</sup> Instances of \*-r /-n- as an exocentric derivational formant in Indo-European are exceedingly rare<sup>68</sup>; I would like to propose, rather, that at some stage of the protolanguage \*-r/-n- and

<sup>65</sup>See Nikolaev 2005: 47.

<sup>66</sup>Indo-Iranian *\*d<sup>h</sup>ánuṣ*, *\*d<sup>h</sup>anuáns* 'bow' may well go back to the same paradigm *\*d<sup>h</sup>emuṣ/-n-*; prerequisites are 1) a dissimilation of labials (*\*d<sup>h</sup>ánuṣ* < *\*d<sup>h</sup>ámuṣ*) 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).

<sup>67</sup>For instance, a comparable prehistory may be envisaged for the Indo-European word for 'well, fountain' which is reconstructible as *\*b<sup>h</sup>rēu-ḡ/-n-* or *\*b<sup>h</sup>reh<sub>1</sub>u-ḡ/-n-* on the basis of Gk. *φρέαρ*, Nom. Pl. *φρήατα* (Φ 197, *mss.* *φρέιατα*), Arm. *abbiwr* 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" *\*b<sup>h</sup>erw-* 'to boil, to flutter', attested in Lat. *fervō*, *fervere* 'to be boiling hot, to boil, ferment, glow' (which is used of water, e.g.: *feruit aqua*, Lucil. ap. Quint. 1, 6, 8; *omne! excitat turbo ingenti sonitu mare, fervere cogens*, Lucr. 6, 442) and *dēfrūtum*, -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 *\*b<sup>h</sup>erh<sub>1</sub>u-* and *\*b<sup>h</sup>reh<sub>1</sub>u-* and account for the *u*-extension. And yet I believe that it is possible to pursue this connection within the framework of the delocalative 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 *φόρυς· δακτύλιος 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 *φορύνω*, *φορύσσω* '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 *\*b<sup>h</sup>o/erh<sub>1</sub>u-* 'flowing, gushing' from the root *\*b<sup>h</sup>erh<sub>1</sub>-* (which may have formed a *u*-present). Assuming that this stem had a locative *\*b<sup>h</sup>reh<sub>1</sub>u-er/-en* with *Schwebeablaut* as discussed above one could stipulate that an *\*-r /-n-* stem *\*b<sup>h</sup>reh<sub>1</sub>u-ḡ*, *\*b<sup>h</sup>rh<sub>1</sub>u-en-s* was built to it. Thus it becomes possible to tie up the loose ends and to subsume Italo-Celtic verbs meaning 'to boil' (*fervō*, *berw-*) and the PIE word for 'well, fountain' under a common denominator *\*b<sup>h</sup>erh<sub>1</sub>u-*. (Note that Italic and Celtic forms are compatible with this reconstruction: (1) *fervere* may go back to *\*b<sup>h</sup>erh<sub>1</sub>u-* > *\*ferau-* with an early syncope of *Ǟ / L<sub>1</sub>u* after a light preceding syllable (as in *salvus*, *corvus*); (2) Lat. *dēfrutum* is found at Pl. *Pseud.* 741 with a long *-ū-* (*frū-* < *\*b<sup>h</sup>ruh<sub>1</sub>*); (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 *\*ḡueh<sub>2</sub>*)).

<sup>68</sup>See Nussbaum 1998b: 535.

\*-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 heteroclitics 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.<sup>69</sup>

It is thus possible that a *u*-stem \**sēh<sub>2</sub>u-* could in fact have served as a derivational basis for \**sēh<sub>2</sub>u<sub>l</sub>*, Gen. Sg. \**sh<sub>2</sub>u<sub>é</sub>ns* 'sun'.

## 7. Conclusion

In this paper I have argued that Gmc. \**s<sub>u</sub>erðā<sup>n</sup>* 'sword' is cognate with CLuv. *šī(h)ual* 'dagger' via a derivational chain which involves delocative derivation:

$$\begin{aligned} & *sēh_2u \text{ 'sharp(ness)', Loc. } *sh_2u\text{-er} \\ & \Rightarrow *s(h_2)u\text{-er-t} \\ & \Rightarrow *s(h_2)u\text{-er-tó- (adj.)} \\ & \Rightarrow *s(h_2)u\text{-er-tó}^n \text{ (subst.)} > *s<sub>u</sub>erðā, n. \end{aligned}$$

Another locative from the same stem, \**s(e)h<sub>2</sub>u-el* gives rise to a back-formed holokinetic paradigm with Nom.-Acc. \**sēh<sub>2</sub>u-ōl* which is the source of CLuv. *šī(h)ual*.

The phonological side of this analysis becomes possible under the assumption that a laryngeal between an initial \**s*- and a following \**u* was lost already in Proto-Indo-European. A study of the mechanism of delocative 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 delocative 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

<sup>69</sup>In this connection one wonders whether PIE \**uo/ed-γ/-n-* 'water', the flagship example of a heteroclitic noun, is in any sort of derivational relationship with the root noun \**uo/ed-* 'water' (Hitt. *uid-*, Gk. *ῥδελ* Hes. *Op.* 61 (with the old dative ending *-ελ*), indirectly supported by OIcel. *vátr* 'wet' < \**uédō-* that had both \**ud-en* and \**ud-er* as its locatives (Ved. *udán* RV I, 104, 3, *udán-*; \**ud-ró-* > Ved. *udrá-*, Gk. *ῥδρος*, OHG *ottar*). Space limitations prevent pursuing this idea here any further.

addition to new etymologies and morphological analyses brought by the tool of delocative 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.

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