## Hittite evidence and the myth of the amorphous neuter

A view which has been repeated by Indo-Europeanists for generations is that the referents of neuter nouns were originally not only exclusively inanimate but were almost entirely, if not wholly, masses or abstractions normally incapable of occurring in discrete units (Brugmann 1906-11: 2.86; Puhvel 1994: 257). It is associated with the proposal of similar longevity, first made by Schmidt in 1889 and still current today, which holds that the neuter plural forms belonged earlier to singular collectives and were originally identical to those attested as the nominative singular of the distinctively feminine nouns. The two views are interdependent, for the belief that the referents of the neuter were primarily formless would explain why the neuter nouns could have remained without plural forms for an appreciable length of time during which their animate counterparts were inflected for number. It would also explain why, when forms were eventually produced to compensate for the lack of neuter plurals, they would have been separate derived nouns which functioned as singular collectives for a period of some duration prior to their incorporation in the inflection of the corresponding neuters.

A few years ago I attempted to demonstrate that Schmidt's proposal concerning singular collectives should be rejected (Brosman 2000). The first difficulty it faces is that Schmidt's fundamental assumption that all instances of  $\bar{a}$ ,  $\bar{\iota}$  and  $\bar{u}$  were in each case originally identical phonologically is now known to have been false and that in the absence of a consensus concerning the number and effects of the laryngeals, from the point of view of phonology alone it must be considered uncertain whether the forms of the feminine singular and neuter plural were originally the same. It was noted further that there are other reasons for holding that they were not. For example, it appears that the distinctively feminine forms originated later than those they are held to have spawned, for there is evidence indicating that the feminine forms arose after the separation of Anatolian, whereas those of the neuter plural are shown by the correspondences among them between Hittite and Indo-European already to have existed in Proto-Indo-Hittite. It also appeared from other evidence that none of the

feminine types was originally associated with collectives. However, the bulk of the previous discussion was devoted to providing a satisfactory response to the traditional citation of the use in Greek of singular verbs with neuter plural subjects as showing that the neuter plural forms were originally singular collectives. Concerning this point it was proposed that the Greek usage and similar constructions found more recently in Hittite can be explained on the basis of the large-scale formal confusion which should have occurred among the neuter nominative-accusative forms upon loss of the laryngeal plural suffix and the restricted circumstances under which neuter subjects would usually have been employed.

The view concerning the formless nature of the referents of the neuters was also mentioned in connection with Schmidt's proposal. The position taken concerning it was that it too should apparently be rejected. However, support for its rejection was limited to pointing out that there is evidence to indicate that a minority of neuter nouns referring to animate creatures was in existence from a time prior to the separation of Anatolian through the period of Indo-European unity (Brosman 1979: 231-2) and that there is thus no reason to think that a considerably larger number of neuters with unitary inanimate referents would not originally have also occurred (Brosman 2000: 15). Verification of the proposal that an appreciable proportion of neuters referred to count-nouns would not have been difficult, since an abundant source of pertinent evidence remained unexamined from this point of view. However, it would have been a lengthy process constituting a digression likely to double the size of the article containing it. For this reason the proposed rejection of the traditional view concerning the referents of the neuters was allowed temporarily to remain plausible but unproven. Now, after an interval greater than originally anticipated, the present article is intended to initiate its verification.

The source of unexamined evidence is of course Hittite, the attestation of which is more than abundant enough to be significant, yet not so great as to be unmanageable by an individual. When the traditional view of the neuter was stated by Brugmann, it was necessarily based solely on the material in the older Indo-European dialects, though it is not clear to what extent it was founded on systematic examination of the neuter forms in the various dialects rather than on the impression that a large proportion of the neuters possessed refer-

ents which were masses or abstracts or were at least capable of being viewed as such. Moreover, regardless of how the evidence was gathered, its interpretation may be presumed to have been influenced by preconceptions encouraged by acceptance of Schmidt's proposal concerning the neuter plural, as is suggested by the passage from Brugmann (1906–11: 2.86) cited here earlier, in which his view concerning the referents of the neuter and Schmidt's explanation of the neuter plural are combined in the same paragraph. However, the traditional view concerning the referents has continued to be repeated since the discovery of Hittite produced an additional source of evidence concerning the matter. Although Hittite provided a convenient means of determining whether it could be confirmed, no one has attempted to do so.

Only a cursory look at the neuters contained in the dictionary of Friedrich (1952-66) and its supplements would have been required to see that the Hittite evidence apparently conflicts with the view that the referents of the neuter were originally formless. What follows is a preliminary survey of such forms which includes, with one notable exception, almost all of those consistently attested as neuter. It indicates that the proportion of neuters with unitary referents was substantial to say the least.

It should be stated at the outset that it seems fairly safe to say on an impressionistic basis that a majority of the Hittite neuters was composed of abstracts. However, the reason for this was the remarkable productivity of the abstract r/n- stem suffixes in -(a)tar, -(es)sar, -war and -mar, which is known to have occurred in Hittite and thus to have no bearing on original conditions. For this reason no attempt was made to collect and count the forms containing these suffixes. They thus constitute the previously mentioned exception to the statement that almost every noun in Friedrich's dictionary consistently occurring as a neuter has been included here.

The other *r/n*- stems present a different picture. The forms considered to belong to this group numbered twenty-four or -five, depending upon whether *sakkar* and *zakkar* 'excrement' are regarded as one word or two. The referents of twelve could be identified with considerable confidence as unitary: NINDA *arpamar* 'a pastry', *asawar* 'fold, pen', *harsar* 'head', *ispatar* 'spit', *karawar* 'horn, antlers', *lammar* 'a short unit of time', *mukar* 'a (musical) instrument', *pattar* 'tray', *pattar* 'wing', *suppiwashar* 'onion', *uttar* 'word, thing' and GIŠ wessar 'a

tree or its wood'.¹ It should be noted that Puhvel (1984-: 2.298) holds asawar to have been an original verbal noun in -war derived from es-, as- 'sit'. However, the etymology seemed too doubtful semantically for acceptance, since the forms cited in its support, PIE \*ni-sdo- 'nest' and Got. sitls 'seat, nest', do not provide parallels.

Nine or ten forms were classified as mass-nouns or abstracts: eshar 'blood', itar 'way', mehur 'time', pahhur 'fire', pankur 'relationship', sakkar and/or zakkar 'excrement', sehur 'urine', sessar 'beer' and watar 'water'. Although itar clearly contains the productive abstract suffix -tar, it was included here because its Indo-European correspondences show that it was produced prior to the proliferation of such forms in Hittite. It should also be mentioned that mehur could be used as 'season' or 'occasion' and as such could be pluralized (Puhvel 1984: 6.110). However, it was decided to include it in the present category, as was done with watar, which also possessed plural forms.

The final three forms, *huitar* 'beast(s), fauna', *tiessar* 'forest' and *satar* 'an injury or malady of some sort', could not confidently be categorized. Although *huitar* was often used collectively, as in *huitar human* 'all wildlife', it could also occur in the plural, as in *huitar humanda* 'all beasts' (Puhvel 1984: 3.352–3). How *tiessar* was employed could not be told, while even the meaning of *satar* was uncertain.

The number of *r*- stems found was fourteen. The *r*- stems were thus distinctly fewer than the *r/n*- stems, even after removal from the latter of the forms containing a productive suffix. From the present point of view, however, the results were similar. Six *r*- stems seemed certainly to be count-nouns: <sup>DUG</sup> huppar 'bowl', kessar 'hand', <sup>UZU</sup> kudur 'body part of an animal', sawatar 'horn (instrument)', waksur 'a container and measure' and zamankur 'beard'. Five were apparently massnouns or abstracts: aniur 'ritual', happar 'commerce, compensation', kuptar 'refuse', kurur 'enmity, warfare' and sessur 'irrigation'.

Again three forms could not readily be classified: GIŠ hasduir 'twig(s), brush', parsur 'a dish or course (of food)' and kuwankunur, defined by Friedrich as 'current, flood (??)' and by Puhvel (1984-: 4.254) as 'boulder (?)'.

It should be mentioned that Puhvel (1984-: 4.160-5) identifies *kessar* as common. The identification is not inadvertent, for he later

<sup>&</sup>lt;sup>1</sup> Since all of the neuters surveyed here can be located in Friedrich's dictionary or one of its supplements, they will not be cited individually by page number

states that Tischler was incorrect in giving its gender as neuter. However, since he offers no reason for this position, he presumably was relying on the attestation of kessar-sis 'his hand' in the Law Code. As Friedrich (1960: 116) has noted, this example is matched by the equally incongruent ŠU-as-set 'his hand', which also occurs in the Law Code and in which the genders are reversed. Therefore the original view concerning the gender of kessar, which Tischler shared with Sturtevant (1951: 96), Friedrich (1960: 116) and Kronasser (1966: 275), has been accepted here. On the other hand, hekur 'rock, cliff, sanctuary', which was also presented by Friedrich in his dictionary as neuter, has not been included here, since Weitenberg (1984: 154, 435) has cited evidence that it was treated at least on occasion as common. It should also be observed that the synonymous common a- stems kessara- and huppara- occurred beside kessar and huppar. However, rather than being instances of unexplained variation in gender as well as in declension which would have caused the exclusion here of kessar and *huppar*, these forms were merely examples of the thematicization in Hittite of inherited neuter r- stems. As I have noted previously (Brosman 2002: 11-2), thematicization in Hittite differed from the similar Indo-European development in that both neuter and common forms were typically thematicized there as common. Several additional examples of this process will be seen in the course of what follows.

The n- stems were also fewer than the r/n- stems. Eighteen neuters occurred as n- stems, including four which varied with a- stems because of confusion between the a- and n- stems resulting from their common possession of nom-acc. sg. -an. From the present point of view the evidence was largely consistent with what has been seen thus far. Seven forms possessed unitary referents. Included were four of those consistently occurring as n- stems, laman 'name', sekan 'ell', URUDU tekan 'pickaxe' and tetan 'breast', and three of the four a(n)stems, GIŠ eva(n) 'an evergreen tree', karza(n) 'spool' and NINDA saramma(n) 'a pastry'. In the case of eva(n) Puhvel (1984-: 2, 254) cites evanan, an accusative singular of indeterminable gender, as occurring once beside a single instance of the specifically a- stem nom.-acc. eya and numerous examples of the ambiguous nom-acc. eyan shared by the a- and n- stems. Presumably eyanan was a common a- stem accusative belonging to a form resulting from the maticization of the n-stem of eya(n) parallel to the manner in which kessara- and huppara- were

produced. It is possible that another example of the thematicization of a neuter is to be found among the forms attributed to saramma(n), which is attested almost exclusively in the plural. In addition to several typical a- or n- stem nominative-accusatives Friedrich includes NINDA HI.A saramnas, indicating his surprise at its occurrence by an accompanying exclamation point. If this form is to be explained, it apparently must be as a thematicization of saramman, in which the common nominative plural ending -as could have been substituted for acc. pl. -us. It should also be mentioned that Puhvel (1984-: 4.117) seems inclined to consider the form given as karza(n) more likely to have been a concretized r/n- stem abstract, in which the sporadic loss of -r has occurred in nom.-acc. \*karzar, than an a(n)- stem. However, because of the consistent absence of -r from three occurrences of karza, the only form of the word attested in the nominative-accusative, this view was thought to be unlikely.

The number of forms apparently referring to masses or abstracts was eight: ezzan 'chaff', henkan 'death', isuwan 'refuse', maskan 'compensation, tribute', nahhan 'respect, awe', sahhan 'feudal tenure or servitude', taksan 'middle, joint' and the remaining a(n)- stem ewa(n) 'a cereal'. Although all of the forms of ewa(n) presented by Friedrich would be appropriate for an a- stem, the more abundant attestation cited by Puhvel (1984–: 2.321) includes some belonging unambiguously to the n- stems.

For yet a third time the number of words considered ambiguous was three: *inan* 'disease, ailment', *kussan* 'wages, fee, price' and *mudan* 'a type of food for dogs and pigs'. The only attested occurrence of *mudan* is in the plural. *Kussan* is also found in the plural, as is plausible in the case of a word which could mean 'fee' or 'price'. The same is true of *inan*, which often referred to localized ailments of a variety of body parts, several of which could occur simultaneously (Puhvel 1984-: 6.195; 4.290-1; 2.365-6). It should be mentioned in connection with the citation of plural forms here and elsewhere that in view of the number of count-nouns encountered thus far and in what follows, it should become clear before long, if it has not already done so, that in Hittite the neuter plural must have served as a genuine plural rather than as a collective or augmentative of some sort.

The *l*- stems numbered thirty-three. They were more numerous not only than each of the other types examined thus far but than any of those to follow with the exception of the *i*- stems, which will be seen

later to have been by far the most abundant of the forms collected here. Otherwise the evidence concerning them was similar to what has previously been seen. Fifteen *l*- stems appeared to possess unitary referents: *alil* 'flower', <sup>GIŠ</sup> *hahhal* 'shrub, bush', *huhupal* 'a musical instrument', *katral* 'a bronze part of the harness', <sup>GAD</sup> *kazzarnul* 'a piece of cloth', *gazzimuel* 'a leather part of the harness', <sup>GIŠ</sup> *kurtal* 'a receptacle', *parsiul* 'crumb', <sup>GIŠ</sup> *sesarul* 'sieve', <sup>GIŠ</sup> *siyattal* 'blade (?)', *suel* 'thread, string', *suppal* 'an animal', <sup>NINDA</sup> *tawaral* 'a pastry', *dammashuel* 'a variety of pear tree' and *wenal* 'prop, pillar, pole'. Among them were two, *alil* and *suppal*, involved in additional examples of the thematicization of neuters as common *a*- stems, though only in the case of *suppal* was the *a*- stem noted by Friedrich (Puhvel 1984-: 1.32).

One of the forms above, *suppal*, is noteworthy as one of two Hittite neuters found thus far which can be identified as having an animate referent. It therefore was discussed previously in connection with the Hittite contribution to the evidence cited here earlier as indicating that a minority of neuter nouns referred to animate creatures prior to the separation of Anatolian. At that time (Brosman 1979: 228) it was pointed out that the referent of the explicitly neuter form nom.-acc. pl. suppala is described as capable of locomotion and subject to becoming ill and subsequently dving in two occurrences in a passage in the Law Code dealing with the punishment of a herdsman who allows his infected livestock to mingle with the previously healthy animals of another (Friedrich 1959: 74). It may be added here that the consistent use of neuter pronouns as replacements for suppala in the same passage verifies that *suppal* was indeed neuter in gender as well as in form. Since the common a- stem suppala- is attested, as was indicated above, and nom.-acc. suppala is ambiguous as to stem, though not as to gender, the previous discussion considered it possible that *suppala* belonged to a variable a- stem rather than to suppal itself. However, it was written before the discovery that Hittite neuters were thematicized as common.

The number of *l*- stems apparently referring to masses or abstracts was fourteen: *assul* 'well-being, good treatment', *hapalzel* 'stew, soup', *hurkil* 'horror, abominable deed', *imiul* 'mixture', *ishiul* 'binding, treaty', *memal* 'groats', *pahsuil* 'horse fodder', *parganul* 'capacity to heighten (?)', *pittul* 'enlacing', *sarnikzel* 'atonement, compensation', *tayazzil* 'theft', *taksul* 'friendship, peace', *dalugnul* 'capacity to lengthen (?)', and *wastul* 'sin'. Although dishes or courses of food will

usually be regarded here as ambiguous, as in the case of *hurutel* below, it was decided to include *hapalzel* among the mass-nouns since Puhvel (1984-: 3.118) appeared to be correct in holding it to refer to a type of stew or soup in the passage which he cites. It thus seemed that the contents of the dish qualified as a mass, though it remains possible that the dish as a whole could be treated as a unit. It should also be mentioned that the occurrence of *assula*- beside *assul* provided another instance of a common *a*- stem resulting from thematicization of a neuter. This latest example is of some interest, since unlike *suppal*, *alil* and the other thematicized neuters encountered thus far, *assul* was unquestionably an abstract. Thus one apparently need not consider the question of whether an incipient tendency to reduce the number of neuters with unitary referents by rendering them animate played a role in determining the manner in which neuters were thematicized.

Four forms were regarded as ambiguous: hurutel 'sacrificial meal or dish', ishiyal 'band, belt', tawal 'a ceremonial drink' and pul 'lot (?)'. Although ishiyal consistently possessed concrete unitary referents, it seems clearly to have been derived from ishiya- 'bind, wrap'. If considered in isolation, it therefore might be taken to have been a wholly concretized original verbal abstract. However, since an abstract stemming from ishiya- is certainly attested in ishiul 'binding, treaty', which contains the suffix seen also in assul, imiul, pittul and wastul, one cannot rule out the possibility that ishiyal was derived to refer to an instrument.

The o- (> a-) stems differed from the other Hittite nominal types in that they apparently arose only shortly before the separation of Anatolian. Among others, a sign that they were distinct in origin from the athematic nouns is their (nominative-) accusative in -m as opposed to zero everywhere else. Evidence that they indeed arose later is provided by the extremely small number of precise correspondences between the PIE o- stems and the a- stems of Hittite, which indicates that they originated prior to the separation of Anatolian but were still of modest importance at the time of separation and that the vast expansion which made their reflexes by far the most important class both in Hittite and among the traditional Indo-European languages was largely carried out through two similar but separate developments. Although it might seem possible that their relatively recent origin would have rendered them less reliable as a reflection of original conditions than the other neuter types, it was apparently of no conse-

quence, for the evidence concerning them did not deviate significantly from that of the other forms.

Twenty-three *a*- stems were found. Since this figure falls within the range of what could be called typical for the other Hittite neuter types, it seems clear that the Hittite neuter *a*- stems, unlike their common counterparts and the *o*- stems of both genders in Indo-European, hardly participated in the expansion which otherwise greatly increased the number of original *o*- stems. Like the different form taken by thematicization in Hittite, their failure to be involved in the expansion provides another reason for holding it to have taken place separately in Hittite and Indo-European. It also may help explain why the *a*- stems apparently can serve as well as any other class to represent the semantic characteristics of the Hittite neuter.

The number of forms with unitary referents was apparently eleven: GIŠ ariyala 'an implement', URUDU ardala 'saw', DUG halwattala 'a container', NINDA hazizita 'a pastry', hupala 'net', galamma 'a part of the door', lammaya 'a container of copper', GIŠ tarsa 'shoot (?)', KUŠ tarusha 'a leather part of the harness', UZU titita 'pupil' and zaha 'a metal object'. Tarsa, which apparently occurs in the plural in its only example, refers to something on a tree which the tree is said to have put forth (Goetze 1938: 97). Although galamma, which is defined by Friedrich as 'a part of the door', is held by Puhvel (1984-: 4.18) to have meant 'broom' or 'rake', it would presumably have referred to a concrete unitary object in either case.

The referents of nine a- stems were apparently abstracts or masses: ara 'right, propriety', arziya 'cultivated land', kusata 'dowry', peda 'place', sarupa 'quarrel, conflict', senahha 'ambush (?)', siyanta 'an intoxicating beverage', siptamiya 'a liquid' and teriyalla 'a beverage'. Friedrich, who cited only one formally ambiguous example, identified arziya as an n- stem and gave its meaning as 'granary'. However, the slightly more numerous forms presented by Puhvel (1984-: 1.187) include gen. sg. arziyas, which indicates that it was an a- stem, and make clear that its apparent occurrence as something on the order of 'granary' was a single instance of figurative use.

The final three forms were left unclassified: UTÚL haramma 'a dish or course (of food)', yuga 'yoke' and pahhisa 'stump, stick (?)' or 'barley (?)'. Although yuga possessed a concrete unitary referent in Hittite, it could plausibly have been a concretized abstract if, as is commonly stated, it had been derived from the extended verbal root

\*yew(g)- 'join'. However, its Indo-European cognates indicate that its etymon had acquired its concrete meaning prior to the separation of Anatolian. Moreover, the rarity of Hittite a- stems with precise Indo-European cognates suggests that yuga could literally have stemmed from one of the few original o- stems, which in that case was not derived directly from \*yew(g)- but presumably arose somehow from an earlier athematic nominal form.

Nineteen *u*- stems were encountered, including eleven identified as possessing unitary referents: <sup>GIŠ</sup> allantaru 'oak', ekdu 'leg', halentu 'a royal building', hattalu 'bolt', kapru 'throat', kapunu 'a unit of superficial measure', <sup>UZU</sup> genzu 'lap', lalu 'penis', miumiu 'a pastry', taru 'tree, wood' and wattaru 'spring'. It should be noted that allantaru and taru are both attested in the plural, as are genzu, miumiu and, more often than not, halentu (Puhvel 1984-: 1.29; 4.154; 6.174; 3.19; Weitenberg 1984: 49).

The number of forms apparently referring to masses or abstracts was seven: assu 'wealth, health', halenzu 'foliage', ishahru 'weeping, tears', iwaru 'inheritance, dowry', lulu 'prosperity', suwaru 'a substance' and welku 'vegetation'. The final form, arsanu, apparently meant 'flow, course, current' but is attested once in the plural among three occurrences.

Beside the forms of both *taru* and *welku* there occurred nominative-accusatives in – u(w)an. In the case of *taru*, GIŠ -*ruan* is attested but once, in a fragmentary passage. Although Friedrich identified it as a common accusative singular, Weitenberg (1984: 280) has shown that it was neuter. Several instances of *welkuwan*, a neuter apparently identical in meaning to *welku*, are found. Concerning the nature of the apparent extensions there is disagreement. From a purely formal point of view the extended forms could have belonged to one of three types, the *a*-, *nt*- or *n*- stems, each of which has been suggested (Weitenberg 1984: 180–1, 281). However, since Hittite neuters were regularly thematicized as common, the view here is that secondary *a*- stems are improbable. Whatever the uncertain origin of the extended forms may have been, it seems clear that *taru* and *welku* were consistently neuter *u*- stems.

It may be mentioned at this point that several years after completion of the supplements to Friedrich's dictionary Weitenberg (1984) published a collection of the Hittite *u*- stems which at the time that he wrote was essentially complete. It therefore was decided to compare

the neuter *u*- stems in Weitenberg's work to those included here in order to obtain an indication of the possible effect upon the present survey of the restriction of the forms on which it is based to those published by Friedrich. It was found that the inclusion of the *u*- stems gathered by Weitenberg would have added only three reliable examples to those presented here, among which two, *peru* 'rock, cliff' and *samlu* 'apple', possessed unitary referents and one, *saru* 'booty, loot', was apparently a mass-noun. It thus appears that, if the *u*- stems can be taken as a sample more or less representative of the other declensions from this point of view, the restriction placed upon the evidence treated here would not have altered it significantly. It may also be noted that, as will have been observed, although the forms treated here are confined to those presented as neuters by Friedrich, evidence from other sources concerning their meaning or gender has not been excluded.

In addition to the zero-grade *u*- stems discussed above, Hittite possessed *au*- stems, which, however, were approaching elimination by the time of its attestation. Only three neuter *au*- stems were found. Two had unitary referents, *harau* 'poplar' and *tanau*, defined as 'a tree' by Friedrich and Weitenberg (1984: 264) and more specifically as 'fir' by Puhvel (1984-: 3.142), while the third, *sishau* 'sweat', was presumably a mass-noun.

There also occurred *ai*- stems parallel to those in -*au*-. Like the latter they were in the process of being eliminated, though the stage which they had reached was somewhat less far advanced. Nine neuters possessed *ai*- stem forms, perhaps seven of which did so exclusively. All but two apparently possessed unitary referents. Included were four of five forms certainly attested consistently as *ai*- stems, *hasuwai* SAR 'an alkaline plant', UZU sisai 'tooth (?)', tallai 'a container' and zalhai 'a container', which occurred alongside the abstract *uwai* 'woe, plaint'.

A sixth form, which may also have preserved an *ai*-stem unaltered, is the second of the two neuters identified as having an animate referent. It is SAL *hazgara(i)*, defined as 'a woman of a certain status or function' by Friedrich and held by Puhvel (1984-: 3.280) to have meant 'female percussionist'. Attested exclusively in the plural, it is found several times as a nominative with each of the endings -*ai*, -*a* and -*aya* and once in the dative as *hazgarayas* (Puhvel 1984-: 3.280-1). Although Friedrich regarded it as being of uncertain stem and inflection, the combination of an oblique form in -*aya*- and nominatives in -*ai* 

and -ava points to an original neuter ai- stem which may have become heteroclitic through the acquisition of an a- stem variant but is more likely to have been retained unmodified. It is plausible that -a as well as -ai is an inherited ai- stem nominative-accusative ending, one which resulted from the loss of -y- between like vowels in \*-aya-. However, it is also possible that -a is an analogical a- stem ending modelled on the occurrence of apparent a- stem forms in unattested oblique cases produced by the same loss of -y-. In either case the presence of -yin the attested oblique form and nom.-acc. -ava must result from the analogical restoration which often took place in the same forms of the other ai- stems and the i- stem adjectives. It is because of the reconstitution of -aya in the nominative-accusative plural that it appears probable that *hazgara(i)* was consistently treated as a neuter *ai*-stem. Another question rasied by it is that, though it is neuter in form, it possesses a referent which is indisputably animate. However, although Puhvel identifies it as common, since its forms are unambiguously neuter regardless of the declension to which they may belong and the attestation of suppal shows that a Hittite neuter could have an animate referent, there seems to be no reason not to accept *hazgara(i)* as an inherited neuter ai- stem.

The remaining three forms included one, hupuwai 'pot', which may have varied with an a-stem, and two, hastai 'bone, strength, a measure of length' and zapzagai 'glass', which displayed confusion between the ai- and i- stems. In the case of hupuwai, nom.-acc. hupuwaya occurs in a few instances in which it could have been either singular or plural (Puhvel 1984-: 3.396). If singular it would have belonged to an a- stem variant which, unlike the possible a- stem forms of hazgara(i), would have contained an extension in -a-. However, since Hittite neuters were typically thematicized as common, it is probable that hupuwaya was a plural form. It will be seen later that only one possible additional example of the thematicization of a neuter as neuter was found. Although hastai is attested consistently as an ai- stem when occurring alone, it is found as an i- stem in the compound UZU danhasti 'twinbone'. Two of these forms, hupuwai and hastai, were included among those with unitary referents, while the third, zapzagai, was presumably a mass-noun. Although zapzagai could be used to refer to a container, it seems to safe to say that in its original meaning it designated a material. The frequent use of hastai to refer to bone as a material provided the basis for its figurative secondary meaning of 'strength'. However, since it was also used to refer to individual bones, as were its Indo-European cognates, it was decided that it belonged among the count-nouns. Support for this view is supplied by its use as a measure of length. Although 'unit of length' was presumably a secondary meaning acquired in Hittite, its development depended upon the earlier use of *hastai* with unitary referents.

That two-thirds of the *au*- stems possessed unitary referents could be due to chance combined with the small number of attested examples. However, in the case of the *ai*- stems, such an explanation could be only partially applicable to the similar proportion of count-nouns found among them. Although it might account for the rarity of *ai*- stem mass-nouns, it presumably was not a factor in producing the equal rarity of abstracts, which may be explained by the fact that among the *ai*-stems the common nouns were clearly associated with verbal abstracts, while the neuters were not (Brosman 2005: 191-4). Although one form, *uwai*, appears to be an abstract, it was not derived from a verb.

As was stated earlier, the *i*- stems were much more numerous than any of the other neuter types (apart from the remarkably productive r/n- stems). Eighty-three of them were found or about two and a half times as many forms as belonged to the *l*- stems, which were second to them in frequency among the neuters collected here. The status of the i- stems among the neuters thus is similar to their position among the common nouns, where they were outnumbered only by the extremely productive a- stems, and presumably is to be similarly explained. It seems safe to say that in both cases the forms appearing as i- stems in the Hittite texts include a considerable number which stemmed from Luwian, where the *i*- stems were notoriously productive, which may or may not have been incorporated in the Hittite vocabulary as loanwords. Forms in -i were also unusually common in Hurrian, which served as a frequent donor of loans to Hittite. That a sizeable proportion of the neuter i- stems were of Luwian origin rather than Hittite is not in itself of great consequence from the present point of view, since evidence from Luwian as well as from Hittite is relevant concerning the original semantic status of the neuter. However, as will be suggested shortly, the relatively large number of the *i*- stem forms apparently consisting of loanwords or foreignisms appears to have affected the nature of the evidence regardless of their source.

The *i*- stems also differed greatly from the other neuters with respect to the proportion of forms with unitary referents. Fifty-four of

them appeared to be count-nouns, or approximately two-thirds of their total number, a fraction comparable only to that found among three small groups of relics on the verge of extinction, the au- and aistems and the s- stems to be considered next. The forms involved were anahi 'sample (of food', armizzi 'bridge', assuzeri 'a drinking vessel', adupli 'cloak', GIŠ elzi 'balance, set of scales', hali 'pen, corral', hapsalli 'footstool', haputi 'lounge, chaise longue', hararazi 'millstone', hariulli 'a container', harmiyalli 'a stone', harsanalli 'wreath, garland', DUG harsiyallanni 'a small container', harsiyalli 'a container', hulali 'roll, spindle', hupiki 'veil', hupulli 'an implement', huttuli 'tuft of wool', huwasi 'column, pillar', iwuli 'wrap, surplice', GIŠ irhui 'basket', isgapuzzi 'a cult object', ismeri 'bridle, rein', ispanduzzi 'a wine container', istapulli 'lid', gagalturi 'a musical instrument', kariulli 'cape, hood', kattaluzzi 'threshold, sill', gazzi 'a container', kenupi 'a container', kishi 'chair', URUDU kullipi 'sickle', kurpisi 'a part of the helmet', kusisi 'robe, gown', kuskussulli 'mortar', kuttanalli 'necklace', lissi 'liver', namulli 'bed, divan', GIŠ nathi 'bed of state', pahhu(i)hali 'brazier or hot brick', GIŠ paini 'tamarisk', parashi 'a gem', GIŠ parnulli 'a tree and its wood', puriyalli 'muzzle (?)', sankuwalli 'an implement', sinapsi 'gatehouse', URUDU tapulli 'an implement', terippi 'plowed field', tuppi 'clay tablet', warpuzi 'a bronze implement', zarivanalli 'a bird (?), GIŠ zerivalli 'a stand for vessels', zipaddani 'a small unit of dry measure' and GIS zuppari 'torch'.

Of the other twenty-nine forms, sixteen were apparently massnouns or abstracts: appuzzi 'tallow, suet', halwati 'objection, protest', hapalki 'iron', hazziwi 'ceremony, ritual', issalli 'spittle', keldi 'health, weal', lukutri 'feudal service', luzzi 'public obligation', nitri 'natron (?)', pargasti 'height', dalugasti 'length', dankui 'lead', tukkanzi 'cattle fodder (?)', walhi 'beer', walwayalli 'slander (?), reproach (?)' and warri 'help'. One of these forms, keldi, was thematicized as common, bringing to two the number of neuter abstracts treated in this manner. It should be added that the meaning of keldi, unknown to Friedrich, was supplied by Puhvel (1984-: 4.142).

The thirteen remaining forms were considered ambiguous: asri 'shape, form, likeness, image', etri 'dish, meal, food', hali 'one of three watch periods during the night', hapattulli 'a dish or course', harpali 'heap, pile', harsiharsi 'thunderstorm', isuwanalli 'refuse heap', UTÚL gangati 'a vegetable dish', pupulli 'ruins (?)', sampukki 'a dish or course', telipuri 'an administrative post or district in provincial cities',

upati 'fief, feudal tenure (?)' and wassi 'remedy, salve'. Of these forms, five are attested in the plural: etri, hali, harpali, upati and, as often as not, wassi (Puhvel 1984-: 2.319; 3.25, 181).

It should also be mentioned that six additional forms, *api*, <sup>SfG</sup> *esri*, *irimpi*, *kappani*, *meni* and *miluli*, are presented as neuter *i*- stems by Friedrich but are shown by the more abundant attestation cited by Puhvel (1984–: 1.99; 2.313, 284; 4.57; 6.112, 124) to have been variable in gender.

It seems likely that the two respects in which the evidence of the *i*- stems deviates from that of the other forms seen here are to be explained in essentially the same manner. It has been seen that the extremely large absolute number of *i*- stems is probably due to the existence of an unusually great abundance of loanwords among them. It is plausible that the relatively large number of loanwords which they contain accounts also for the much greater proportion of *i*- stems with unitary referents. Most loanwords are introduced into a language as a result of the cultural borrowing of their referents by its speakers, which is usually accompanied by the entrance into the language of the borrowers of the word designating the borrowed referent in the speech of the culture serving as its donor. In the case of nouns, except on the learned level, the borrowed thing is more likely to be an unfamiliar object than an abstract concept or a shapeless mass and thus more often than not will introduce a word with a unitary referent.

Like the *ai*- and *au*- stems, the Hittite neuter *s*- stems were approaching elimination. Only seven forms corresponding to the *os/es*-, *is*- or *us*- stems of Indo-European were consistently inflected as *s*-stems. Because Hittite had generalized one vowel or the other of the inherited *os/es*- stems, these forms are attested as having stems uniformly in *-as*, *-is*, or *-us*. Six of them, *ankis* 'a plant', *ates* 'axe', *hupallas* 'skull or scalp', *iskis* 'back', *kalmus* 'crook, crozier' and <sup>DUG</sup> *purpuris* 'a container', possessed unitary referents, while the seventh, *kutris*, was an abstract. Although Friedrich defined *kutris* as 'brevity', Puhvel (1984-: 4.298) holds it to have meant 'reckoning, tally'. Either meaning would seem to fit suitably in the passages containing it cited by Puhvel. From the present point of view the difference of opinion is of little moment, since *kutris* would have been an abstract in either case.

Seven other forms showed variation between *s*- and *a*- or *i*- stems. Presumably it arose through the interpretation of nom.-acc. sg. -*as* and -*is* of original *s*- stems as the nominative singular of common *a*-

and *i*- stems. Included in the second set of forms were five more apparently with unitary referents, hapusa(s) 'penis', hanessa(s) 'a container', tapuwa(s) 'rib, side', NINDA wagata(s) 'a pastry' and hu(wa)lli(s) 'fir-cone', one mass-noun, nepi(s) 'sky' and one, danna(s) 'a meal, dish', which was considered ambiguous. Although Puhvel (1984-: 3.132) holds the word for 'penis' to have been a consistent s-stem, hapus, the dative-locative forms hapusas(s)i, which he rejects as erroneous spellings, indicate that Friedrich was correct in giving it as hapusa(s), for otherwise its few attestations are ambiguous, capable of belonging either to hapus or hapusa.

It also appeared that three of the inherited s- stems, ates, nepi(s) and iskis, had been thematicized. Although in the cases of ates and nepi(s) the resultant a- stems were common as was to be expected, the neuter form iskisa was apparently produced by thematicization of iskis. It is the only certain example of a neuter a-stem which occurred beside a synonymous athematic noun from which it could have stemmed via thematicization. On the other hand, the number of neuters seen here to have been thematicized as common has now risen to nine or ten. However, iskisa, which presumably corresponded to Gk. ἰσχίον 'small of the back' (Puhvel 1984-: 2.425), was also the only potential product of Hittite thematicization with a precise Indo-European cognate. It thus is possible that the explanation for its exceptional gender is that it did not result from thematicization but, as may have been true of yuga, stemmed from one of the few original neuter o- stems, which presumably arose somehow from athematic forms through a process other than thematicization (Brosman 2002: 11-2). At any rate, iskisa apparently did not result from thematicization which took place in Hittite.

That *kutris* was the only abstract among the words possessing s-stem forms is noteworthy, for the neuter s- stems are known to have been closely associated with abstracts in Indo-European (Brugmann 1906–11: 1.515–9). That the Indo-European association with abstracts developed in its entirety following the separation of Anatolian seems unlikely. It appears more probable that there had earlier existed to at least some extent a connection between the s- stems and abstracts, one which was retained or possibly expanded in Indo-European. In that case a plausible explanation for the virtual absence of abstracts from the s- stems of Hittite is that an unknown number of inherited s- stem abstracts had been eliminated by the expansion of the extremely productive abstract r/n- stems.

In view of the explanation suggested above, it might seem that the proliferation of the r/n- stem abstracts should not be entirely disregarded here. It could be held that although the abstract r/n- stems themselves originated almost entirely after the separation of Anatolian, in a number of instances they replaced inherited abstracts which would otherwise have remained in existence. Although this surely took place to some extent, how often it occurred must remain quite uncertain. Moreover, one cannot assume that the abstracts thus eliminated would all have been neuter, for there existed Hittite common forms, such as the ai- stems and those containing the suffixes -att- and -ma-, which were closely associated with abstracts. That, as could have been expected, the common abstracts were subject to competition from the r/n- stems is shown by the occurrence of pairs such as manivahhai- 'government' beside manivahhatar, hullanzai- 'battle (?)' beside hullanzatar or hullanzessar, karsatt- 'cutting' beside karsatar or karsessar and tassiyama- 'strength' beside tassiyatar (Brosman 2005: 191-2; Puhvel 1984-: 4.104; Kronasser 1966: 178). Apparently all that can be said about the consequences of the proliferation of the r/nstem abstracts is that to some unknown degree the proportion of abstracts among the neuters of other declensions was smaller than it would otherwise have been. Since the s- stems were being eliminated regardless of meaning, the s- stem abstracts presumably were especially vulnerable to replacement.

The final group of forms considered here included a small number of root nouns and consonant stems other than those in -s-. There were nine such forms, five with unitary referents, ais 'mouth', kir, kard 'heart', pir, parn 'house', isqarih, isqaruh 'a sacrificial container' and GIŠ tiyarit 'ox-cart (?)' and four mass-nouns, melit 'honey', purut 'clay', seppit 'wheat or barley' and tekan 'earth'. Although Friedrich included two additional forms given as happuriyant- 'vegetation' and marnuwant- 'a beverage', Puhvel (1984-: 6.81; 3.135) has shown that the latter was of variable gender and the former a variable a- stem. It should also be noted that although tekan was an n- stem in Hittite, its Indo-European correspondences show that it originally contained -m and that kard often occurred with an extension in -i-, which is attested also in Indo-European, where it was one of various extensions to a presumably original root noun (Pokorny 1959: 414-6, 579-80).

A summary of the forms surveyed here shows that 141 were classified as having unitary referents and seventy-seven or -eight as mass-

nouns or abstracts, while thirty-one were left unclassified. Although words with unitary referents predominated by a wide margin, a major factor in producing this result was the evidence of a single declension. the *i*- stems, which in addition to being the most numerous of the Hittite types by far, contained a much greater proportion of count-nouns than almost all of the others. It was seen that the probable reason both for their large overall number and for the high frequency of countnouns among them was that they included an unusually great number of loanwords. For various reasons three other sets of forms, the austems and those inflected at least in part as ai- or s- stems, equaled or exceeded the i- stems in the proportion of count-nouns they contained but because of their small size were of little consequence with respect to the total figures. Otherwise the evidence of the various declensions was remarkably close to uniform. When the i- stems and the three semantically similar groups of forms are removed, the overall figures become sixty-seven forms with unitary referents, fifty-six or -seven mass-nouns or abstracts and seventeen regarded as of uncertain classification. It must of course be acknowledged that the apportionment among the different categories necessarily was somewhat subjective at times. It should be added that the collection of neuters examined was slightly short of complete, for with certain specified exceptions forms of variable declension as well as of variable gender were omitted, as were a very few words which could not be identified as belonging to a recognized declension. Nevertheless, it seems safe to say that among the neuters in Friedrich's dictionary (other than the r/n- stem abstracts) those with unitary referents were approximately as numerous as those without them. There thus need be little doubt that within Hittite as a whole the number of neuters with such referents was substantial at the very least.

The evidence seen here cannot be held to disprove the traditional belief in an essentially amorphous neuter. However, it appears to place the burden of proof on those wishing to maintain it. Whatever the actual basis for the established view, Hittite is at least as likely to represent the original status of the neuter as is Indo-European. In fact, Hittite seems considerably more likely to do so, for in each set of total figures seen here a large majority of the forms represented belonged to original declensions which in Proto-Indo-European were nearly or wholly eliminated. The neuters of the *r*-, *l*-, *i*-, *ai*- and *au*- stems were virtually, if not entirely, eliminated in Indo-European

and those of the r/n- and u- stems and the root nouns were reduced to extreme rarity there. On the other hand, any conclusions concerning the neuter in the older Indo-European dialects must have been based on little more than the evidence of three declensions, the o-, s- and n- stems. Moreover, it is now known that the most numerous of these forms, the o- stems, cannot serve to represent original conditions, since most of them arose after the separation of Anatolian as part of the great expansion of the inherited o- stems which took place separately and somewhat differently in Hittite and Indo-European.

That the neuter s- stems were closely associated with abstracts in Indo-European seems certain. As was indicated here earlier, the association appears more likely than not to have originated prior to the separation of Anatolian, though how far it might have developed by the time of the separation cannot be said. However, in Hittite, where the s- stems were approaching elimination, only one such form referred to an abstract. The explanation suggested for the nearly complete lack of s- stem abstracts in Hittite was that an unknown number of them had been eliminated by the extreme productivity of the r/nstem abstracts. If this proposal is correct, in the case of the s- stems the Indo-European evidence may well reflect earlier conditions more accurately than that of Hittite. However, it is of limited significance, since the Indo-European s- stems were associated specifically with abstracts, not with formless referents as a whole, and the process proposed to have nearly eliminated the s- stem abstracts from Hittite also applied only to abstracts. Since both the o- and s- stems are largely irrelevant, Indo-European evidence potentially concerning mass-nouns is virtually confined to the n- stems.

Although it has been suggested here that acceptance of Schmidt's proposal concerning the origin of the neuter plural produced a predisposition toward belief in an originally amorphous neuter, it appears probable that in Indo-European most neuters were indeed abstracts or mass-nouns. As has been mentioned, in the article proposing rejection of Schmidt's explanation it was pointed out that the loss of the laryngeal plural suffix should have resulted in confusion among the neuter nominative-accusative forms, since before initial syllabics the loss of the suffix would have produced plural forms identical to those of the singular in every athematic declension. In addition, among some of these neuter types singulars identical to the other plural vari-

ant would have been produced in a few instances through the occasional lengthening of -i, -u and -n (and presumably of -r and -l as well) upon the loss of a following initial non-syllabic laryngeal (Brosman 2000: 11–3). It was suggested at the same time that one result of the confusion among the athematic neuters was an attempt to reduce its consequences by reducing the number of such forms (Brosman 2000: 16). This suggestion appears to have been confirmed more amply than was anticipated at the time that it was made, for it presumably is the principal explanation for the large-scale elimination of the neuter r-, l-, i- and u- stems which obviously took place. Although other influences may be assumed to have also been at work among the root nouns and the r/n-, ai- and au- stems, it probably was an important factor in the elimination of those forms as well.

If athematic neuters were eliminated on a large scale in Indo-European because of confusion among them as to number, the bulk of the forms eliminated should have possessed unitary referents, for it was among such forms that the confusion would have caused the greatest difficulty. Neuters referring to abstracts or masses, on the other hand, would seldom have required a plural and thus would more often have been allowed to remain until in this passive way they eventually came to constitute a sizeable majority.

Three obvious methods available for the elimination of the athematic neuters were complete elimination from the language, transfer to the animate > masculine and thematicization. It might seem that, contrary to what was suggested above, the use of thematicization would have had no effect on the number of neuters with unitary referents. since the thematicization of an athematic neuter as a neuter o- stem would merely have shifted it from one neuter declension to another. However, although this is certainly what often happened, not all thematicized neuters emerged as neuter o- stems. At some point following the separation of Anatolian the  $\bar{a}$ - stems arose. Once they were in existence, the o-stem neuter plural was no longer unambiguously plural. That the result was confusion between the  $\bar{a}$ - and neuter o- stems is well known. One consequence of the confusion was a reduction in the effectiveness, and thus presumably in the use, of thematicization as a means of solving the problem of number within the neuter nominative-accusative. What is more immediately pertinent is that regardless of their manner of origin, a considerable number of neuter  $\rho$ - stems became  $\bar{q}$ - stems. It therefore seems safe to

say that the ultimate result of the thematicization of an athematic neuter was fairly often a feminine  $\bar{a}$ - stem. The extent to which this was the case cannot vet be stated more precisely. However, what little evidence concerning this question was cited in the article on the origin of the neuter plural suggested that in Indo-European the thematicization of neuters yielded  $\bar{a}$ - stems perhaps as often as neuter o- stems (Brosman 2000: 6-8). It was reported then that examples of the Indo-European thematicization of forms attested as neuter in Hittite included three apparently certain instances of each type. The  $\bar{a}$ stems were Gk. πατάνη 'dish' and Lat. patera 'shallow sacrificial dish', which presumably resulted from extensions to each of the stems of the Hittite r/n- stem pattar 'tray', and Gk. καρδία. 'heart' (: Hitt. kardi-), while the o-stems were OIr. cride 'heart' (: Hitt.kardi-), Gk. πτερόν = Skt. pátram 'wing' (: Hitt. pattar 'wing') and Gk. οστέον 'bone' (Hitt. hastai). Less certain were proposals that the cognate of Hitt. henkan was thematicized as the  $\bar{a}$ - stem OIr. écen 'necessity' = MWel. anghen 'fate, destiny' and that, like kardi-, variable Hitt. hekur was represented by forms of each type in Skt. ágram 'point, tip' and OCS gora 'mountain'. It is also pertinent that except in the case of the uncertain henkan 'death', all of the forms cited, whether  $\bar{a}$ - or ostems, had unitary referents. Thus in addition to their relevance concerning the outcome of thematicization, they support the view that the athematic neuters eliminated in Indo-European were usually of that sort.

It thus appears that because of the confusion between the  $\bar{a}$ - and neuter o- stems, the use of thematicization as a means of eliminating the athematic neuters would have reduced the number of neuters with unitary referents to some extent. Although it would not have done so on the same scale as the other suggested means of elimination, the evidence seen here indicates that its effect would not have been negligible and could conceivably have been on a scale half as great as in the case of the others. In any event, since thematicization would have supplemented to at least some degree the reduction caused by the other methods, the large-scale elimination of athematic neuters which seems clearly to have occurred in Indo-European probably resulted in a substantial majority of abstracts and mass-nouns among Indo-European neuters. However, in that case another result would have been to invalidate Indo-European as representative of original conditions within the neuter.

The evidence considered here has led to three principal conclusions. One is that in Hittite the number of neuters with unitary referents was at the very least substantial. It also appeared that Hittite is a more reliable indicator of original conditions within the neuter then Indo-European, since a large majority of Hittite neuters belonged to original declensions which in Indo-European survived barely if at all. Finally, although it is likely that most Indo-European neuters referred to abstractions or masses, this situation can be explained on the basis of developments occurring after the separation of Anatolian. It therefore appears probable that the belief in an originally amorphous neuter is incorrect. Although more detailed investigation will be required before its rejection can be accepted without reservation, appearances at present are that the only difference between the referents of the two original genders was that nearly all words referring to animate creatures belonged to the animate gender.

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