Studies on the Collective and Feminine in Indo-European from a Diachronic and Typological Perspective

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Studies on the Collective and Feminine in Indo-European from a Diachronic and Typological Perspective

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PREFACE AND ACKNOWLEDGEMENTS

The idea for the present volume, *Studies on the Collective and Feminine in Indo-European from a Diachronic and Typological Perspective*, was suggested by some participants at the end of the 4. Jenaer Indogermanistisches Kolloquium *Kollektivum und Femininum: Flexion oder Wortbildung? Zum Andenken an Johannes Schmidt* (2010) and was realized thanks to the support of one of the lecturers, H. Craig Melchert, co-editor of the series BSIEL.

The book is presented here by request of the editors of the series as a sort of monograph and is meant to exemplify the variety of approaches to the topic. For this purpose, the contributions were editorially unified, alphabetically arranged by author's name and provided with an English abstract. This allows readers who are interested just in single papers to purchase each one separately. For this reason, no comprehensive bibliography was put together for the whole volume.

We would like to express our thanks to the many people and institutions that made this project possible. First of all we are indebted to the speakers at the above mentioned colloquium who, despite the short time span between the invitation and the date of the conference and the limited financial support, were pleased to take part, as well as the numerous participants from near and far who have contributed to the success of the event. Without the active support of Rosemarie Lühr, the student assistants, and the Friedrich Schiller University of Jena, the organization of the conference would not have been possible: also to them goes our deep gratitude. We also are much indebted to the authors who did not actually participate at the colloquium itself, but were disposed to submit a contribution to the volume. We would also like to thank the two peer reviewers of Brill for their helpful and detailed comments on the single papers of the book.

Finally, we want to express our heartfelt thanks to the editors of the series *Brill Studies in Indo-European Languages & Linguistics*, Olav Hackstein and H. Craig Melchert, who have gladly agreed to include this volume in the series, as well as the always helpful and patient assistant editors of Brill Franca de Kort, Jasmin Lange and Stephanie Paalvast.

We are pleased to hand over the final work to friends, colleagues and the scientific community.

Jena, December 2013
Sergio Neri and Roland Schuhmann

PIE *-eh_2 AS AN "INDIVIDUALIZING" SUFFIX AND THE FEMININE GENDER

H. Craig Melchert

Abstract: Contrary to previous claims by the author and others, Anatolian shows reflexes of at least two of the three known IE "motion"-suffixes, but not as exponents of the feminine gender, which is surely an innovation of "core-IE". Anatolian facts argue against development of the feminine function of the suffix *-(e)h_2 from collectives. I cite Anatolian evidence for a use of *-(e)h_2 to derive endocentric individuated nouns from thematic bases and argue that these are the most plausible starting point for the feminine gender. The steps by which the suffix acquired this specialized function remain elusive, and any full account will have to address how the other suffixes *-ih_2/-$i̯eh_2$ and *-$íh_x$ acquired the same function. We must reckon with the strong possibility that more than one factor played a role in this innovation.

1. Premises[1]

1.1. Proto-Indo-European had a four-way contrast of number in animate nouns: singular, dual, count plural and "collective" plural (or Singular, Dual, Plural, Komprehensiv): see Eichner 1985 and Melchert 2000.[2] Inanimate nouns lacked the *grammatical* category of count plural/Plural.[3]

[1] Proto-Indo-European (Urindogermanisch) is used here for the directly reconstructable source of all Indo-European languages including Anatolian, pre-Proto-Indo-European for earlier internally reconstructed stages. I use Core Indo-European (Restindogermanisch) to refer to a stage postdating the "separation" of Anatolian (without prejudging the particular status of Tocharian, Italo-Celtic, etc. vis-à-vis other branches).

[2] I retain the traditional label "collective" for consistency, although it leaves the unfortunate impression that use of the category implies a blurring of the distinctiveness of the individual referents. This clearly is false (in Greek *κύκλα* 'chariot' the wheels of the vehicle remain distinct, as does each path of strewn or poured enticing materials that make up the Hittite composite *palša* 'path' on which deities are lured). The term "set" plural would be more accurate: see Eichner 1985: 142. The claim of Luraghi (2009a: 7–8) that collectives are like mass nouns and lack internal structure is false, as shown by her own Italian examples where a noun with the collective suffix *-istica* by her own characterization "has the same meaning" as the count plural of the base noun.

[3] This lack does not, of course, mean that PIE speakers could not express the notion of count plural of grammatically neuter nouns for which this was appropriate (such as **pédom* 'place'). They would have had at their disposal for this at least numerals and quantifiers such as 'several', if not other means.

Minus the dual, this system is attested effectively intact in Old Hittite. New Hittite and Core Indo-European independently eliminated the functional contrast of "collective"/Komprehensiv vs. count plural/Plural in favor of the latter.

1.2. In PIE there was a strong correlation between gender and number, and animate grammatical gender reflected more the individuation of the referent than its real-world animacy. See Ostrowksi 1985 and for a typological comparison with Ket (Yeniseyan) Matasović 2004: 200–2. As with most systems of grammatical gender, this semantic organization was a *tendency*, not a rule, and there were exceptions: e.g. inanimate individuated **pédom* 'place' and animate group noun **slóu̯g$^{(h)}$o-* 'retinue, Dienerschaft'. As correctly stressed by Luraghi (2009b: 116–7) following Corbett, the evidence of attested gender systems suggests that we must expect some instances of opacity in gender assignment in PIE as well.

1.3. The formal exponent of the Komprehensiv/"collective" plural (better "group/set plural"), the suffix **-h_2*, was grammaticalized in pre-PIE from a *derivational* suffix that formed secondary exocentric concrete nouns referring to entities viewed as [+bounded, + internal structure] (i.e., non-mass and consisting of matching parts) such as **u̯orb^{h}eh$_2$* 'enclosure' (attested in Hittite plurale tantum *warpa*). These nouns were inanimate pluralia tantum (still attested in Anatolian *distinct* from animate nouns in 1.4 below!). See Melchert 2011 for one possible scenario of the grammaticalization. By so-called "recategorization" (see Corbett 2000: 84–7 & 117, n. 33), the "set plural" ending **-h_2* was also *marginally* used already from pre-PIE to form plurals to mass nouns to express extensionality, sorts, or instances (cf. English 'waters', 'rices', 'floods'). As per Melchert 2011, singular verb agreement with inanimate "collective" plural subjects is *not* sufficient evidence for assuming that these collectives were once singulars! All other evidence argues that these nouns were plurals from the very beginning and that they remained so in PIE.

1.4. The *derivational* suffix **-h_2* was also used from PIE onward to form secondary exocentric concrete and abstract nouns for entities viewed as [+bounded, -internal structure] (i.e. non-mass but not divisible into matching parts). As per 1.2 above, these nouns took animate grammatical gender with an accusative singular in **-m* (see Ostrowski 1985: 316 and Matasović 2004: 186). Crucially, in Anatolian these are still *a distinct class from* inanimate "collective" pluralia tantum described in 1.2 above.

1.5. Contra Oettinger 1987, Melchert 1992 and 1994, et al. there is no compelling evidence for *feminine grammatical gender* in Anatolian. On Lycian animate stems in *-a-* see Hajnal 1994 and on "*i*-mutation" Rieken 2005. Contrary to the reasoning of Melchert (1992: 48) and Harðarson (1994: 35–9), the existence of grammatically animate nouns such as Hittite *ḫāššša-* 'hearth' in Anatolian in no way proves that such nouns were at that stage grammatically feminine. The putative evidence for adjectival agreement of the type *novus, nova, novum* in Lycian cited by Melchert (1992: 48[16]) is uncertain. Even if it is genuine, it clearly reflects a very marginal innovation, not an archaism. Development of the feminine grammatical gender is an innovation of Core Indo-European.

1.6. However, all three eventual "motion" suffixes were almost certainly present in Anatolian in other functions. The suffix **-eh_2* forms exocentric concrete and abstract nouns in Lycian (Melchert 1992 and Hajnal 1994) and in limited numbers in Hittite: *ḫāššša-* 'hearth, Feuerstelle' and *ḫiššša-* 'hitch-pole, Deichsel' (see Melchert 1994 and Harðarson 1994).[4] As per 1.4 above, all those directly attested where we have diagnostic forms show animate gender. As pointed out by Eichner (1973: 59–60), the suffix appears in extended form in the Luvian abstract suffix *-aḫ-it-* (for which see in detail Starke 1990: 153–76). The coexistence of Cuneiform Luvian *warraḫit-* and Hittite *wārra-* 'help' and the singular inflection of the latter argue that we should begin with a **u̯órh$_x$eh$_2$-*, undoubtedly animate in gender. We cannot strictly determine the gender of **mi̯yaḫ-* (virtual **mih$_x$-eh$_2$-*) 'growth, maturity' seen in *mi̯yaḫuwant-* 'old' (see again Eichner 1973: 59–60) or the original base of the extended massively productive type of Hittite abstracts in *-ātar, -ānn-*. The same applies to the much smaller class of Hittite nouns in *-āwar* (*ašāwar* 'pen', *ḫaršawar* 'ploughed ground', *partāwar* 'wing', *karāwar* 'horn' (see Nussbaum 1986: 33–4). The meaning suggests that the base **-eh_2* of the abstracts had animate gender, but the set in *-āwar* could have originally belonged to the inanimate pluralia tantum described above in 1.3.

As shown by Widmer (2005), the suffix **-íh$_x$* ("*vr̥kī́*-type") is attested in Hittite *nakkī-* 'heavy' < **'burdensome' < **'that which pertains to a burden'. Only this derivation directly accounts for the *unique* combination of lack

[4] As shown by its animate gender, this word always meant 'hearth, place where a fire burns' and was never a collective "Aschenhaufen, pile of ashes" (contra Harðarson 1994: 39). If it had ever been a collective, it would necessarily have appeared in Anatolian as an inanimate plurale tantum †*ḫāššša*.

of ablaut and oxytone accent in a Hittite *i*-stem adjective.[5] There is no *demonstrable* reflex of **-ih_2/$i̯eh_2$-* ("*devḯ*-type"), but the ablaut argues for existence of the suffix *in some function* already in PIE (see Harðarson 1994: 31, following Sommer). If (contra Widmer 2005) one derives the *vr̥kḯ*-suffix from that of *devḯ*-type (Balles 2004: 48 et al.), the presence of the former in Anatolian presupposes that of latter.[6, 7]

1.7. We must allow for the possibility that multiple factors led to the development of the feminine gender distinct from the masculine.

2. A New Factor: Endocentric *-H_2

2.1. Any account of the rise of the feminine gender in Core Indo-European must address two questions. First, what was the previous function of its various exponents before they became markers of the feminine grammatical gender? Second, how and why did these particular suffixes come to be associated with the feminine? Previous scenarios have generally begun with the formations cited above in 1.3 and 1.4: collectives (e.g. Tichy 1993) or abstracts (Harðarson 1987: 100–03 and in a very different sense Luraghi 2009a and 2009b). However, evidence from Anatolian suggests a further possibility.

There is evidence in Core Indo-European for a dual pattern in substantives derived from adnominals (Nussbaum 2004, cited by Vine 2006: 151): several secondary suffixes form both endocentric masculines 'the X one' and exocentric feminine abstracts. The former tend to develop further to "weak" adjectives. Both of these derivational types are already attested in Anatolian (the nouns naturally with animate gender).

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[5] A potential oxytone adjective with suffix **-í-* would have led to Hittite *-āi-*, as demonstrated for oxytone *i*-stem nouns by Rößle (2002: 115ff.).

[6] *Some* instances of "*i*-mutation" *could* also reflect ablauting **-ih_2/$i̯eh_2$-*: a pre-Luvian paradigm **-nt-ih_2, *-nt-ih_2m* (*[*-ntīm*] by Stang's Law) and weak **-nt-$i̯eh_2$-s/C°* would have led regularly to **-ntī, *-ntīn, *-ntsas*, whence by leveling of the consonantism attested Luvian *-ntīs, -ntīn, -ntati*, etc. Unfortunately, this possibility is and will surely remain unprovable.

[7] It is tempting to see in OH/OS (Laws §47A; Hoffner 1997: 56) A.ŠÀ.ḪI.A-*n=a mekkī* 'most of a field' (lit. 'a field, lots of it') to the adjective *mēkk-* < **meǵh_2-* the expected use of **-ih_2* as a collective plural (see Balles 2004: 48). However, while it is clear that the Hittite *i*-stem *mēkki-* and its mostly attributive syntax are secondary, it is by no means certain that the *i*-stem originates in the collective *mekkī*. That is, we have no assurance that *mekkī* is to be analyzed as **meǵh_2-ih_2* rather than as **meǵh_2i-h_2*, a perfectly ordinary collective plural to an *i*-stem. One therefore cannot put much weight on this example.

In Core Indo-European we find for the suffix *-i-* Avestan *tiγri-* m. 'arrow' (i.e. *'the sharp thing') ← *tiγra-* 'sharp' and Latin *tenuis* 'thin' (< **tenh$_2$u̯i-* *'the thin one') ← **tn̥h$_2$u̯o-* 'thin' (Greek *τανάος*) beside Latin *rauis* f. 'hoarseness' ← *rauus* 'hoarse'. Likewise Hittite attests *dawani-* anim. 'stem, stalk' (*'the straight thing') ← *tāwana-* 'straight; true' and Hittite *šalli-* 'grown, great' and CLuvian **šalḫi-* 'idem' in *šalḫi-tti-* 'growth' (< **s(e/o)lh$_2$i-* *'the grown/great one') ← **se/olh$_2$o-* 'grown, great' (thus modifying Rieken 2005: 57–8) beside **s(e/o)lh$_2$i-* *'growth' seen in CLuvian *šalḫi-ant-i-* 'growth' (for the derivational pattern of *šalḫianti-* see Melchert 1999a: 23). For the suffix *-(e/o)t-* Nussbaum cites Greek m. *γυμνής, γυμνήτ-* 'unclothed (one), light-armed soldier' ← *γυμνός* 'unclothed' and Latin *dīuēs, dīuit-* 'rich' (< *'the rich one') ← *dīus* 'brilliant, radiant' beside Vedic *nivát-* f. 'depth' (< **niu̯e-(e/o)t-*) ← **neu̯i-u̯o-* 'low' (Greek *νειός*). In Anatolian we find CLuvian *kallaratt(i)-* (with "*i*-mutation") 'portentous one, gargantua' ← *kallar-* 'portentous' (< **g^{h}alh$_x$ro-*) beside Hittite *naḫšaratt-* 'fear' ← **naḫšar-* 'fearful' (< **neh$_2$s-ro-*). A third example of the pattern is shown by the "individualizing" suffix **-on-* (again see Nussbaum 2004): Greek *Στράβων* 'the squinty-eyed one' ← *στραβός* 'squinty-eyed', Latin *Catō* 'the sharp one' ← *catus* 'sharp', and Germanic "weak" adjectives beside Latin *cuppēdō* 'gluttony' ← *cuppēs, cuppēd-* 'glutton'. The endocentric type is attested in Anatolian in the Lycian personal name *Xudalijẽ* *'the nimble one' beside *Xudali* *'nimble' and with "*i*-mutation" in *Tewinezẽi* cited below, and probably also in Hittite *alkištan-* 'branch' beside *alkišta-* 'idem'. There is not yet clear evidence for the corresponding exocentric abstracts.

We might therefore expect to find a similar dual pattern for the secondary suffix **-(e)h$_2$*, i.e., endocentric nouns with a sense 'the X one' and adjectives beside the well-known abstracts. Hajnal (1994: 151–2) has in fact already presented such evidence for Anatolian in the form of the Lycian suffix *-(a)za-* < **-ti̯eh$_2$*. This suffix is highly productive in forming animate nouns referring to professions: *asaxlaza-* 'governor', *haxlaza-* (representative of Persian king), *kumaza-* 'priest', *maraza-* 'judge', *wasaza-* (kind of priest), *xddaza-* 'slave', *zxxaza-* 'fighter' (plus at least ten more). The same suffix is also attested in Luvian. HLuvian *kumaza-* (KAYSERİ §17 nom. sg. *ku-ma-za-sa*) is a direct cognate of the Lycian cited above and probably also means 'priest', but the status as a noun is not entirely assured. The stem *wara/ilaza-* '?' (KULULU lead strip 1 §4.22 dat. sg. *wa+ra/i-la-za*) refers to a profession or occupation and is definitely a noun. The attested CLuvian examples show the common secondary development into adjectives: *urazza-* 'great' (KUB 9.31 ii 30 *uraz<zaš>* ^{d}UTU-*az* 'great Sun-god'; emendation with Starke 1985: 53ff. after VBoT 60 i 2 *urazzaš*); *wašḫazza-* 'sacred,

holy' (KUB 35.107+ iii 10 URU*Taurišizzaš waššazzaš* dLAMMA-*aš* 'the sacred Tutelary Deity of Taurisa'), a direct cognate of Lycian *wasaza-*.

As per Hajnal, the stems in *-(a)za-* are in origin derived from thematic appurtenance adjectives in *-ze-* < **-ti̯o-*. The latter is the PIE suffix added to local adverbs, which spread in Lycian from its inherited locus (*hrzze/i-* 'upper' ~ Hittite *šarazziya-*) to nouns referring to places such as *neleze-* 'of the agora' < *nele-* 'agora' (whence also ethnica like *Pttaraze/i-* 'of Patara' < *Pttara*) to other nouns (see for the development already Gusmani 1961).

As emphasized by Hajnal (1994: 152), in contrast to the adjectival *-ze/i-* "*-(a)za(-)* bildet dagegen exklusiv substantivische Personbezeichnungen. Die Erweiterung */-ā-/* dient also zur Substantivierung wie zur Personalisierung (Individualisierung)." There is *no basis* in this case for assumption of singulatives backformed from inanimate collectives, either directly (Lat. *nauta* 'sailor' < 'crew', as per Balles 2004: 46 following Klingenschmitt) or by addition of **-s* (as per Leukart 1994: 149ff. for Mycenaean */Kréta-s/* 'inhabitant of Krete' < *Κρήτᾱ* 'Crete' etc.). The nominative singular in *-s* (see the Luvian examples) is merely part of the regular pan-Anatolian mechanical renewal of asigmatic animate nominative singulars (Hittite and Palaic *ḫaraš* 'eagle' < **h₃érō+s*, Hittite *ḫāššaš* 'hearth' < **h₂óh₁/₃seh₂+s*, *ḫaštērz(a)* 'star' < **h₂stḗr+s*, etc.). As per Hajnal, there is evidence against a collective Lycian *-aza-*: collectives to adjectival *-ze/i-* are formed by direct substantivization (*prñneze/i-* 'household' < *'belonging to the house'). One may note also the entirely parallel derivation from an adjective **tewineze-* of *tewinaza-* (title and also personal name attested as *Τευινασος*) with **-h₂* and the personal name *Tewinezẽi* (with suffix **-on* + "*i*-mutation"), both *'the *tewineze-* one'.

Given the word equations with Luvian and the existence in Luvian of substantives *kumma-* and *wašḫa-* (both 'the sacred' with derived **i̯o-*adjectives *kummaiya-* and *wašḫaiya-*), the likely starting point for the Lycian type are adjectives like **kummeze-* and **weseze-*, from which are derived *kumaza-* and *wasaza-*. Obviously the Lycian type in *-(a)za-* became fully productive, and we should not reconstruct adjectival bases for all attested examples. Endocentric **-(e)h₂* is not limited in Lycian just to *-(a)za-* < *-ze-*. Note also *Tlañna-* 'a Tloan' (noun!), formed with the ethnic adjective suffix **-u̯en-* + **-eh₂* and Lycian *θurtta-* (a title), in formal terms an endocentric stem in **-teh₂* < **-to-* , beside the exocentric abstracts *pijata-* 'gift' and *xñtawata-* 'rule, reign'. For the moderately productive existence of adjectival **-to-* in Anatolian see Melchert 1999b: 368–72.

2.2. I believe that an endocentric suffix **-(e)h₂* used to derive grammatically animate substantives, at least some of which referred to animate

(human) individuals, provides a far more plausible starting point for *-(*e*)h_2 as a "motion-suffix" than inanimate collectives or abstracts alone. Furthermore, its attested tendency (shared with other such endocentric suffixes) to take on adjectival function would have helped the development of the agreement pattern that was the crucial step in establishing the feminine as a true third grammatical gender.

Luraghi (2009a: 4–5 and 2011) has already cited serious problems with the derivation of the feminine gender from the collective function of *-h_2. As she correctly points out, there is no evidence that *g^{u}én-h_2/g^{u}n-éh_2 'woman' or *h_2u̯id^{h}éu̯eh_2 'widow' was ever a collective (as per Tichy 1993: 11[18] and 16 et al.). Both words are attested exclusively as animate (feminine) nouns, and the collective source is entirely hypothetical. Likewise unsupported is the claim of Matasović (2004: 168) that Greek feminine action nouns such as τομή '(a) cutting' reflect neuter collectives (see again the just criticism of circularity by Luraghi 2011). Finally, the widely accepted thesis of Fritz (1998: 260–3) by which the PIE animate *s*-stem *$h_2$éu̯s-ōs, *$h_2$éu̯s-os-, *$h_2$us-s-és 'dawn' reflects a reanalyzed collective plural (**$h_2$éu̯s-os-h_2) of the type of *u̯édōr < **u̯édorh_2 is also far from compelling. An original animate *s*-stem (*$h_2$éu̯s-ōs < **$h_2$éu̯s-os-s) is equally straightforward in formal terms (thus Szemerényi 1970: 109 & 164), and amphikinetic (or holokinetic) inflection is used for internal derivation of animate nouns from neuters just as much as hysterokinetic inflection: see Schindler 1967: 201–2, 1975a: 63–4 on Latin *Sēmōnēs* beside *Cerēs*, and 1975b: 3–4. Semantically, Fritz's derivation is highly problematic, since an original set plural for a notion like 'dawn' makes little sense. One must insist on the distinction between an inanimate set plural and an animate abstract.[8]

Luraghi (2009b: 116[1]) also suggests that Anatolian presents a problem of relative chronology for derivation of the feminine gender from collectives, but the difficulty is more serious. The facts of Anatolian show unequivocally that in PIE there was no synchronic association between inanimate collective (set) pluralia tantum with nominative-accusative in *-eh_2 and animate abstracts with nominative singular *-eh_2 and accusative singular

[8] Similar reasoning applies to the animate amphi-/holokinetic form for 'sun': *séh$_2$-u̯ōl, *sh$_2$-ul-és. Since a set plural makes even less sense for 'sun' than for 'dawn' (see correctly Rieken 1999: 423–4), this internal derivative from the proterokinetic neuter *séh$_2$-u̯l̥, *sh$_2$-(*u*)u̯én-*s* (thus with Schindler 1975b: 10) surely continues **séh$_2$-u̯ol-*s*. The masculine gender of this word in Latin *sōl* < *sh$_2$u̯ōl (with generalized root zero-grade) shows that there was no special association of the internally derived animate type with the feminine. Whether these animate nouns are ultimately personified abstracts or substantivized adjectives with possessive semantics may be left open (see again Schindler 1975a: 64).

in *-eh_2m.[9] Furthermore, there is no basis for supposing that any such association was made in Core Indo-European. The only two stems in *-eh_2 in Anatolian with cognates in Core Indo-European are animates: Hittite *ḫāšša-* 'hearth' and *ḫišša-* 'thill, hitch-pole'. So are abstracts such as Lycian *arawa-* 'freedom' (deadjectival from a cognate of Hittite *arawa-* 'free') and action/result nouns like Lycian *uba-* 'grant' (deverbative from *ube-* 'grant, dedicate').

Given not one but two sources in PIE of grammatically *animate* stems in *-eh_2—endocentric nouns typically referring to humans and abstract and action nouns—the parsimony principle argues that we can and should dispense with the massive restructuring of paradigms required by the derivation of the feminine from collective plurals. Luraghi (2009a: 5 and 2009b: 116) cites the further weakness that by this scenario the creation of an entire grammatical category is made to rest on the (supposed!) semantic link between collective and feminine reference in one or two words (such as 'widow', 'woman', 'dawn').

2.3. Luraghi (2009b: 127 and 2011) argues convincingly that the creation of the feminine gender in Core Indo-European was motivated by a split *within* the preexisting PIE animate gender and that the split was sex-based. She provides ample cross-linguistic evidence for such a sex-based contrast in gender at the upper end of the animacy scale. She suggests that involvement in procreation motivated the new distinction, which finds some support in the fact that words referring to young humans and animals that are not yet capable of procreation are often inanimate (neuter) in early IE languages. Be that as it may, that the creation of the feminine gender resulted from a split within the animate gender is a fact, as argued at length already by Meillet (1931). As already seen by Meillet (1931: 19) and stressed by Luraghi (2011), when the new distinction was extended to the demonstrative (by all accounts a key step in the development into a true grammatical gender), the subject form of the feminine was created by adding the nominal ending *-eh_2 to the unique animate stem **so*

[9] On this point I differ from Luraghi 2009a: 5–8 and 2011 only in that I regard this separation as original (see 1.3–4 above and Melchert 2011) rather than as the result of an early split of abstract into collective and abstract. As per Luraghi (2009b: 117[3]), the use of "abstract" in Indo-European linguistics is confusing, in that it is used to refer not only to abstracts in the narrow sense ('truth'), but also action or event nouns ('cutting'), which can become concretized as "result nouns" ('a cutting').

that contrasted with neuter **tod*.[10] While I do not deny the role played by other functions of *-h_2 in the overall implementation of the new feminine grammatical category (see below), I contend that its attested use to form endocentric nouns referring to humans in various roles must have been the crucial starting point for its becoming a motion-suffix in a sex-based gender contrast.

3. Suffix *-H_2 and the Feminine

3.1. What still remains to be explained is why/how the suffix *-h_2 (both in the form *-eh_2 based on thematic stems and *-ih_2, -$i̯eh_2$ based originally on *i*-stems) came to be used to mark female referents in the new sex-based contrast within animates. Semantic motivation clearly cannot be the answer. We have seen above (2.1) that the Lycian nouns in -(*a*)*za*- have masculine referents, and Greek nouns in -*ᾱ́ς* and -*τᾱ́ς* and Latin examples like *scrība* 'scribe' confirm that endocentric *-eh_2 was in no way limited to use for feminine referents. Likewise, while Lycian *lada* < **ladeh*$_2$ means 'wife', Russian лада is attested as both 'husband' and 'wife'. In the handful of likely cases of reanalysis of abstracts or collectives as referring to individuals, masculines are at least as numerous as feminines: Latin *agricola* 'farmer, field-tiller' < *'who has/deals with field-tilling' from a compound with original second member *-$k^{u}oleh_2$ *'tilling', OCS слуга 'servant' < **sloṷg*$^{(h)}$*eh*$_2$ *'service' (attested in Lithuanian *slaugà*),[11] and Latin *nauta* 'sailor' (if it indeed is a back-formed singulative 'member of a crew').

It is true that in the Core Indo-European *three*-gender system feminine gender is widely associated with an intermediate degree of individuation. Luraghi (2009a: 117–21) presents evidence from both ancient and modern Indo-European languages for a higher degree of individuation in event nouns with masculine grammatical gender than in the corresponding feminines (though she is careful to point out that this is a tendency and not a strict rule). She cites the fact that Core IE reflexes of stems in *-*tu*-,

[10] The problematic assumption of **seh*$_2$ having been created by a "crossing" of **so* and collective plural **teh*$_2$ (e.g. Tichy 1993: 16–17) is entirely unnecessary. As argued by Jasanoff (2009: 147–8), Core PIE **teh*$_2$ was itself created on the model of the corresponding nominal ending (**i̯ugéh*$_2$ etc.), replacing PIE nom.-acc. plural neuter **toi̯*. PIE *-*oi̯* as the nom.-acc. plural ending is directly attested in the Hittite demonstratives *kē* and *apē*.

[11] I explicitly withdraw my previous misguided attempt to compare the OCS word to the Lycian endocentric type, since there is no genuine parallel in the type of formation. One may compare the use of English 'help', which notably refers either to a male or a female.

which are prototypically masculine, generally have a more concrete sense than the mostly feminine nouns in *-*ti*- (see already Matasović 2004: 134). However, in the two-gender system of PIE nouns in *-*tu*- and *-*ti*- were both merely animate, and any difference in their semantics could have had nothing to do with gender. The later differentiation must be a result, not a cause, of the three-gender system.[12] The fact that the suffix *-h_2 spanned such a wide portion of the PIE animacy/individuation hierarchy also surely played an important role in the assignment of feminine gender within the three-gender system to abstract and event nouns with intermediate individuation, regardless of the form of the suffix. However, as seen by Luraghi (2009a: 27), degree of individuation per se cannot be the motivation for the split of the animate gender in the previous two-gender system into a sex-based masculine and feminine.

In the oral presentation of this paper I tried to explain the association of the suffix *-h_2 with the feminine gender by the morphological equivalent of a "push-" and "pull-chain". I proposed that a functional gap was created by the obsolescence, indeed virtual loss, in Core Indo-European of the previous "motion" suffix *-*sor* (originally an independent noun 'woman'), still productive in Anatolian (compare Ledo-Lemos 2000: 133–45, with caveats). I suggested that the suffix *-h_2, specifically in its form *-eh_2, originally used for both genders, was pushed into the role of marking the feminine by the rise of a new means of forming masculine agent nouns: substantivized "*τομός*-type" adjectives like Latin *procus* and Sanskrit *varás* 'suitor' and Greek compounds like *αἰπόλος* 'goatherd', *βουκόλος* 'cowherd'). This type is virtually unattested in Anatolian.

I retain the first part of this account, but abandon the second, for several reasons. First, the endocentric nouns in *-eh_2 were not in origin agent nouns. The Lycian nouns in -(*a*)*za*- cited above indicate in the first instance membership in a class (NB *lataza*- 'dead person') and only secondarily agent nouns: *kumaza*- 'priest' was originally *'the sacral(ized) one'. The findings of Leukart (1994: 156) for the Greek type in -*ās* and -*tās* point in the same direction. The fact that the suffix originally lacked *-*s* in the nominative singular (e.g. Latin *scrība*) also argues against a primarily agentive sense. Second, it is very doubtful whether substantivizations of the *τομός* type in the role of human agent nouns were numerous enough

[12] The use of *-*tu*- in Sanskrit and elsewhere as infinitives and other types of verbal noun also suggests that concreteness was not a defining characteristic of the suffix.

to have had the impact that I imputed to them. Third, this scenario seriously underplays the role of the "*devī́*-type".

Luraghi (2009a: 128) suggests that the assignment of *-(*e*)h_2 to the feminine in the new three-gender system may have been motivated simply by the fact that in Indo-European the feminine gender is typically formally marked vis-à-vis the masculine, and I now suspect that markedness was decisive in how the sex-based split of the former animate gender was implemented. While avoiding all sociological speculations regarding the role of men and women in early and prehistoric Indo-European societies, one can observe the fact that Indo-European languages, ancient and modern, that make a morphological distinction in nouns referring to males and females overwhelmingly do so by use of suffixes marking the feminine. Obviously, avoidance of circularity means that one cannot cite as evidence in this regard such use of the suffixes under discussion. However, modern languages furnish examples such as French (and by borrowing English) *-esse*, German *-in*.[13]

3.2. While mere markedness may seem to some an insufficient motivation, I must stress once again that the use of *-h_2 to mark the feminine gender cannot be plausibly connected with its other attested semantic functions. Luraghi (2009b: 116 and 125) regards abstraction as the primary function of the suffix. However, we have seen that *-h_2 is no different from many other secondary suffixes: on the one hand it derives endocentric nouns with the meaning 'the X one' (so its meaning cannot be abstractness), and on the other hand it is but one of several suffixes that derive abstracts (both abstracts in the strict sense and event/action nouns). The characterization of Balles (2004: 48) that *-h_2 indicated "Ent-Individualisierung" is also clearly false. However, it would be equally wrong to maintain the opposite: that *-h_2 fundamentally marked individualization. The individualization seen in Lycian *-aza* and other endocentric *-h_2 derivatives reflects merely the substantivizing function of the suffix: 'the X one'.

[13] Each of the examples cited has its own history. For French *-esse* see Nyrop 1903: 2.289–95 and for German *-in* the older treatment of Wilmanns 1899: 2.309–13 and the more recent account of Jobin 2004: 50–3. The only point for our present purposes is that at all eras the typical pattern in Indo-European is for dedicated feminines to be derived from masculines and not vice-versa (notwithstanding exceptions such as English *widow* → *widower* or German *Witwe* → *Witwer*). I cannot here undertake to review or evaluate the provocative claim of Jobin (2004: 3–4 in summary and chapters 6 and 7 in detail) that German *-in* has undergone grammaticalization and is becoming an inflectional marker.

Rather more promising is the suggestion of Balles (2004: 48) that *-h_2 marked appurtenance. This characterization is also per se insufficient, since PIE had other secondary suffixes with that basic function. What may be special about *-h_2 is that it marked belonging to a set or group (NB not an active role per se, hence the lack of nominative singular *-*s*). This function is transparent in the endocentric examples cited in 2.1 above. Similarly, the collective pluralia tantum such as Hittite *warpa* 'enclosure' refer to inanimate objects that consist of matching parts that fit together to make a set. Such a meaning is admittedly far less obvious in the case of abstracts and event nouns such as Lycian *arawa-* 'freedom' or Greek *τομή* '(a) cutting'. However, as per Luraghi (2009b: 119), feminine event nouns tend to refer to "a single instantiation of the activity," which may (though it certainly need not be) regarded as a reflection of *-h_2 as marking one of a set. Likewise, we may be permitted to suppose that abstracts like *arawa-* 'freedom' originated as *'the quality shared by all instantions of being free'. I readily concede the speculative nature of the last statement, but it does seem at least compatible with the use of *-eh_2 to form *factitive* verbs: *$ne\underset{\cdot}{u}eh_2$- 'to make new', i.e. 'to instantiate the quality of newness; to add another instance to the set of that which is new'.

Various factors, most notably our inability to identify with any assurance its reflexes in Anatolian, make it even more difficult to identify the primary function(s) of the *-ih_2 form of our suffix. However, as emphasized by Balles (2004: 48), if we make the plausible assumption that the -*ī* of the Italo-Celtic genitive singular ending (NB without -*s*!) reflects *-ih_2, the basic appurtenance sense is directly attested. As Balles also suggests, Greek *λύσσα* 'rage' also points to the use of *-ih_2 to form abstracts. Note also Sanskrit *śácī-* 'might' etc. (Wackernagel-Debrunner 1954: 405–7) and likely reflexes in Germanic (Casaretto 2004: 146ff.). As noted above, direct evidence for a collective sense of *-ih_2 appears to be lacking, but we have some reason to infer that examples of the "*vṛkt́i*-type" such as Sanskrit *rathī́-* 'charioteer', with the singulative *-*s*, are parallel to that of /*Krḗtas*/ 'inhabitant of Krete' < *Κρήτᾱ* 'Crete' (compare Balles 2004: 46–9). A truly convincing scenario for the development of the feminine gender is likely to remain elusive until someone can provide a more explicit unified account of the functions of both the *-eh_2 and *-ih_2 suffixes than the very sketchy ideas presented here.

3.3. As indicated above in 1.7, I do not believe it is necessary or wise to attempt to explain the rise of the feminine gender in terms of a single factor. The coexistence of endocentric nouns referring to persons and

abstracts/event nouns (and also collective plurals) would have favored some reanalysis of the latter two types as the first. Vine (2006: 150–1) entertains two scenarios for the Latin *i*-stem *cīuis*: an endocentric masculine 'the socially close one' *or* a back-formed singulative from an abstract '(member of) society, citizenhood'. Likewise, I see no way to determine whether PIE *$*h_2\underset{\smile}{\mu}id^hé\underset{\smile}{\mu}eh_2$- 'widow' (animate and in Core Indo-European feminine), based on *$*h_2\underset{\smile}{\mu}id^hé\underset{\smile}{\mu}o$- 'belonging to the fatally struck' hence 'bereaved' (thus Tichy 1993: 16) represents an endocentric *'the one belonging to the fatally struck, the bereaved' or a back-formed singulative from an abstract *'(state of) belonging to the fatally struck, bereavement' or from a collective *'the family of the fatally struck'. For *$*g^uen\text{-}h_2$, *$*g^un\text{-}éh\text{-}s$ a singulative from a collective (set plural) can be envisioned if one regards the set in question as the wives belonging to an extended family living in one household, but I would not wish to make a definitive choice between this and an endocentric *'the female one'.

4. Conclusion

I have no illusions that I have come close to "solving" the problem of the rise of the Indo-European feminine grammatical gender. The preceding discussion at best leaves many open questions. I do hope to have brought to bear on the question a previously neglected factor, endocentric secondary derivatives in *-$(e)h_2$ referring to persons, that at a minimum requires a major reassessment of the sum of the evidence.

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