A. AUFSÄTZE

A 'New' PIE *men Suffix

1. B. Forssman, *KZ* 79 (1965) 11—28, reconstructs a PIE suffix *-mnó- which forms locatival adjectives from preverbs. He bases this reconstruction on the following examples: Grk. πρυμνός/πρόμνος 'prominent' and substantivized πρύμνη 'stern (of a ship)' from πρό 'forth'[1]; Skt. nimná- 'valley, depression' substantivized from * 'low, located below' from ní 'down'[2]; Hitt. šaramna- 'located above' from šarā 'up'[3]; Lat. antemna 'insect's feeler' substantivized from * 'located in front' from ante 'in front'; and Lith. priem(e)nẽ 'vestibule, entry hall' again substantivized from * 'located in front' from priẽ 'at, by, *in front'.

Forssman's discussion of Hitt. šaramna- centers on the ablative form šaramnaz (also spelled šarammanaz and šarammaz)[4]. He also cites the

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[1] I use 'prominent' here merely as a cover term. As Forssman shows in detail, pp. 12—14, πρυμνός is regularly used to refer to that part of one object which is connected to another object; i. e., that part which may be viewed as 'growing out' of the latter. Thus πρυμνός refers to the heel of the hand, the base of the head, the lower part of the shoulder, etc., as well as the stern of a ship (because ships in Homeric times were beached stern-first).

[2] Forssman himself argues that ni-mná- originally means 'downward going'. However, this is based in part on his erroneous assumption that an adjective from a directional adverb must itself necessarily have a directional sense as well (see note 3 below). Examples like English 'upper' from 'up' show that this assumption is false. The usual meaning of Vedic nimná- is 'valley, depression', which is most easily derived from an adjective 'deep, located below' (attested in Pali ninna-, as Forssman shows). The instrumental forms nimnéna and nimnā́ts are best taken with Böhtlingk–Roth and Geldner as adverbial: 'talwärts'.

[3] Hittite šarā means consistently 'up' or 'upward', pace Forssman, p. 20, n. 5. For the derivation of a locatival adjective from a directional adverb compare English 'upper' from 'up'.

[4] I have only two points to add to Forssman's treatment of these passages, which is essentially correct. First, Friedrich's interpretation of the instrumental šaramnit at *KUB* XIII 2 II 11f. as standing for an ablative is undoubtedly correct. Such a hypercorrect use of the instrumental for the ablative is perfectly in order for a Neo-Hittite copy of a Middle Hittite text: see my dissertation 'Ablative and Instrumental in Hittite', Harvard University (1977) 340 and 426. Second, although it is possible in all cases of šaramnaz to suppose reference to an object or place which is 'located above', there is not an iota of positive evidence

Hittite word ^(NINDA)šaram(m)a-/šaramna- (a type of bread) but hesitates to equate the latter with šaramna- 'located above' due to both semantic and phonological uncertainties[5]. We now have available considerably more attestations of ^(NINDA)šarama-, and the identity of the bread term and the adjective may be confirmed.

As to the semantics, Forssman already cites the crucial passage, although his translation requires minor revisions. In *KUB* VII 17, 7—9 we find: *kattan* 1 NINDA ERÍN.MEŠ 20-*i[š] šerr-a-ššan* 10 *MEŠLU šaram-naš* ^{NINDA}ḫāliš 'Below is one twenty-(weight?) troop-bread, and on it are ten half-(loaves) of ḫāli-bread for on top'. Passages such as *KUB* XXXI 57 IV 8—11, cited by Hoffner, *Alimenta Hethaeorum* (1974) 154, show that *šaramnaš* must be interpreted as a genitive singular or plural parallel to ^{GIŠ}BANŠUR-*aš* 'of/for the table' and *ŠA* ERÍN.MEŠ 'of/for the troops'. This does not, however, alter the fact that *šaramnaš* is used to describe bread which is placed on top of another kind of bread. Furthermore, the fact that ^{NINDA}ḫāli- can be *šaramnaš* shows that the latter does not indicate a particular kind of bread (in terms of shape, color or ingredients), but bread used for a particular purpose (just as the other two genitives cited above).

There is other evidence that the Hittites created 'sandwiches' or 'layer-cakes', as in this passage from the Palaic 'words of the bread' (*ŠA* NIN-DA.KUR₄.RA.MEŠ *uddār*), which were recited in the Zaparwa ritual[6]: *wāšu wišta[š] šamlūwaš wuᵤlašinaš kītar wāšu wišta[š] [m]alitannaš wuᵤlašinaš kītar* 'The *wišta*-bread lies well on the *š. wulašina*-bread. The *wišta*-bread lies well on the honeyed *wulašina*-bread'. It is therefore perfectly reasonable that bread (of whatever type) used for the top layer of such creations could be referred to as *šaram(m)a-* 'located above, top-(bread)'.

^(NINDA)šaram(m)a- may also be equated formally with the adjective *šaramna-*, although not quite in the way Forssman suggests. Most attestations of the bread term have been conveniently collected by Hoffner, *Alim. Heth.* 179—180. They show the following paradigm (the determiner is omitted):

Nom.-Acc. Sg.	šaraman	Nom.-Acc. Pl.	šar⁽ā⁾ma/šaram(ma)na/
			šaramma
Gen. Sg./Pl.	šaramnaš		
Dat.-Loc. Sg.	šaram(a)ni	Dat.-Loc. Pl.	šaram(ma)naš/šarammaš
Inst.	šaramnit		

for such an interpretation. Thus Friedrich's explanation of *šaramnaz* as an adverb '(down) from above' is most likely for all passages.

[5] The equation is doubted by Hoffner, *Alimenta Hethaeorum* (1974) 179—180, who does dispose of the earlier suggestion of Goetze that ^{NINDA}šarama- means 'breadbasket'.

[6] For the insertion of the 'words of the bread' into the Hittite-Palaic Zaparwa Ritual see *IBoT* II 38 III 4.

The oblique stem shows the spellings -*mn*-, -*m(m)an*- and -*mm*-. These point to an original cluster -*mn*-. This sequence becomes -*mmn*- in Hittite by a change in which *m* becomes *mm* before a sonant[7]. The cluster -*mmn*- is spelled alternately -*mn*- and -*mman*-, the latter being an attempt to show the geminate quality of the *m*. Compare for this development *gimra*-'field' also spelled *gimmara*-, *lamniya*- 'to name' also *lammaniya*-, ^É*karimna*-'temple' also *karimmana*-, and *ḫilamni*- 'of the entry-hall' also *ḫilammini*-. The sequence -*mmn*- is then regularly simplified to -*mm*- between vowels (see also Oettinger, *Die Stammbildung des hethitischen Verbums* (1979) 145)[8]. In cases where the sequence -*mmn*- is constant, the change to -*mm*- is uniform: e. g. *mimma*- 'refuse' < *me-mn* (Sturtevant, *CGr¹* (1933) 133). See also *tameummaḫḫ*- and *tameummešš*- (from *-*umna/e*-) below. In originally ablauting paradigms the cluster -*mmn*- is usually preserved, often alternating with -*mm*-: thus ^É*karimmi/a*- 'temple' and *ḫilammi*- 'of the entry-hall' beside the forms with -*mmn*- cited above. Therefore the alternation -*mn*-, -*m(m)an*- and -*mm*- in ^{NINDA}*šarama*- points to an ablauting paradigm with an oblique stem *šaramn*-.

The crucial forms are the nom.-acc. singular and plural *šaraman* and *šar⁽ā⁾ma*. These forms, with single -*m*-, cannot be explained from an *a*-stem *šaramna*-. The neuter singular *šaraman* could be from an *a*-stem *šarama*- or an *n*-stem *šaraman*-. The evidence for the oblique stem makes the choice obvious: we are dealing with an ablauting *n*-stem *šaraman*-, *šaramn*-. The Old Hittite neuter nom-acc. pl. *šar⁽ā⁾ma* is formed after the neuter singular *šaraman* on the analogy of the neuter *a*-stems: *kunnan* : *kunna* : : *šaraman* : x (→ *šarama*)[9].

Thus beside Forssman's *-*mnó*- supported by the examples elsewhere, Hittite attests in the same function an originally ablauting suffix with anim. nom. sg. *-'mō(n)$, nt. nom.-acc. sg. *-'mon, gen. sg. *-mn-és, loc. sg. *-mén(i), in current terminology a 'holokinetic paradigm'[10]. We would predict that the anim. nom. sg. of such an adjective in Hittite would end in -*maš*: cf. Hitt. *ḫaraš*, gen. sg. *ḫaranaš* 'eagle' with OHG *aro* 'idem'. In Hittite the original anim. nom. sg. *$h_3$éro* (which became *ḫarā*) has been renewed by the productive anim. nom. sg. marker -*s*, giving *ḫaraš*. Compare also Hitt. nom. sg. *ḫašterza* /hasterts/ 'star' < *$h_2$stḗr + s* (Grk. ἀστήρ)

[7] The phonetic nature of this -*mm*- is unclear. It may represent a 'strengthened' articulation (fortis vs. lenis -*m*-).

[8] Only in *ḫilammar* 'entry-hall' is the opposite development also attested: obl. *ḫilann*- beside *ḫilamn*-.

[9] Confusion between neuter *a*-stems and *n*-stems is attested elsewhere in Hittite: the original *a*-stem *ewan* (a kind of grain) shows a gen. sg. *ewanaš* beside expected *ewaš*. ^{GIŠ}*eyan* 'evergreen tree' also shows gen. sg. *eyanaš* but abl. *eyaz*.

[10] For the terminology see Eichner, *MSS* 31 (1973) 91, and for the type Schindler, *BSL* 70 (1975) 3f. For the coexistence of *-*mnó*- and *-*mō(n)* compare Lat. *alumnus* and the rarer *alumō* 'fosterling'.

and nom. sg. *šum(m)anza* /sumants/ 'cord' < **suh₁-méns* (cf. Grk. ὑμήν 'membrane'): see further Section 3 below. The form **šaramaš* is not attested, but there is evidence elsewhere in Hittite for anim. nom. sg. *-maš* < **-mō+s*.

2. Hittite has a well-known 'gentilic' or 'ethnic' suffix *-umna-* (also spelled *-uma-*, *-umma-*, *-umana-* and *-umena-*) which forms adjectives from place-names: e. g. *Katapumna-* ← ᵁᴿᵁ*Katapa*. There are also a few examples from other stems: *arunum(a)na-* 'maritime' ← *aruna-* 'sea', ᴸᵁ*ḫištum(n)a-* = ᴸᵁ ᴱ*ḫištā* 'the man of the *ḫišta*-house', *kuenzumna-* 'from what place?' (cf. Lat. *cuias*) and *tameuma(n)-* 'belonging to another' ← *tamai-* 'other'.

There is also attested a suffix *-uman* in 'Cappadocian' personal names, many of which can be shown to be derived from place-names: e. g. *Liḫšuman* ← *Liḫša* (a mountain). There is general agreement that Hitt. *-umna-* represents a thematized form of the *-uman* seen in the Cappadocian names: see e. g. Laroche, *BSL* 55 (1960) 170, and Kronasser, *EHS* (1963) 112. There the agreement ends. Kronasser, *EHS* 114, believes that *-uman* is of 'Cappadocian' origin and denies that it is Common Anatolian or of Indo-European origin (likewise Kammenhuber, *HdOr* (1969) 268). Laroche, *BSL* 55.171—172, compares Hitt. *-um(a)na-* to the Luvian gentilic suffix *-wanni-* (HLuv. *-wana/i-*) and Lycian *-ñni-*. He reconstructs a Common Anatolian **-uwan-*, secondarily thematized to *-umana-* in Hittite (with *w* > *m* after *u*) and to *-wanni-* in Luvian (with the usual *i*-stem). Laroche goes no further than Common Anatolian, leaving open the question of connections with Etruscan and Greek names in -υμνος and -υμνα. For the latter comparison see among others Kretschmer, *Glotta* 14 (1925) 313ff. Bonfante and Gelb, *JAOS* 64 (1944) 184, n. 77, raise the possibility of connections with middle participles in **-m(e)nos*. For some of the lengthy bibliography on *-uman(a)-* see Kronasser, loc. cit.

None of the above studies pay close attention to the actual forms of the suffix in Hittite. Laroche assumes a development in Hittite from *-uman-* to *-umana-* to *-umna-* to *-umma-* to *-uma-*; i. e., thematization, syncope, assimilation and simplification. The distribution of the alternate spellings of the stem in Hittite points to a very different conclusion:

NSgAnim *Ḫalpūmaš, Ḫaššūmaš, Zalpūmaš, ḫištumaš/ḫištummaš*[11]
ASgAnim *Purušḫandumnan*, ᵈ*Ḫu(r)tūmanan*[12]

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[11] LÚ ᵁᴿᵁ*Šutummanaš* (*KBo* III 60 II 6) is syntactically unclear. It is not necessarily an anim. nom. sg. as usually assumed. ᵁᴿᵁ*Ḫattušummaš*, cited by Laroche, *OLZ* 1956, 424, does not exist. Read rather in *KBo* VII 14 Rs 3 ᵁᴿᵁ*Ḫattuaz-ma-aš . . . uit* 'but he came from Hattu': cf. ᵁᴿᵁ*Ḫattuе* immediately preceding and ᵁᴿᵁ*Ḫaddu* at *KBo* IV Vs 52.

[12] I follow Goetze, *Lg* 30 (1954) 352, who interprets the divine name ᵈ*Ḫu(r)tumanan* as a derivative of the city name *Ḫurutta*.

NASgNt	*tameuman* (3 ×) / *tameumman* (2 ×)
GSg	*Luwiumanaš* (OH ms.) = *Luiumnaš* (MH ms.)
DSg	ᴸᵁ*ḫeštumni*
NPlAnim	*Ankullaumeneš, Katapūmeneš, Nešumeneš, Šalampumeneš* (all OH mss.); *Kātapumneš, Šalampumneš, Šutulumniš, Anunumne/iš* and *Anunumnaš, Kartapaḫum(e)neš, arunumaneš*

Adverbs *kanišumnili, nešumnili, palaumnili*

(The case of some exx. is unclear: *Uššumnaš, kuenzumnaš, [Akkad]umnaš*).

It is noteworthy that nearly all of the above examples are from assuredly Old Hittite texts. The only instance from a Neo-Hittite composition is *[ta]meumman* in the Instructions of Tuthaliya IV (*KUB* XXVI 1 II 52). Looking at the above paradigm, we cannot help but notice that all examples of the form *-uma-* (rarely *-umma-*) are in the anim. nom. sg. and the nt. nom.-acc. sg. Elsewhere we find predominantly *-umn-* (less often *-uman-*). In the anim. nom. pl. Old Hittite shows consistently *-umen-*, while later manuscripts have *-umen-*, *-umn-* and *-uman-*.

This complementary distribution is very strange if we assume with Laroche that all forms come from *-umana-*. Why does the assimilation to *-umm-* and simplification to *-um-* occur only in the anim. nom. sg. and nt. nom.-acc. sg.? Why do we never find either *-umn-* or *-uman-* there? On the other hand, the above paradigm may be accounted for starting from the holokinetic paradigm reconstructed above for *šaraman-*. The anim. nom. sg. *-umaš* is from **-u-mōs* just like *ḫaraš* < **h₃érōs*. Friedrich, *HW* 208, assumes an *a*-stem *tameuma-* for *tameuman*, but the latter can just as well be from an *n*-stem *tameuman-* (cf. *šaraman*). This is confirmed by the derivatives *tameummaḫḫ-* 'make another's, alienate' and *tameummešš-* 'become another's, be alienated', which both show the second *-mm-* consistently double (contra Friedrich, *HW* 208), because they are built on the oblique stem **tameumn-*. The spellings of *tameuman* as *tameumman* (with incorrect double *-mm-*) are undoubtedly due to the influence of *tameummaḫḫ-* and *tameummešš-*.

The stem **-mon-* of the strong cases may also be directly continued in the anim. acc. sg. ᵈ*Ḫu(r)tumanan* and anim. nom. pl. *arunumaneš*. This cannot be absolutely assured, since they occur in NH copies, but the single *-m-* argues against their representing *-umn-* (we would expect *-umman-*). Furthermore, those cases where we can compare the spelling of the OH manuscripts with that of the later copies suggest that the copyists leveled the oblique stem in favor of *-umn-*, not *-uman-*. The spellings with *-uman-* are therefore probably real (cf. also nom. pl. *išimāneš* in an OH ms. cited below in Section 3). The OH gen. sg. *Luwiumanaš* would be analogical after the strong cases.

The consistency of the *e* in the OH anim. nom. pl. -*umen(eš)* argues that it is genuine, but it need not be original there. There is evidence to suggest that Hittite sometimes assimilates a vowel to that of a following syllable. For example, *ištaman(a)-* 'ear', originally an *n*-stem (note the inst. *ištamanta*) shows consistent *a*-vocalism of the stem except in the inst. *ištaminit*, where the first *i* appears to be due to the presence of the second. Anim. nom. pl. -*umeneš* may reflect a similarly remodeled -*umaneš*. The latter is probably attested in *arunumaneš*, and holokinetic *-*mones* is definitely continued in the OH form *išḥimāneš* (further discussion below in Section 3).

The personal name *Šuppiluliuma-* (derived from *šuppi luli* 'pure spring/pool') also points to an original ablauting -*uman-*. The name shows consistent single -*m-* (nearly 70× vs. -*mm-* 4×). This indicates that -*umaš* comes not from assimilated -*umnaš* (from which one would expect overwhelmingly -*ummaš*), but directly from *-*u-mō + s*. In this personal name attested only from early Neo-Hittite, the ablauting paradigm -*umaš*, gen. -*umnaš* has been leveled after the nominative, creating a secondary *a*-stem: cf. the same development in 'eagle', where we find acc. sg. *ḥaran* after nom. sg. *ḥaraš* beside regular *ḥaranan*[13].

3. Oettinger, *KZ* 94 (1980) 48, has independently recognized that the gentilic -*uman-* is an ablauting *n*-stem, but he reconstructs 'hysterokinetic' inflection: anim. nom. sg. *-*umḗns*, anim. nom. pl. *-*umḗnes*, gen. sg. *-*umn-és*, etc. Since this reconstruction explains the anim. nom. pl. form directly (but not the forms in -*uman-*), some discussion of this alternative is necessary.

Oettinger begins with the following phonological rule: pre-Hittite nasal + *s* became double -*šš-* after an accented syllable and -*nz-* after an unaccented syllable. This is supposed to explain the difference between *ḥašša-* 'descendant' < *$h_2$ómso-* (cf. Luv. *ḥamša-* 'idem') and *ḥanzašša-* 'great-grandson' < *$h_2$omso-só-* orig. 'belonging to the descendant/grandson', as well as *ḥanzana-* 'black' < *$h_2$omsnó-*[14] and *anzāš* 'us' < *$\underset{.}{n}$s-ós*.

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[13] The appearance of the gentilic suffix as -*uman* in the Old Assyrian texts of the *kārum* period reflects nothing more than the usual use of the bare stem as the 'absolute case' in Akkadian texts from Boǧazköy. Likewise the oft-cited personal name *Šuppiuman* functioning as a subject in the OH text *KBo* III 34 II 22. On the use of the absolute case with personal names in Old Hittite see Neu, *StBoT* 18 (1974) 52—54. Since the copyist of *KBo* III 34 did not understand the formation of *Šuppiuman*, he 'corrected' the coordinate *a*-stem name into an accusative *Maraššann-a*. On the other hand, the dative *Šuppiumni* in line II 24 is the perfectly regular dative to a stem in -*uman-* and need not be a neologism, as claimed by Kammenhuber, *HdOr* (1969) 271.

[14] For the root etymology see Čop, *Linguistica* 10 (1970) 95f., who compares Grk. ἄσυς 'mud', Skt. *ásita-* 'black' and Germ. *Amsel* 'blackbird'. Despite the arguments of Puhvel, *Essays... Kerns* (1981) I. 237ff., *ḥanzana-* 'black' seems assured by *ḥanzanan inniri* 'black eyebrow' in *KUB* XXIV 12 II 31. III 6.

That *ḥašša-* 'offspring, descendant' is from *$h_2$ómso-* is reasonably certain[15]. Compare further *ḥaššu-* 'king' < *h_2é/ónsu-*[16] and *daššu-* 'mighty' < *dénsu-* (similarly Oettinger, *StBoT* 22 (1976) 24, n. 8 with refs.). The derivation of *anzāš* < *$\underset{.}{n}$sós* is also solid (whatever one thinks about the origin of the ending). It is by no means clear, however, that the conditioning for the different outcomes of *-ns-* is the position of the accent.

There are several apparent counterexamples to Oettinger's rule. The divine name [d]*Daganzipa-* consists of the locative of the stem *tekan-* 'earth' plus -*šepa-* 'spirit, genius'. The prevalent (and OH) spelling of the locative of 'earth' is *t/da-ga-a-an*, which is the regular Hittite outcome in every respect of PIE *dhǵhém*, including the accent on the final syllable (for the original paradigm of 'earth' see Schindler, *Sprache* 13 (1967) 191ff.). The fact that the accent of the univerbation [d]*Daganzipa-* also fell on the -*gan-* is confirmed by the consistent spelling of -*zipa-* with an *i*-vowel (never -*zé-* or -*zi-e-*). For unaccented *ě* > *i*, compare the consistent contrast in OH manuscripts between [URU]*Ne-(e-)ša-* /Nésa-/ and [URU]*Ka-ni-iš* /Kániš/. Thus *dagán + sepa-* became *dagánzipa-*; i. e., *-ns-* became -*nz-* following the accent, against Oettinger's rule. Another set of counterexamples consists of the pronominal genitive plurals *apenzan, kēnzan* and *šumenzan*. These are most plausibly derived from the oblique pronominal stem plus the element *-ns-* seen in Luvian plurals plus the old nominal genitive plural ending -*an* < *-ŏm*: see Laroche, *BSL* 57 (1962) 43, following Gusmani, *RIL* 94 (1960) 502f. Now it is virtually certain that the accent in these forms was on the final syllable of the stem (as it was in the rest of the paradigm). This means that once again *-ns-* > -*nz-* after the accent. There are therefore grounds for doubting the validity of the proposed rule.

The distribution of -*nz-* and -*šš-* < *-ns-* may be more simply accounted for by assuming that original *-ns-* became -*š(š)-* everywhere in Hittite, while later secondarily created sequences of -*ns-* then produced -*nz-*. There is independent evidence to suggest that syllabic nasals remained for some time in Hittite[17]. Thus *anzāš* < *$\underset{.}{n}$sós* is due to the fact that *$\underset{.}{n}$s* became

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[15] It is originally a verbal action noun to *ḥašš-* 'give birth', a type also attested in Hitt. *ḥarga-* 'destruction' ← *ḥark-* 'perish'. For both the formation and development to a concrete noun 'offspring, descendant' compare Grk. γόνος 'child, offspring' as well as 'begetting', cf. Lat. *genō* 'I beget'.

[16] It is likely that *ḥaššu-* etc. ultimately represent *h_2é/ómsu-* ← *$h_2$ems-* 'give birth' (> Hitt. *ḥašš-*). For the meaning compare Gmc. *kuningaz* 'king' from the root *ǵenh₁-*.

[17] The assumption that syllabic sonants remained into Hittite enables us to account for the difference between *palḥi-* 'broad' (< *plh₂-i-*) and examples such as *šunnanzi* 'they fill' < *su-nh₂-énti* and *ḥullanzi* 'they strike' < *$h_2$ulh₂-énti*. We need only assume that the rule by which *-VRh₂V-* > -*VRRV-* operated before *R* > *aR* (verbal suggestion of J. Schindler). The explanation of Oettinger, *Stammbild.* 549, by which *-V̆Rh₂V-* > -*VRRV-* while *-V̆Rh₂V̄-* > -*VRhV-*, is falsified by examples like *šunnanzi* and *ḥullanzi*, where the pre-Hittite accent was certainly on the vowel following the sonant-laryngeal cluster.

*ans only after the change of original *-ns- to -šš-[18]. The adjective ḫanzana-
'black' may similarly be explained from a zero-grade form *h₂ms-nó- (cf.
Skt. ásita- 'black' and Grk. ἄσις 'mud')[19]. The univerbation ᵈDaganzipa-
is clearly secondary, as is the Hittite addition of -s to the anim. nom. sg.
of n-stems: thus šummanza 'cord' < *suh₁-méns (further discussion be-
low)[20]. Note that the treatment of secondary -ns- as -nz- is parallel to that
of secondary -rs- as -rz- (ḫašterza 'star' < *h₂stḗrs). The creation of the
pronominal genitive plurals in -enzan is certainly post-PIE and may easily
be inner-Hittite[21].

Having discussed two alternative explanations for the distribution of
-šš- and -nz- < *-ns-, let us now see how these apply to the inflection of
animate n-stems, which was the point of departure. I must first point out
that Oettinger assumes that the anim. nom. sg. of all n-stems in Hittite
contained n: thus *-ēn + s or *-ōn + s. In view of Skt. -ā and Lat. -ō in the
anim. nom. sg. this hardly seems a safe assumption.

We begin with ḫaraš, ḫaranaš 'eagle', which is the Hittite animate n-
stem with the strongest claim to being a PIE inheritance. Oettinger's
preform *h₂érōns for the nom. sg. would give by his rule *ḫaranza. He is
thus forced to claim that the attested ḫaraš is analogical after the type of
išḫimaš, where -maš is regular from *-méns by his rule. There is a serious
difficulty with this account. The contrast between Luv. ḫamša- and Hitt.
ḫašša- shows that the rule of nasal + s > šš is specifically Hittite, and

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[18] This account of ans- < *n̥s- is based on a suggestion of J. Schindler (cf.
note 17).

[19] The etymology of ḫanzašša- < *h₂omso-só- 'belonging to the descendant/
grandson' is questionable. First of all, the meaning of ḫašša- is 'child, descendant'
and that of ḫanzašša- 'grandchild': see Melchert, RHA 31 (1973[76]) 57ff.
Second, the above etymology also gives no account of the double -šš- in ḫanzašša-,
which cannot be from PIE *s, which regularly gives Hitt. -š-.

[20] The claim of Oettinger, KZ 94.51, that -s was added to the nom. sg. of
all animate consonant stems in Anatolian is falsified by OH keššar(-šiš) versus
ḫašterza. The word for 'earth' *dhéǵhōm also failed to add -s, becoming neuter
instead: Hitt. tekan.

[21] The received etymology of Hitt. kuwaške- 'slay' < *gʷhnske- contradicts
both the rule offered here and that of Oettinger: both predict *kuwanz(a)ke-.
There is, however, independent evidence that the derivation is false. Eichner,
MSS 31 (1973) 73ff., has shown that postconsonantal *wR appears in Hittite as
uR. The verb kurkur(iya)-/kukkur(iya)- 'cut off, mutilate' < *kʷr-kʷr-(ye-) to *kʷer-
'cut' shows that this rule also applies to labiovelar plus syllabic sonant. Thus
*gʷhnske- could give only Hitt. *kuške-. Since seške- from šeš-/šaš- 'sleep' (already
in OH mss.) shows that full-grade of the root is possible in Hittite in the iterative
of an ablauting mi-verb, the attested kuwaške- must represent a pre-Hittite *gʷen-
ske- with regular development of Vns.
I know of no rule which can account for the preservation of *-ns- as -nš(š)- in
anš- 'wipe'. An original intervening laryngeal (*anHs-) is possible, but in the
absence of a solid etymology for the root purely speculative.

Oettinger assumes the same for nasal + s > nz, KZ 94.45, n. 6. This means
that the alleged analogical replacement of *ḫaranza by ḫaraš (after iš-
ḫimaš) could only have taken place in pre-Hittite (post-Common Anatoli-
an). However, the paradigm ḫaraš, ḫaranaš is also attested in Palaic: see
Carruba, StBoT 10 (1970) 54. The nom. sg. ḫaraš is surely Common
Anatolian and cannot be accounted for by Oettinger's derivation. A much
more straightforward account of ḫaraš is that given earlier: ḫaraš <
*h₃érō + s with secondary -s. The form shows no trace of an n because it
never contained one[22].

Oettinger derives Hitt. šummanza 'cord' from *séuh₁-mōn-s, which is
phonologically impeccable (assuming that the addition of the nom. sg. -s
is secondary). The attested oblique stem šummanzan- is certainly second-
ary by any derivation. However, Oettinger's explanation requires that this
holokinetic nom. sg. contain n, while we have seen solid evidence that
*h₃érō 'eagle' did not. Furthermore, Oettinger is forced to deny the ap-
parent word equation between Hitt. šummanza and Grk. ὑμήν 'membrane'.
The latter suggests that the original inflection was hysterokinetic: nom. sg.
*suh₁-mén, gen. sg. *suh₁mn-és. The Hitt. nom. sg. šummanza may be
directly derived from *suh₁-mén plus secondary s (with the usual -nz from
secondary -ns and -an- from *-ēn- in a closed syllable)[23]. The oblique stem
would have been *šumn-. It is not surprising that an allomorphy šumman-

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[22] For the derivation of ḫaraš from a nom. sg. without n see also Kammen-
huber, HdOr (1969) 289. Compare also ḫaššaš 'hearth' < *h₂eh_xseh₂ (> Lat.
āra and pre-Hittite *ḫaššā) + -s.

[23] Support for the development *ēnC > anC (vs. *ērC > erC in ḫašterza) may
be found in Hitt. pankur, pankunaš, which means both 'clan' and 'milk'. Both
meanings may be easily derived from PIE *bhenǵh- 'be thick'. For 'milk' as 'that
which is thickened' cf. Skt. takrám and Ice. pél 'buttermilk' ← *tenk- 'draw
together; thicken'. It is also reasonable that the 'clan' is 'that which sticks to-
gether': note the OH occurrence KBo III 27 Vs 15—16 'may your my servants'
clan be one like that of the wolf'. The noun pankur, pankunaš represents a *-wer/
-wen- stem. When we consider the well-established inflectional types for PIE
nouns, we find that the nom.-acc. pankur eliminates 'amphikinetic' (*-wŏr would
give Hitt. -wār) and 'hysterokinetic' (*-wēr > -wer, *-wĕr > -war). The genitive
sg. pankunaš eliminates 'proterokinetic' (*-Cwens > Hitt. -Cwaš). We are thus left
with the two 'acrostatic' types (root ablaut *ó/é or *é/é). Phonologically *bhónǵhwr,
*bhénǵhwns would lead to pankur, pankunaš, but I know of no evidence within or
outside Anatolian for such an ablaut type in *-wer/-wen- stems. On the other hand,
Eichner, MSS 31.53ff., has solidly established a Hittite type with *ē/ĕ ablaut
(Hitt. mehur, mehunaš 'time', etc.). All evidence thus suggests that pankur, pan-
kunaš reflects the same type: *bhĕnǵhwr, bhĕnǵhwns with the same treatment of
*ēnC as I propose for šummanza < *suh₁-mĕns. One could, of course, suppose
leveling of the weak stem *bhĕnǵh- in pankur, pankunaš, but the opposite leveling
in mehur, mehunaš argues against this. Compare also the different outcome of *ĕr
in merta 'vanished' from that of *ĕn in anda 'into' < *endo. The general rule that
tautosyllabic *eR became aR in Hittite needs considerable revision.

za/šumn- would have been eliminated. Nor is the solution of adding -n- to the nominative to form the oblique stem unexpected from the point of view of Hittite[24]. For the assumption that Hittite had anim. nom. sg. in *-ḗn (with n) beside *-ō (without it), compare the situation of Latin liēn 'spleen' (and probably also masculine (!) pecten 'comb') beside homō, etc.[25].

Having denied hysterokinetic inflection in šummanza(n)-, the one Hittite word for which there is external evidence for such a paradigm, Oettinger proceeds to discover hysterokinetic inflection in Hitt. išḫiman-'rope, cord' and in the gentilic suffix -uman- (both with anim. nom. sg. in -maš). This is based in part on his rule that *-ns becomes -š directly after the accent: anim. nom. sg. *-mḗns > -maš. However, the final -s here is clearly secondary, a Hittite addition, and we have seen evidence above that secondary ns gives nz, regardless of the positioning of the accent (see especially ᵈDaganzipa- and kenzan, etc.). Direct evidence for an e-grade in išḫiman- and -uman- is weak: the acc. sg. išḫaminan shows an aberrant base išḫa- as well as unique -min- for -man-. The OH nom. pl. is attested as išḫimāneš, which points to holokinetic *-mones. On the anim. nom. pl. -umeneš see Section 2 above. The animate nominative singulars išḫimāš (OH ms.) and -ūmaš, with no trace of n, argue decisively for holokinetic *-mō+s parallel to ḫaraš < *h₃érō+s.

4. Beside the ablauting suffix -man- in šaraman- we thus have the ablauting suffix -uman-, both reflecting holokinetic inflection. The former makes a locatival adjective from a preverb, and the latter gentilic adjectives from place-names. Their formal and functional similarity suggests that they are related, and this is confirmed by the fact that -uman- (with the u) is also attested in a locatival sense. We have already seen arunuman- 'maritime' ← aruna- 'sea'. An even clearer case is padummazzi, which occurs at KUB XXIV 11 II 25—26 in the phrase kitkarza padummazzi-ya. Because it is preceded by a Glossenkeil, the form has been booked as Luvian, but it is a perfectly regular Hittite word. The ending -azzi is the normal Hittite form of the ablative before -ya 'and' (cf. ZAG-naz GÙB-lazzi-ya 'on the right and on the left'). The collocation kitkarza padummazzi-ya obviously means 'at the head and at the feet', and padummazzi is the ablative of *paduman- 'located at the feet'.

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[24] The relationship of nom. sg. šummanza to obl. šummanzan- is comparable to OH nom. sg. šiu-š, obl. šiun- 'god' or the neuter s-stems ateš- 'hatchet', obl. atešn- (in gen. sg. atešnaš) and ḫu(wa)lliš- 'pine-cone', obl. ḫu(wa)llišn- (in dat.-loc. pl. ḫuwallišnaš). The origins of this type are undoubtedly diverse, but synchronically for Hittite they all show an opposition nom. sg. ∅ versus obl. -n-. Cf. also pir, parn- 'house'.

[25] The Latin parallel is meant to show only that a single language could have types both with and without a final -n in the anim. nom. sg. I do not wish to imply a consistent contrast between hysterokinetic inflection with -n and holokinetic without. Latin uerrēs 'ram' may well represent a remodeled *urṣḗ+s (without -n!).

Another example of locatival -uman- is found in *ḫaršuman-, which means 'headwaters' or 'source': see Goetze, JAOS 74 (1954) 189, and Laroche, RHA 69 (1961) 79. The word occurs in the dat.-loc. pl. in a concrete sense: 'the headwaters of the Mala River' (KUB XXXVI 35 I 5) and in the gen. sg. or pl. in a figurative sense: 'lord of the source of knowledge' (KUB XXXIII 120 II 5. III 15). The word is probably plurale tantum an epithet: '(the waters) located at the head' > 'headwaters'. In any case, it is derived with -uman- from *ḫarš- seen in ḫaršar, ḫaršan- 'head'[26].

There is also ḫantezzumni 'in the fore-court' (KBo XVII 1 I 21), which may be analyzed as ḫantezzi- 'front' plus -uman-: *ḫantezzuman- '(that which is) located in front' > 'fore-court'. Since neither nom. nor acc. is attested, one could also assume a locatival noun *ḫantezzummar (see below and cf. Otten–Souček, StBoT 8 (1969) 95 and 112). There is thus good evidence for locatival -uman- beside -man-: we are dealing with two forms of the same suffix.

There is one additional example of simple -man- as well: ᴱkarimmi/karimna- 'temple'. The nom.-acc. sg. of this word is karimmi, which appears to be a neuter i-stem. However, the oblique stem is either karim-(ma)n- or karimm-, with no trace of an i-stem. There is no way to explain karimn-/karimm- starting from an original i-stem, but one can derive nom.-acc. karimmi from *kariman-. The latter would have an oblique stem karimn- (with assimilation karimm-; see Section 1 above). The form karimmi is a neuter nom.-acc. pl. like ḫalḫaltumari 'corners'. That a word for 'temple' was originally a collective plural is not surprising: cf. not only Lat. aedēs 'temple' but also Hitt. É.DINGIR (šiunaš pir), which was also plurale tantum according to KUB XXIX 4 I 60—61. Thus formally ᴱkarimmi, karimn- may be analyzed as *kari-man- '(that which is) located in the *kari-'.

In seeking to identify the presumed base *kari-, we must take into account the usage of ᴱkarimmi. The translation 'temple' is inaccurate, since the real word for 'temple' in Hittite is É.DINGIRᴸᴵᴹ 'god's house', which is to be read in Hittite as šiunaš pir: note šiunaš parna at KBo XIII 175 Vs 5 and elsewhere. The fact that ᴱkarimmi is not the same as É.DINGIR 'god's house' is shown by KUB XIII 4 III 36—37, where various members of the priesthood are warned against getting drunk 'ŠÀ É.DINGIRᴸᴵᴹ našma tamēdani ᴱkarimme', i. e. 'in a god's house or (any) other karimmi'. The term karimmi can thus apply to more than just 'temple' in the strict sense. On the other hand, various passages make it clear that the karimmi belong to the gods. This fact, and the prohibition

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[26] Laroche, loc. cit., assumes a nom.-acc. sg. *ḫaršumar. This cannot be entirely excluded, but the derivation from 'head' and the meaning 'head-waters' make an adjective *ḫaršuman- more likely.

against drunkenness, suggest that *karimmi* means 'sacred building' (of whatever sort).

This meaning in turn leads me to propose that **kari-* represents an unattested *i*-stem noun 'enclosure' (← PIE **ǵher-* 'enclose'; cf. Grk. χόρτος 'enclosure, court', Lat. *hortus* 'garden', etc.). 'Sacred' buildings were those which were 'located in the enclosure' or sacred precinct of the gods. I know of no textual evidence for the fact that the Hittites enclosed their sacred precincts with walls, but fortunately we have direct physical testimony. The first construction at the shrine Yazılıkaya consisted of a simple wall which enclosed the sanctuary (which may have contained one building). The great temple precinct of Temple I at Boğazköy was also surrounded by a wall, which significantly enclosed not only the temple itself but also the storerooms and other buildings. Immediately to the southwest lay the É GIŠKIN^*TI* 'workhouse' (also surrounded by a wall), where the temple personnel worked (and may have lived). For these facts see Bittel, *Les Hittites* (1976) 127 and 130ff., and Naumann, *Architektur Kleinasiens* (1971) 460. It is therefore plausible that all buildings in the sacred precinct were designated as **kari-man-* 'located in the enclosure/precinct'[27].

The unattested **kari-* 'enclosure' is also the likely base for the verb *kariya-* 'cover'. The action of 'covering' is nearly always performed with a cloth, so 'wrap' or 'enclose' is equally admissible as a translation. It cannot be excluded, of course, that *kariya-* is deverbative from a **kar-* ← **ǵher-*: cf. *karp-* and *karpiya-* 'lift'.

It is worth noting that one manuscript *KUB* XXXI 88 has É*karūmmi* instead of *karimmi*. The scriptio plena makes a scribal error unlikely: we seem to have a genuine variant. Since a sequence *-iu-* normally remains in Hittite (cf. ^TÚG*kariulli-* 'covering' ← *kariya-*), É*karūmmi* probably represents *kar-ummi* with deletion of the *-i-* of **kari-* before *-man-*: cf. **ḫantezzummar* ← *ḫantezzi(ya)-* and the frequent loss of stem-final *-a-* before *-uman-* in the gentilics above. The existence of *karummi* beside *karimmi* confirms the equation of *-uman-* and *-man-*.

5. Hittite thus offers evidence for a suffix **-(u)mō, -(u)mnés* with holokinetic inflection which forms locatival adjectives. Hittite also has a small set of locatival nouns with heteroclite *-mar, -m(a)n-* inflection. The clearest example is É*ḫilammar* (obl. *ḫilamn-/ḫilann-*) 'entry hall', which is patently a derivative of *ḫila-* 'courtyard'[28]. On the precise meaning of

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[27] Weitenberg, *Hethitica* 2 (1977) 47ff., argues that HLuv. *warpi-* (= Hitt. *warpa-* 'enclosure') refers specifically to 'sacred precinct', which would support the proposed derivation of *karimmi-*.

[28] The double *-mm-* of *ḫilammar* has been generalized from the oblique stem *ḫilamn-*, where **-mn- > -mmn-* (see Section 1 above). The same leveling is seen in other nouns in *-mar*, with varying degrees of consistency.

ḫilammar see Bittel, Naumann and Otto, *WVDOG* 61 (1941) 45ff., and Naumann, *Arch. Kl.* (1971) 455. The *ḫilammar* is the room which is (in most instances) immediately adjacent to the *ḫila-*, and it may thus be interpreted as 'the place by the courtyard'.

Another likely example is ^UZU*šarnumar*, a body part. The inflection is assured by nom.-acc. sg. *šarnumar* (*Bo* 2391, 18 cited by Riemschneider, *StBoT* 9 (1970) 65), gen. sg. *šarnummaš* (*KBo* VIII 91 Vs 4), dat.-loc. sg. *šarnumni* (*KBo* XIII 13 Vs 13). As discussed by Riemschneider, *šarnumar* occurs in collocation with 'penis' and 'breast', is probably equivalent to ^UZU MAŠ.GIM (meaning also unknown), and must refer to a body part or organ in the abdominal region. Since the meaning is unknown, and the base **šarn(u)-* unanalyzable, it is possible that *šarnumar* represents an instrumental use of *-mar* (see below), but with a body part the locatival interpretation seems more likely.

On the basis of its form and meaning, I believe that one more example belongs here: *ḫalḫaltumar(i)-* 'corner'. The inflection of this word is troubled: some forms point to an *r*-stem (dat.-loc. sg. *ḫalḫaltumari*, nom.-acc. pl. *ḫalḫaltumar*, dat.-loc. pl. *ḫalḫaltumar(r)aš*); others suggest an *i*-stem (dat.-loc. sg. *ḫalḫaltumariya*, nom.-acc. pl. nt. *ḫalḫaltumari*, nom. pl. anim. *ḫalḫaltumariyeš*, dat.-loc. pl. *ḫalḫaltumariyaš*). The *i*-stem is surely secondary, originating in the nom.-acc. pl. *ḫalḫaltumari* (cf. É*karimmi* above)[29]. As for the *r*-stem, a neuter stem in *-mar* would be unique in Hittite. On the other hand, there are at least six sure examples of heteroclite stems in *-(u)mar, -(u)m(a)n-*. The sense of the word also fits this derivation: it indicates a location like *ḫilammar*. The base *ḫalḫalt-* may be analyzed as a reduplicated form of the root **ḫal-* 'bend' which is also seen in *ḫaliya-* 'bow' < 'bend oneself' (the verb is inflected in the middle in OH). The root is that of 'elbow' seen in Grk. ὠλένη, ὠλήν, Lat. *ulna*, OIr. *uilenn* (also 'corner') and especially Skt. *aratni-* and Av. *arəθna-* with a *t*-enlargement (the root is probably **h₃el-*, less likely **h₂el-*). Hittite *ḫal-ḫal-t-umar* is thus 'the place where something bends' > 'corner'. For the generalization of the *r*-stem compare *kurur-* 'enmity' < **kʷr-wr̥* representing the verbal noun

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[29] The *i*-stem *mekki-* 'much, many' undoubtedly originated in the same way. The *i*-stem is secondary, as shown by the Old Hittite forms *mēk* (*KBo* XXV 23 Rs 6), *mekkan* (*KUB* XXXVI 98b Rs 10 and *KBo* XXI 68 I 4), and *mekkuš* (4 ×). The attributive use of *mekk(i)-* is relatively rare, as is that of its functional opposite *tepu-* 'a little, few'. The original syntax of these forms is still the prevalent one for *tepu-*: a neuter (collective) noun in apposition to another noun (see the example *alpuemar tepu* 'the horn-tips, a little bit' in Section 6 above). This is also attested for *mekki-*: see *KBo* VI 2 II 46 (OH ms.) *takku* A.ŠÀ.ḪI.A-*n-a mekki wāši* 'But if he buys a field, a large amount (of it) . . .'. This usage of *mekk(i)-* as 'a large amount' accounts for the semantic shift from 'large' to 'much' and answers the objection of Benveniste, *HeI* (1962) 111, to the derivation of *mekk(i)-* from **meǵh₂-*.

$*k^wér$-wr, k^wr-$wéns$ 'schism, cutting' ← $kuer$- 'cut': for the etymology see Oettinger, *Stammbild.* 120, with refs.

6. Hittite thus shows a suffix -$(u)man$- which makes locatival adjectives and a suffix -$(u)mar$, -$(u)mn$- which makes neuter locatival nouns. In the clear cases both are denominative: $sara$-man-, pad-$uman$-, $hila$-$mmar$.

There is another -mar, -$m(a)n$- suffix in Hittite which makes instrumental nouns. One example is $tiyam(m)ar$ 'rope, cord' < 'that with which one ties' attested in the nom.-acc. sg. $tiyamar$ and inst. $tiyamman$-d/ta. This is derived from the verb $tiya$- 'bind' attested in *KBo* III 40 Rs 13f.[30]. The root is $*deh_1(i)$- 'bind': cf. Skt. $dáman$- 'bond' = Grk. -δημα 'strap' from the base $*deh_1$-.

Another case is $harnammar$ 'leavening' < 'that with which one leavens'. The noun is attested only in the nom.-acc. sg. $harnammar$, but the oblique stem $*harnamn$- is assured by the derived verb $harnamniya$- 'foment, stir up'. The noun $harnammar$ is clearly related to the adjective $harnant$- 'fermented'. The latter is ambiguous, since it may represent either the participle of a verb $*harne/a$- 'ferment' or the extension of an adjective $*harna$- 'fermented'. Likewise, $harnammar$ may be either deverbative or denominative.

A clear denominative example is $miummar$ 'kindness' (of the gods), attested also in the inst. $miumnit$. This is derived from the adjective miu- 'soft, gentle, mild'. Note, however, that while an instrumental interpretation of $miummar$ is possible ('that by which one is kind'), it may more straightforwardly be taken as an action noun or abstract 'the act of being kind, kindness'.

Finally there is $alpuemar$, which refers to the tips of an animal's horns which are cut off. It is derived from a stative verb $*alpue$- 'be smooth, blunt' ← $alpu$- 'smooth, blunt'. On the correct meaning of $alpu$-, see most recently Puhvel, *JAOS* 97 (1977) 599, with references. Puhvel takes $alpuemar$ as a verbal action noun '(horn) trimming' < '(horn) blunting'. This interpretation is possible, with two stipulations. First, the suffix -mar here cannot be the usual Hittite verbal noun suffix, since the latter occurs as -mar, -mas only after -u- (by dissimilation of w to m in the presence of u): see for this rule Kammenhuber, *HdOr* (1969) 137, with refs.

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[30] Watkins, *Lg* 45 (1969) 239, and Oettinger, *KZ* 92 (1976) 75, explain $tiya$ in *KBo* III 40 as an imv. 2nd sg. to $dāi$- 'put, place'. However, the only attested imv. 2nd sg. of $dāi$- in Hittite is $dāi$. Furthermore, I am not aware of any evidence in Hittite for $dāi$- used with clothing. Finally, as Watkins points out, the context of *KBo* III 40 refers to burial shrouds, not ordinary clothing. Thus the derivation from $*dh_Lie$- 'bind' (Watkins, oral communication) is more plausible.

Second, the attestations of $alpuemar$ show that it refers to a concrete object, not the act of trimming. In *KBo* XI 14 I 13 we find: ANA SI.HI.A-ŠU $alpuemar$ $tepu$ $kuranzi$ nu-kan $apē$-ya $anda$ INA NINDA.KUR$_4$.RA $dāi$ 'They cut off the a., a little bit, from his horns, and one also puts them (nt. pl.!) in the bread'. *KUB* XVII 26 I 10 (//XVII 25) reads $alpuemar$ EGIR-pa $hapu[(szi)]$ 'he repeats (replicates) the a.'. This means that the tips which have been cut off are restored artificially with some material, as is confirmed by *KUB* XXXIII 33, 14 [al]$puemar$ GUŠKIN-as 'a. of gold'. Finally there is the lexical entry in *KBo* I 42 III 45 SI-as $alpuimar$ = Akk. sa-par-du. The latter is to be read $sapartu$ and related to $sapāru$ 'trim', a variant of $sepēru$ (thus CAD sub $sapāru$). Von Soden, *AHw* 1082, similarly defines $sapāru$ in some instances as 'einschneiden', i. e. 'incise, notch'. Once $qarnu$ $sapru$ 'trimmed/notched horn' (?) is attested in reference to the moon's horns. Akk. $sapartu$ (not listed in *CAD* or *AHw*) is to my knowledge attested only here, but it supports the Hittite evidence for a concrete meaning for $alpuemar$: 'that which is trimmed'. For an action noun 'trimming' Akkadian would have the infinitive $sapāru$. The concrete $sapartu$ is a feminine formation comparable to $sapartu$ 'surety' < 'that which is sent' ← $sapāru$ 'send'. It remains true that a change from an action noun $alpuemar$ 'blunting' to a concrete 'result of blunting' is quite possible: cf. English '(wood) shavings'. On the other hand, since the horn-tips are the things which are removed, it is also possible to view $alpuemar$ as 'that by which (the horn) is blunted'[31].

7. The Hittite suffix -mar, -$m(a)n$- which forms instrumental nouns and probably also action nouns is the Hittite reflex of the well-known PIE instrumental suffix $*$-men-: e.g. Lat. $tegumen$ 'covering' to $tegō$ 'I cover'. The functions of this suffix have been studied in some detail by Haudry, *BSL* 66 (1971) 109ff., who distinguishes five categories: (1) verbal action nouns, e. g. Lat. $nūmen$ '(the act of) nodding' (cf. also Grk. infinitives in -μεν(αι) and Skt. -$mane$ — HCM); (2) 'neuter' agent nouns, e. g. Grk. ῥεῦμα 'stream'; (3) result nouns, e. g. Lat. $sēmen$ 'seed'; (4) instrumental nouns, e. g. Skt. $dáman$- 'bond' = Grk. -δημα 'strap'; (5) locatival nouns, e. g. Skt. $sthāman$- 'place to stand'. Haudry argues that the instrumental value of

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[31] Another example of an abstract noun in -mar from an adjective (see $miummar$) is reflected in Hitt. $sumrāi$- 'be pregnant'. Oettinger, *Stammbild.* 298, n. 78, following Neumann, assumes a verbal noun $*sumar$ < $*suwar$ (with dissimilation) to the verb root $*seuh_2$- seen in Hitt. $su(wa)$- 'become full, swell' and $sunna$- 'fill'. However, $*h_2$ is preserved before w in Hittite: cf. $huis$- 'live' < $*h_2wes$-. Therefore the verbal noun of a root $*seuh_2$- should be $*suhhu(wa)r$, gen. $suhhuwas$. The latter is in fact attested as the verbal noun of $suhh(a)$- 'pour', which is the same root as 'fill': cf. PIE $*pleh_1$- 'fill, pour'. The base $*sumar$ 'pregnancy' < 'being full, swollen' is rather an abstract in -mar from the adjective su- 'full', just like $miummar$ from miu-.

the suffix is original, suggesting that nouns in *-men- represent the nominalization of a syntagm of verb plus a noun in the instrumental case. Perhaps such a relationship existed synchronically in late PIE, but a verbal action noun is a far more likely source for all the various meanings given above. The other four types listed all represent merely different concretizations of the basic verbal action noun. The development to one or the other type is largely a function of the semantics of the root and the type of collocation(s) in which the verb typically occurs.

For example, the 'neuter' agent nouns (the least common type) are typically from intransitive verbs which may take inanimate subjects: Grk. ῥεῦμα 'stream' < 'that which flows'. The *men nouns from ordinary transitive verbs tend to be result nouns: Lat. sēmen 'seed', Skt. ján(i)man- 'creature' (but also action noun 'birth'), mánman- 'thought', cárman- 'skin, hide' < 'that which is cut off', Grk. νῆμα 'thread' < 'that which is spun' and τέρμα 'boundary-mark' (= Lat. termen 'idem') < 'that which is driven in'. Intransitive verbs with animate subjects (especially motion verbs) usually show locatival *men nouns: Skt. ájman- and vártman- both 'trail, path', pátman- 'flight-path', sthā́man- 'place to stand'. Transitive verbs which can occur with a noun in the instrumental form instrumental *men nouns: thus Skt. dā́man- 'bond' = Grk. -δημα 'strap' and Hitt. tiyamar 'cord' as well as Skt. vásman- = Grk. εἷμα 'garment'. Obviously, some verbs offer more than one possibility: Lat. agmen 'column (of march)' is 'that which moves' and OIr. menme 'mind' is 'that which thinks' (type 2) versus Skt. ájman- and mánman-. Some cases are also ambiguous: Haudry, p. 132, argues that cárman- should not be interpreted as 'that which is cut off' (result), but as 'that of/by which one despoils (the animal)' (instrumental). As his syntactic examples show, this interpretation cannot be excluded. Compare the case of Hitt. alpuemar above.

Nevertheless, all the above functions can easily be accounted for based on the common denominator of a verbal action noun. Furthermore, parallel developments can be shown for other verbal noun suffixes. Compare, for example, the uses of PIE *-teu-: (1) action nouns, e.g. Skt. infinitives in -tum; (2) 'neuter' agent nouns, e.g. Grk. κλειτύς 'slope'; (3) result nouns, e.g. Skt. jantú- 'creature'; (4) instrumental nouns, e.g. Skt. sétu- 'bond'; (5) locatival nouns, e.g. Skt. gātú- 'path'. Note not only the same functions, but also the same distribution of verb types as given above for *men. The same phenomenon can be demonstrated for the Modern English verbal noun suffix '-ing': besides its basic use to make verbal nouns (gerunds), it also forms 'neuter' agent nouns ('rising'), result nouns ('building', 'clearing'), instrumental nouns ('covering', 'frosting') and locatival nouns ('parking', 'landing'). Such developments appear to be commonplace, if not universal, with verbal action noun suffixes.

8. The Hittite instrumental suffix -mar, -m(a)n- seen in tiyamar 'cord' thus reflects a special use of the PIE verbal action noun suffix *-men-. The latter is also attested in its basic use in Anatolian: CLuv. tatariyam(m)an (obl. tatariyamn-/tatariyamm-) 'curse' (see Laroche, DLL 95 and 139). The base *tatariya- 'curse' is not attested, but it certainly represents a reduplicated form of the stem seen in Hitt. tariya- 'call upon, invoke': cf. for the meaning Av. zav-, both 'call upon' and 'curse'[32].

The action noun suffix *-men- is for the most part deverbative. However, Hitt. denominative miu-mmar and *šum(m)ar from adjectives miu- and šū- are not entirely without parallels. Within Anatolian compare CLuv. ḫuitumar 'life' ← *ḫuitu- 'alive' (for the noun see Carruba, StBoT 2 (1966) 18, n. 27). The base *ḫuitu- is also seen in ḫuitwali- 'living': ḫuitu-ali- like ulant-ali- 'mortal' ← u(wa)lant- 'dead'. The noun ḫuitumar, ḫuituman- 'life' also serves as the base for the abstract ḫuitum(ma)naḫi(t)-, which means 'vitality' or the like[33]. Compare further Skt. várṣman- 'height' and concretely 'high(est) place' from a stem *varṣ- 'high' seen also in várṣīyas- 'higher' and várṣiṣṭha- 'highest'[34].

One means of forming an adjective from a noun in *-men- is the suffixation of the thematic vowel *-ó-: cf. the derivation of middle participles in *-mnó- from the verbal noun in Section 10 below. We would expect to find the same in the case of denominative *-men-. No adjective *varṣ-

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[32] The stem tariya- 'call upon' is in turn derived from tar- 'say, mention': see Carruba, StBoT 2 (1966) 15, n. 15, and Oettinger, Stammbild. 346. Hitt. tar- is certainly to be related to Lith. tar̃ti 'say', pace Oettinger, Stammbild. 109.

[33] Another abstract noun in -umar is suggested by the chain of derivatives in CLuv. annari-, *annarumar, annarummi-, annarum(m)aḫit- and annarumaḫitašši-. CLuv. annari- (= Hitt. innara-) may be derived from a preform *en-h₂nr-o- 'having strength/virility inside': cf. Grk. ἔνυδρος 'containing water' and perhaps also Hitt. ant(u)waḫḫaš, gen. antuḫšaš 'human, man' from *en-dhueh₂ōs, *endhuh₂ses 'having breath inside': see Eichner, Sprache 25 (1979) 77. From annari- 'powerful, virile' there was formed an abstract *annarumar 'strength, virility', from whose oblique stem *annarumn- a new adjective annarummi- 'powerful, strong' was derived, which in turn was the base for a new abstract noun annarummaḫit- 'strength' and finally yet another adjective annarum(m)aḫitašši- 'strong, powerful'. Since annari- itself is attested as a noun (KBo I 44 + IV 35 = Akk. lamassu 'Lebenskraft'), it cannot be excluded that the next step was directly an adjective *annaruman- 'powerful', which was then thematized (in Luvian fashion) to annarummi-. Cf. Hitt. innarawant- 'powerful' with the possessive suffix -want- from innara-.

[34] The extension of an originally deverbative suffix to denominative use is of course attested elsewhere in PIE. Compare the use of the verbal adjective suffixes *-to- and *-no- with nouns: Lat. barbātus 'having a beard, beard-ed' (note also the use of English -ed) or Grk. σελήνη 'moon' from *selas-nā 'having brightness'. A direct parallel for the extension of the verbal noun suffix *-men- to adjectives is provided by current English 'greening' in 'the greening of America', with the verbal noun suffix -ing (although one cannot (yet?) say *'America greens' or *'We green America').

m(a)ṇá- 'of/pertaining to height' is attested, but the process of forming adjectives in *-mn-ó-* from denominative *-men-* stems is reflected in Skt. *dyumná-* '(heavenly) radiance' and *nṛmṇá-* 'manliness, manly deeds', which are substantivized adjectives 'radiant' and 'manly' formed by *-mna-* from the nominal stems *dyu-* and *nṛ-*. The forms *dyumná-* and *nṛmṇá-* do not, of course, guarantee the existence of nouns **dyuman-* 'radiance' and **nṛman-* 'manliness' (though these are possible). They do, however, suggest a model such as **varṣ-* 'high', *várṣman-* 'height', **varṣm(a)ṇá-* 'of height, high', whether or not the intermediate noun existed in all cases. Similarly, Luv. *annarummi-* 'powerful' (note 33) from *annari-* 'powerful', points to an intermediate noun **annarumar, annaruman-* 'power, strength' or a similar model.

Skt. *várṣman-* 'height' shows another way in which *-men-* derivatives could acquire a locatival sense. Since the noun *várṣman-* 'height' comes to mean concretely 'high place', a corresponding adjective **varṣm(a)ṇá-* 'of/pertaining to height' would likewise become 'of/pertaining to a high place', effectively 'high' or 'located in a high place'. It could then serve as the model for its functional opposite *ni-mná-* 'of/pertaining to what is down', i. e. 'low' or 'located in a low place', substantivized to 'low place, depression'. The locatival sense of *-mnó-* is thus a function of the meaning of the nominal base, not an inherent feature of the suffix (just as the locatival sense of some deverbative nouns in *-men-* depends on the meaning of the verb).

The corresponding Hittite suffix *-(u)man-* (< *-'(u)mō, -(u)mnés*) reflects another means of forming adjectives from nouns in *-men-*: internal change to holokinetic inflection (cf. Lat. *Sēmōnēs* '(the gods) of the sowing' ← *sēmen* 'seed'). A reexamination of the Hittite words in *-(u)man-* shows that 'of/belonging to (a certain place)' actually accounts for the use of the suffix better than 'located in'. In particular, the gentilics in *-uman-* mean 'of a certain place', not 'located in'. Likewise, *tameuman-* means effectively 'belonging to, in the possession of another'. Furthermore, the locatival sense of all the other examples (such as *šaraman-* 'top-, upper', *arunuman-* 'maritime', **kari-man-* 'sacred building') is based on the fact that the nominal bases themselves express a location, like *várṣman-*. When the noun refers to a place, a derived adjective 'belonging to/of (a place)' in effect means 'located in (that place)'. Note that the adjective *hilamni-/hilammi-* 'of the entry-hall' refers in actual usage to things located there.

It remains true, of course, that Hittite *-(u)man-* is used specifically to derive adjectives from locatival bases. This specialization presupposes a Hittite model like *várṣman-*. That is, in order for the secondary holokinetic adjectives in *-'(u)mō, -umnés* to become associated with locatival nouns, Hittite must have had denominative abstract nouns formally parallel to *miu-mmar* 'kindness' with a meaning which could be concretized to a

location. No such noun is directly attested, but we do have an adverb *arum(m)a* 'very, extremely', which is clearly related to the rare adjective *aru-* 'high' (*KUB* XXXIII 5 II 17 || *parku-* 'high'). The spelling of the adverb is prevailingly double *-mm-*, which requires explanation and may be accounted for by original *-mn-* (see Section 1 above). The adverb *arumma* may therefore be the old directive of a noun **arum(m)ar* 'height' or a corresponding **aruman-* 'of height, high'. This derivation also fits the sense: 'to the heights, to a high (degree)' > 'highly, extremely'. Several other Hittite *u*-stem adjectives are attested which could also have served as the starting point for the development of abstract nouns in *-mar* with locatival meaning: *parku-* 'high', *hallu-* 'deep', *hatku-* 'narrow'.

I therefore propose that the 'locatival' suffixes *-mnó-* (*nimná-*, etc.) and *-(u)mō, -(u)mnés* (Hitt. *-(u)man-*) have developed out of secondary adjectives from denominative *-men-* stem nouns which express a location (such as Skt. *várṣman-*). The latter are a subset of deadjectival abstracts (also attested in *miummar, huitumar*) modeled after the more common deverbative action nouns in *-men-*, which themselves often appear concretized as nouns of result, instrument or location.

9. The derivation just proposed for Hittite instrumental/locatival *-(u)mar, -(u)m(a)n-* and locatival *-(u)man-* raises two formal questions, the first of which is the relationship of the forms with and without *-u-*. It should first be pointed out that the form with *-u-* is not attested in any of the examples which are assuredly or likely deverbative: Hitt. *tiya-mar, harna-mmar, alpue-mar*, Luv. *tatariya-man*. The presence of the *-u-* thus seems to be associated with the denominative type. In principle, faced with such an alternation, we would predict that the simple form *-mar, -man-* was original and that the variant with *-u-* originated in derivatives from *u*-stems. That is, an original X*u-mar* was resegmented as X*-umar*, and *-umar* then became a new suffix. This sort of process is common in Indo-European languages, and it is attested in Hittite. Compare the development of the Hittite adjectival suffix *-ala-*, as in *huhhadala-* 'ancestral' ← *huhhant-* 'forefather'. The original form of the suffix is **-lo-* (cf. Skt. *bahulá-* = Grk. παχυλός 'thick-ish, somewhat thick'). This was added to thematic stems, as in *adda-la-* 'paternal' ← *atta-* 'father'. By resegmentation to *add-ala-* the new form *-ala-* was created, which then became the productive suffix: *harši(y)ala-, arnu(w)-ala-*, etc.

We have attested in Hittite a derivative in *-umar* which actually fits the above hypothesis of X*u-mar* to X*-umar*. The noun *miummar* 'kindness' is derived from the *u*-stem adjective *miu-* 'soft, gentle, mild': *miu-mar*. However, by an archaic process, the stem-final *-u-* of *miu-* is lost in some derivatives: *mi-ešš-* 'become mild'. Thus synchronically the word 'gentle, soft' has two allomorphs: *miu-* and *mi-*. This would have permitted *miu-mar*

to be reanalyzed as *mi-umar* with the shorter allomorph of the adjective. By Kuryłowicz's first law of analogy the complex *-umar, -uman-* would then spread at the expense of the simplex *-mar, -man-*. Since *-umar, -uman-* is the productive form of the suffix, only *-uman-* appears in the gentilic suffix — the only productive use of the suffix in Hittite. If the analysis given above of *arumma* 'very' < *arumna* to a noun *arummar* 'height' is correct, this would provide another example of the same process, in this case one with a direct connection to the locatival use of *-umar, -uman-*[35].

The other formal matter is the contrast between Anatolian heteroclite noun inflection *-m̥r̥, -mnés* (or *-méns*) and *-mn̥, -méns* elsewhere. Benveniste, *Origines* (1935) 116f., concludes that Hittite preserves the original situation, based on remnants of heteroclite inflection elsewhere. He cites Grk. τέκμαρ, τέκμωρ 'mark', especially 'boundary(-stone)', as well as the late-attested μῶμαρ 'blame' and λῦμαρ 'filth'. The root etymology of τέκμαρ is disputed (see Chantraine, *Dict. étym.* sub verbum), but the derivation as an instrumental noun 'that by which one marks something' seems clear enough. The fact that the word is attested only in the nom.-acc. could account for the lack of forms with *-n-*. Benveniste also cites Skt. *áśmara-* 'of stone' beside *áśman-* 'stone', Lith. *akmuõ* 'idem', etc. It is thus plausible that the more common *-mn̥, -méns* is a leveling of original *-m̥r̥, -méns* preserved only in Hittite and a few relics.

Nevertheless, the relic forms listed do not actually demonstrate heteroclite inflection outside Anatolian, and they provide a very slim basis for the reconstruction of a type in *-m̥r̥, -méns*. Furthermore, heteroclite inflection is attested in Hittite in several very productive suffixes: note *-atar, -annaš, -eššar, -ešnaš* and especially verbal nouns in *-war, -waš* (< *-wéns*). This raises the possibility that the heteroclite inflection *-mar, -man-* in Hittite is secondary, analogical after other nouns in *r/n*, especially the functionally very similar verbal nouns in *-war, -waš*. The fact that the latter has an allomorph *-mar, -maš* after *-u-* would have made the situation even more favorable for such influence.

This explanation of *-mar, -man-* would be confirmed if Hittite were shown to have isolated neuter *-men-* stems with the inflection *-mn̥, -méns*. There are three likely candidates, none of which is assured. Formally, the most likely is *ērman*, gen. *ērmaš* 'sickness', which may be derived from an earlier *ērman*, *armaš*, reflecting proterokinetic *ér-mn̥, r̥-méns*. The original oblique stem *arman-* is preserved in the derivative verb *armaniya-* 'be sick'[36]. Etymologically, *ērman* may be related to Alb. *jerm*

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[35] Since the noun *ḫuitar* 'animal world, wild beasts' represents 'living things' (see Neumann, *MSS* 16 (1964) 49—50), Luvian *ḫuitu-* 'alive' probably also had an allomorphy *ḫuit-, ḫuitu-*. Thus *ḫuitumar* could have served as another starting point for the complex form *-umar*: cf. *annarumar* in note 33.

[36] For the assumed preservation of syllable-final *er*, compare again *merta* 'disappeared' (see note 23).

'daze, stupor, delirium, lack of complete consciousness caused by fever, sickness, etc.' (thus Kiči, *Albanian-English Dictionary* (1976) 127). Both Alb. *jerm* (< *er-mo-*) and Hitt. *ērman* (< *ér-mn̥*) may be analyzed as action nouns 'agitation' ← *er-* 'move': cf. Pokorny, *IEW* 328[37]. Hitt. *ērman* would thus have originally referred to illnesses characterized by fever and delirium. This is not implausible, since Hittite has two other words for illness, the unanalyzable *inan-* and *ištarningai-*, which is derived from the verb *ištar(ak)k-* 'be sick, fall ill'. The latter is probably to be derived from PIE *ster(k)-* 'be stiff, numb' and thus also originally referred to a certain type of symptoms.

The PIE word for 'name' (Hitt. *lāman, lamnaš*) has also often been analyzed as a *-men-* stem. See among others Schindler, *Flexion und Wortbild.* (1975) 263, who posits a proterokinetic *h₁néh₃-mn̥, *h₁nh₃-méns*: cf. Oettinger, *Stammbild.* 366 and 457 for a similar analysis. The oblique stem *h₁nh₃mén-* would have led to Anatolian *anman-*, which is probably attested in HLuv. *at(i)manza* 'name', with dissimilation of the first *n* and a graphic or genuine anaptyctic *i*[38]. Since in Hittite the oblique stem *anman-* is leveled after the nom.-acc. *lāman*, the replacement of the 'internal' inflection in *-maš* (< *-men-s*) by 'external' *-mnaš* is not unexpected. Only the latter type is productive in Hittite. Anatolian reflexes may thus be accounted for by a proterokinetic *-men-* stem. On the other hand, the PIE paradigm given above cannot explain Toch. AB *ñom/ñem* (< *nēmn̥*), and the remaining reflexes are open to other explanations: see e.g. Szemerényi, *Syncope* (1964) 243ff., and Cowgill, *Evidence for Laryngeals* (1960) 113. Since we are dealing with an archaic, semantically unanalyzable noun, it remains possible that the paradigm of 'name' does not fit any of the productive PIE patterns.

Even more uncertain is Hitt. *ištaman-* 'ear', which is originally an *n*-stem: note the instrumental *ištamanta*. Wennerberg, *Sprache* 18 (1972) 24ff., equates *ištaman-* with Grk. στόμα 'mouth' and Av. *staman-* '(dog's) muzzle', starting from a basic meaning 'slit, aperture' (see already Kronasser, *VLFH* 222). If Wennerberg's further derivation from *(s)tem-* 'cut' (= *tem-* 'cut' with *s*-mobile) is correct, then we are dealing with an *-en-* stem, not a *-men-* stem: *stom-en-*. Wennerberg's evidence for the *s*-mobile in *tem-* 'cut' is weak, however, and Oettinger, *Stammbild.* 196, raises the

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[37] The root etymology of Alb. *jerm* from *er-* goes back to Jokl, who compares Grk. ὄρωρα 'I am excited': see Çabej, *Studime Gjuhësore* (1976) 250. The root connection of Alb. *jerm* and Hitt. *erman* seems solid, based on the specific relationship of *jerm* to delirium *caused by illness*. Kiçi's definition is supported by the *Fjalor gjuhës shqipe* (1954) 187, which also defines *jerm* as: *të mosqenët në vete, nga ethet, nga një sëmundje* 'not being oneself, from fever or from an illness'.

[38] Oettinger, *Stammbild.* 457, derives *atimanza* from the full grade *h₁néh₃mn̥*, but the HLuv. *i*, even if real, can hardly represent *eh₃*, and there is no good evidence for initial *h₁* to Anat. *a-*.

possibility of a *sth_3-men-. Since *ištaman-* offers neither a clearly segment-
able *-men- nor evidence for proterokinetic inflection, it must be consider-
ed the weakest of the three examples for such a type in Hittite.

In sum, *ērman* presents a fairly strong case for a Hittite neuter *-men-
stem, and *lāman* is also plausible, while *ištaman-* is uncertain. The preser-
vation here of a putatively original -man, -maš (> -mnaš), versus regular
Hitt. -mar, -maš (> -mnaš), would of course be due to the fact that the
suffix -man is not synchronically analyzable in these nouns in Anatolian.
They would therefore have escaped the influence of the verbal nouns in
-war and the other productive heteroclite suffixes. The heteroclite inflec-
tion of -mar, -m(a)n- nouns in Anatolian is thus probably secondary,
although compelling proof does not seem possible at present[39].

10. The derivation of adjectives in *-mnó- or *-'mō(n), -mnés from
'locatival' nouns in *-men- (in the sense of Section 8 above) is supported
by similar formations based on the verbal nouns in *-men-. Several lan-
guages show 'agent' nouns in *-mō(n), which are in origin possessive
adjectives formed from verbal nouns in *-men-. In Greek this relationship
is still clear in pairs like γνώμων 'judge' beside γνῶμα 'judgment' and μνήμων
'mindful, remembering' (< *'having memory') beside μνῆμα 'memory'. In
adjectives formed from a verbal noun the step from possessor to agent is
a short one: 'one who has judgment' > 'one who judges'. Hence the
*-mō(n) suffix could come to form agent nouns directly from verbal stems:
e. g. ἡγεμών 'leader' ← ἡγέομαι 'I lead'. There is also at least one denomina-
tive example: δαιτυμών 'guest at a feast' < 'one who has a feast' ← δαιτύς
'feast, banquet'.

Likewise in Tocharian B the verbal adjectives in -mo (< *-mō, cf. *okso*
'ox' < *$uk^w s\bar{o}$) are mostly formed directly from synchronic verbal stems:
e. g. *aišamo* 'wise, knowing' (with palatalization) from the thematic pre-
sent stem of *aik-* 'know'. The origins of the type are clear, however, in
Toch. AB *klyom/klyomo* 'noble' < *$\hat{k}l\acute{e}u$-mō 'possessing fame, renown', a
secondary adjective from a noun *$\hat{k}l\acute{e}u$-mn 'hearing' > 'renown' attested
in Av. *sraoman-* '(faculty of) hearing' and indirectly in Skt. *śrómata-* and
OHG *hliumunt* 'renown'. On this formation see van Windekens, *Le tokh.*
II/1 (1979) 44 ff., who also cites two denominative examples of -mo: AB
orkäm/orkamo 'dark' from the root of Grk. ἔρεβος 'darkness' and Toch. B
*$w\bar{\imath}n\bar{a}mo$ (required by the further derivative *wināmäññe* 'taking pleasure
in') from B *wīna* 'pleasure'.

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[39] The heteroclite inflection of *hilammar* 'entry-hall' is necessarily secondary in
any case. Since the base *hila-* 'courtyard' can not easily be explained as an
adjective, *hilammar* in turn can hardly be analyzed as an original abstract noun
in -mar like *miummar* or *arum(m)ar*. It is most naturally taken as the substantivi-
zation of an adjective *hilaman-* 'of/pertaining to the *hila-*'. That a transparently
derived noun in -man would become -mar after the other nouns in -mar is not
surprising.

Old Irish also has agent nouns in -em (gen. -emon, -eman) derived from
verbal nouns: *brithem* 'judge' ← *breth* 'judgment', *airem* 'plowman' ← *ar*
'plowing' etc.: see Thurneysen, *Gram.* (1946) 172.

Note that although these adjectives in *-mō(n) begin as internal deri-
vatives from verbal nouns in *-men- (γνώμων : γνῶμα), the form *-mō(n)
develops into an independent suffix capable of being added to other
nominal bases of similar function: Grk. δαιτυμών ← δαιτύς (verbal noun in
*-teu-), Toch. B *wināmo* ← *wīna* (verbal noun in *-ā), *brithem* ← *breth*
(verbal noun in *-tei-). This parallels the development proposed above:
'locatival' adjectives in *-'(u)mō originated as internal derivatives of
*-men- stem nouns expressing location (such as *vársman-* and *arum-
(m)ar*). The form *-(u)mō then became an independent suffix capable of
being added to other 'locatival' nominal bases.

Just as there is a locatival *-mnó- beside *-(u)mō(n), there are also
verbal adjectives in *-mno- beside those in *-mō(n). Luvian past partici-
ples in -mmi- and Balto-Slavic middle participles in -amas, -omŭ may both
directly reflect *-mno-. In the former, the double -mm- (by far the preva-
lent spelling) confirms derivation from *-mno- with the same change of
intervocalic -mn- to -mm- as seen in Hittite (see Section 1 above) and the
usual Luvian replacement of an o-stem by an i-stem. In view of the Luvian
parallel and the absence of any counterexamples, one may also derive
Balto-Slavic *-omo- from *-omno- with Vaillant, *Gramm. comp.* III (1966)
113—114, contra Benveniste, *HeI* (1962) 27—32[40].

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[40] Forssman naturally assumes *priemne˜* as the original Lithuanian form of
'entry-hall'. However, he himself cites many dialectal variants (several with -min-)
and admits, p. 24, that his assumption of an anaptyctic *e* in *priemne˜* is problema-
tic.

Support for Vaillant's derivation of Balto-Slavic *-omo- from *-omno-
exists in the form of OPruss. middle participles pointing to the parallel suffix
*-mō(n). First of all, there is the well-known hapax *poklausīmanas*, fem. nom. pl.
'heard, listened to' from *klausīton* 'hear, heed'. Benveniste attempts to elimi-
nate the form by emendation, but the explanation seems artificial. We appear to
have a thematized *-mon-, the strong stem of a holokinetic verbal adjective in
*-mō(n). Vaillant shows that there are other examples of OPruss. middle par-
ticiples supporting this explanation: *poadamynan* 'sweet/fresh milk' may be analy-
zed as a substantivized future middle participle 'that which is to be drunk', with
a suffix which matches Lith. -damas, with one important difference — it shows a
stem -damyn- from *-damn-, which would be the weak (preconsonantal) stem of
an adjective in *-mō(n). He also argues that *enimumne* 'agreeable' (translates
Germ. *angeneme*) represents a middle participle *enimamin- to *enim-* 'accept,
agree'. Both the umlaut of *a* to *u* and syncope of the *i* are well-founded in Old
Prussian: see Trautmann, *Altpr. Sprachd.* §§ 22 and 52. The existence of
OPruss. -damyn- beside Lith. -dama- is particularly striking. Given the close match
in form and function, it seems unlikely that we have two separate formations. We
are instead looking at parallel verbal adjectives in *-mō(n) and *-mno-, as else-
where: cf. again Lat. *alumō* and *alumnus*.

Benveniste, *BSL* 34 (1933) 3—24, also derives other forms of the middle participle from a PIE *-mno-. He shows that all Avestan examples of -m(a)na- may be derived from an Indo-Iranian *-mna- and argues that Sanskrit -māna- represents a blend of this *-mna- and the Indo-Iranian athematic suffix -āna-. He also makes a case for an anaptyctic e in Grk. -μενος. However, his attempt to derive Toch. A -māṁ = B -mane (occasionally -māne) from *-mno- must be rejected. The ā of Toch. A -māṁ (and the B alternate -māne) cannot be explained by an anaptyctic vowel. We would expect rather Toch. A *-mäṁ, as shown by Benveniste's own example: A ṣpäṁ = B ṣpane 'sleep' < *swepnos. The Tocharian suffix can only be explained from a Common Tocharian *-māna-.

Klingenschmitt, *Flexion und Wortbild.* (1975) 159ff., accounts for the Tocharian form by reconstructing a PIE middle participle suffix *-mh₁no-. This proposal has the attraction of explaining directly not only the Tocharian form (see his examples for PIE *h₁ > Toch. ā), but also Grk. -μενος (regular from thematic stems) and Indo-Iranian -āna- (regular from athematic stems).

However, the reconstruction of a formally isolated suffix *-mh₁no- restricted specifically to forming middle participles runs counter to what we know about other PIE participial suffixes. All of these show clear traces of having developed from verbal adjectives not originally associated with any specific aspectual or temporal stem: *-to-/-no-, *-lo-, *-e/ont-, *-went- and *-wes-. Furthermore, the assignment of a given suffix to a specific tense or diathesis is not uniform. The suffix *-e/ont-, which forms present or aorist active participles elsewhere, functions as a past participle in Hittite, with generally passive meaning in transitive verbs: e. g. *appant-* 'taken'. Similarly, *-lo- has an active sense in Lat. *credulus* 'believing' and OHG *tregil* 'carrier', but forms a past participle in Armenian and Slavic, again with a passive sense in a transitive verb: e. g. Arm. *sireal* 'loved'.

Likewise the suffix *-mno- is not restricted to use as a middle participle. As we have already seen, Luvian -mmi- functions as a past participle, predictably passive in transitive verbs: e. g. *šarlaimmi-* 'exalted' ← *šarlai-* 'praise, exalt'. As Benveniste points out, there is also no justification for assuming that Lat. *fēmina* and *alumnus* represent remnants of a specifically middle participle formation. There is nothing to show that they are anything more than verbal adjectives. Note that *alumnus* may have an active sense (*alma terra*) as well as passive. Furthermore, Armenian adjectives in -own-, taken by Klingenschmitt from *-omno-, following Meillet, *BSL* 22 (1921) 21, may have both active and passive meaning, as Meillet's examples show: *gitown* 'knowing' and 'known' ← *gitem* 'I know'. The example *šaržown* 'mobile' ← *šaržem* 'I move' reveals the basic value of a verbal adjective, often preserved in intransitive verbs.

Finally, the Tocharian 'middle' participles in -māṁ/-mane are in fact usually derived from verbs with active inflection and show no specific 'middle' sense: e. g. Toch B *nesamane* ← *nes-* 'be' (pres. 3rd sg. *nesäṁ*). The likely origin of the Tocharian form is shown by the Toch. B pair *sälpamo* and *sälpamane*, both 'glowing', from the present stem of *sälp-* 'glow' (pres. 3rd sg. *salpäṁ*). The original paradigm of the adjective in -mo had a nom. sg. *-mō, strong obl. *-mon-. Generalization of the long ō of the nominative singular would have led to strong obl. *-mōn- which regularly gives Tocharian *-mān-: see van Windekens, *Orbis* 13 (1964) 288, and *Le tokh.* II/1.44. The 'middle participle' in -māṁ/-mane probably represents merely a thematized Tocharian *-māna- from the oblique stem *-mōn- (> *-mān-) of the adjectives in -mo: cf. OPr. *poklausīmanas, poadamynan* and *enimumne* in note 40 above.

There is thus evidence that the function of derivatives in *-mno- was not restricted to use as middle participles. Like other participial suffixes, *-mno- originally formed verbal adjectives, with the general meaning of 'possessing, provided with' the notion expressed by the verb. From this the more specialized meanings developed: e. g., Lat. *alumnus* 'possessing nourishment' led to both 'nourishing, fostering' and 'being nourished, fostered'. Derivation of this *-mno- from verbal nouns in *-men- (parallel to isofunctional *-mō(n); cf. again *alumō* beside *alumnus*) seems unavoidable[41].

11. The result of our investigation may be summarized as follows:

(1) Beside Forssman's 'locatival' suffix *-mnó-, Hittite offers evidence for holokinetic 'locatival' adjectives in *-́(u)mō, -(u)mnés.

(2) The locatival sense of these suffixes is secondary, originating in the derivation of adjectives in *-mnó- and *-́(u)mō(n) from nouns in *-men- expressing location: Skt. *várṣman-*, Hitt. *arum(m)ar*.

(3) The locatival nouns in *-men- are a subset of abstracts in *-men- formed from adjectives: cf. Hitt. *miummar*, CLuv. *ḫuitumar*. These deadjectival abstracts represent an extension of the verbal noun suffix *-men-: cf. current English 'greening'.

(4) The appearance of the suffix *-men-, in all its various functions, as -mar, -m(a)n- in Anatolian is probably secondary, based on the existence of Hitt. *ērman* and Hitt. *lāman* beside HLuv. *atimanza*.

(5) The formation of adjectives in both *-mnó- and *-́mō(n) from locatival nouns in *-men- is paralleled by similar derivatives from the

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[41] This derivation does, of course, leave unresolved the source of Indo-Iranian -āna-, but there is no lack of alternative solutions: see the summaries of Wackernagel—Debrunner, II.2 (1954) 278, and Thumb—Hauschild, I.2 (1959) 359.

suffix *-men- in its primary function as a verbal noun: hence verbal adjectives and 'participles' in *-mnó- and *-ʹmō(n).

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