

# TOCHARIAN

AND

## INDO-EUROPEAN

## STUDIES

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### Tocharian Plurals in *-nt-* and Related Phenomena\*

#### 1. Tocharian Noun Plurals in *-nt-*: the Problem

##### 1.1 The Data

Of the myriad Tocharian nominal plural formations one of the most widely attested is that which contains an element *-nt-*. In Tocharian B we find the invariant form *-nta*, where the final *-a* represents the neuter (more accurately collective) nom.-acc. plural ending, either athematic *\*-h<sub>2</sub>* or thematic *\*-eh<sub>2</sub>*, depending on one's views on Tocharian Auslautgesetz.<sup>1</sup> There are more than a hundred such plurals, which may be conveniently organized into the following groups.<sup>2</sup>

##### A. Loanwords (92)

< Sanskrit: *acār*, *acārānta* '(proper) conduct' < *acāra-* (m.); *śārtr*, *śārtrīnta* 'reliquiae' < *śārtra-* (n.). Note also cases of alternate plurals such as *akṣar*, *akṣarānta/akṣaranma* 'syllable'. < Khotanese: *kāṣṣf*, *kāṣṣṭrīnta* 'teacher' (masc.) < *kṣta-*. < "Middle Iranian": *amok*, *amokānta* 'art' (cf. MPers. *hmwǝg*).<sup>3</sup>

##### B. Nouns in *-e* (28)

1. < neuter *s*-stems: *ake*, *akenta* 'end' (= A *ak*) < *\*h<sub>2</sub>ékos*; *ṣatype*,

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<sup>1</sup> For the former see Pinault (1989: 89). Adams (1988: 128) argues rather for *-a* < *\*-eh<sub>2</sub>*. Van Windekens (1979: 189) and Ringe (1996: 35) allow for both possibilities. The question is immaterial for our present purposes, since a spread of the thematic ending to an athematic formation as elsewhere would be trivial.

<sup>2</sup> The following summary is based on the material in Adams (1999), to which I refer for all further details. Unless otherwise specified, all examples show "alternating" gender, with masculine concord in the singular and feminine concord in the plural (see Krause-Thomas 1960: 75) or limited evidence compatible with this type, which Adams straightforwardly calls "neuter". There is general agreement that this type does originate in PIE neuters (see e.g. Pinault, 1989: 67f.).

<sup>3</sup> Also loanwords (from Buddhist Hybrid Sanskrit or Prakrit unless noted): *akappi*, *akṣar*\*, *aranārs\**, *anulaksam\**, *apramani\**, *abhijñā\**, *abhiprāy*\*, *amāc* (masc.; < Khotanese), *asamkhyai\**, *asām\**, *āgat\**, *āyatam\**, *āhar\**, *indrī*, *iryāpāth\**, *upāy\**, *upeksindri\**, *uppāl\**, *kappi\**, *karmapāth\**, *kaṣṣy*, *kāmaguṇ\**, *krāke* (< Khotanese), *ganī\**, *gantharasopavitār\**, *cintāmanī*, *jātak\**, *tinār\**, *nastukārm*, *nāksār\**, *nivārām\**, *nirai\**, *pakaccām\**, *pañcavarīk\**, *paṭāk\**, *pannāk\**, *paramānu*, *pariṣṭār\**, *paryāri\**, *parso\** (< Middle Iranian; see Adams 1999: 360), *pāyiti*, *pāramit\**, *pāssakw\** (< Iranian), *praktār*, *pratisamvit\**, *pratihart\**, *prcyok*, *bodhyānt\**, *bhakti\**, *bhagandāla\**, *bhap/bhav*, *bhavānt\**, *bhājam\**, *bhūmi\**, *mankā*, *mahābhūt*, *mahābhūtaaravyi\**, *mahārsi*, *mārgānt\**, *mukthār\**, *raṭāni\**, *rātipat\**, *lakṣām\**, *lokadhātu\**, *vijñāni\**, *vibhakti\**, *vedam\**, *vedanākyi(f)\**, *waidm\**, *windm\**, *wirukti*, *wimokṣ\**, *wirot*, *wiṣai\**, *waipece* (< Iranian(?)); see Adams 1999: 612), *śāsaraji\**, *śikṣapāt\**, *soḍhām\**, *śrām\**, *samskrītalaksam\**, *sankrām*, *samādhi\**, *samudār*, *sūtār* (NB also *sutar*-(n)mal), *sparsakāy\**, *smṛtyupasthān\**.

šäypenta 'salve' < \*selpos (cf. A šäbyp, šäbypaŋ and Hesych. ἐλαρός); cake, cakenta 'river' < \*tekos.

2. < (masculine) o-stems: yärke, yarkenta 'honor' < \*(h<sub>1</sub>)erko- (= A yärk, yärkant; cf. Skt. arká- 'ray', Arm. erg 'song'); pelaične, pelaitkenta 'law' (m.) vs. simplex yakne, yaknem 'way, manner' (but A wäkäm, wäkanti) < \*weg'no- (formally = OIr. fén 'wagon').<sup>4</sup> Note especially the so-called "pluratives" in -aiwenta < \*oiwo-: ešaiwenta '[many] individual pairs of eyes' to eš 'eyes' (dual); misaiwenta 'pieces of meat/flesh' to misa 'meat, flesh' (pl. tantum!); ostuwaiwenta 'several groups of houses' to ostwa 'houses' (see on these forms Winter 1962: 115ff.).

C. Abstracts in -(ñ)ä (10)

palskañe, palskañenta 'thought, idea' < pälsk- 'think'.<sup>6</sup>

D. Verbal Nouns in -o (9)

palsko, pälskonta 'thought' (A pälsäk, pälskant); pilko, pilkonta 'look' (A pälk/pläk, pälkänwäs).

E. Verbal Nouns in -or (2)

äyor, äyornita 'gift'; yämor, yämornita 'deed'.

F. Other (19)

war, wranta 'water' (cf. A wär, wräntu); byam, byanta 'lake' (m.).<sup>8</sup>

The situation in Tocharian A is somewhat more complex. The most common and clearly the productive form of the matching plural ending is actually -ntu, where the final -u represents either \*-uh, or thematic \*-weh,<sup>9</sup>

< Sanskrit: arth, arthantu 'sense' < artha- (m.); šarir, šariräntu 'religiae'

<sup>4</sup> Also in all probability päke, pakenta (= A päk) 'part, portion'; pace Adams 1999: 363f., whose argument against makes no sense in view of yärke.

<sup>5</sup> Also here belong ästise (noun), äke, erepate (cf. A arämpät), ewe, ore (pl. wrenta), kariše, carke, ñ(y)äise, naumiye, pitte, puwe, pausye, mäncuške (mass.), ykäme, raitwe, lakie, wañenta (hapax), šätäläye, šäke, sarriwenta (see Adams 1999: 677). A special case is šaiyye 'Kleinivieh' with plural šánta, on which see below.

<sup>6</sup> Also ekañäie, ekañäie, aikamäie, ompalskoñäie, papäšorñäie, pemernäie, yolaiñäie, ykorñäie, isnanñäie.

<sup>7</sup> Also kälko, kräsko, tranko, yarpko, raso, šiko and tsamo. Note also the not obviously deverbal oko 'fruit' (= A), moko 'elder' (= A mok), and warito 'forest' (= A wärto).

<sup>8</sup> Other stems with plurals in -nt- are: ekañäi, keñänta (hapax), kerñä, trau, pärkä, (= A päрко), pärmank (= A), pitär\* (= A), pišäka, poyši (mass.), pratim (< A), mäskw, müfnäsi\* (?), yauyäk\* (?), läšänta (hapax), šalna, sawästa\*, spēlkäm (= A).

<sup>9</sup> The following survey is based on the material in Poucha (1955). On the final -u as reflecting \*-uh (via \*-wä) see Pinault (1989: 43 & 1997a: 219ff.). For -u < thematic \*-weh, see Adams (1988: 32 & 128) and Ringe (1996: 30f.).

< šarira- (n.).<sup>10</sup>

H. Abstracts in -me/-one (6)  
käswone, käswone(yät)ntu 'virtue' < käsu 'good'.<sup>11</sup>

I. Other Nouns in -e

1. Plural only in -entu/-ey(n)tu (11)

käcke, käckentu 'joy' (< kätk- 'rejoice').<sup>12</sup>

2. Alternating plurals (5)

ype, ypeyu/ypeyätntu 'land, country' (cf. B yapoy, ypauna).<sup>13</sup>

J. Other -ntu (41)

arämpät, arämpätäntu 'form, figure' (B erepate, erepätenta); oko, okontu 'fruit' (B oko, okontia); ñemi, ñemintu (B naumiye, naumiyenta).<sup>14</sup>

Tocharian A also has a type where the nominative/oblique plural (and sometimes the instrumental in -yo) shows merely -nt, while the other plural cases have -ntu/-nw- before the case ending, as well as a handful of cases of pure -nt.

K. Nom./Obl. -nt vs. -ntu/w+ (9)

klop, klopant, klopantyo, klopänwäs, klopänwäs, klopänwäm 'suffering, sorrow'; yärk, yärkant, yärkantyo, yärkänwäm 'honor' (B yärke, yarkenta); wäls, wälsantyo/wälsantyo 'thousand'.<sup>15</sup>

L. Pure -nt

näkäm, näkämant, näkämantyo 'reproach'; špäñ, špäñant, špäñasam 'sleep' < \*šwepno- (cf. B špane with no attested plural); wles, wlesant, wlesantyo 'work, service' < ??; äkär, äkrunt 'tear' (cf. B plural äkräna).

<sup>10</sup> Also loanwords (from Buddhist Hybrid Sanskrit unless noted): akappi, amok (< Middle Iranian), äpçy\*, ävahan\*, äsrap\*, inäri (beside inäriñi), kävvi, küsamul\*, kotär, granuh\*, ñare, tripiñak ävip, dhänu\*, näyü\*, nišänätär, pärami, piš-sašk, pñi, pratpaj, mankal, murcçä\*, vijñän, višay, \*ved, winän, wyäkšep, šäsär, šütsäpat, sañce, säntäk, sänuddät, swabhäp.

<sup>11</sup> Also om(ä)skane, knänmune, ciñrone, präkrone, istrassune.

<sup>12</sup> Also ääise, talke, räke, rape, rehwe, roté\*, wampe, wraske, šotre, säle.

<sup>13</sup> Also käbyme, käbymes/käbymeantwari, tampe, tampeñ/taampeyntu; yetwe, yetweñ/yetweyu/yetwey(ä)ntu; yepe\*, yepesyo/yepeyntu.

<sup>14</sup> Also äsä (astunt, asiänwac), äkäl, äy, opšäy, käryap, känd, käřsk, ken-päk (as noun ken-päikänwäs vs. adj. ken-päikäsam), cälpal\*, cinätamäñ (beside cinätamäñi), cmol (beside cmolwam), ñemi, ñom, tiri, inäm, nišpal, päk (beside päkäñ), päрко, prašt, praški, pälk/pläk, märkampal, rkät\*, lyälypu, wäsi (beside waštu), wär, šätädäy, šuräm, šol (beside šolan), šwäsi, šän, šäm, spēl, särm\*, säk, snum, spēlkäm, tsänär.

<sup>15</sup> Securely here are also: pälsäk, pälf(ä)skant, pälskänwam; manik, manikant, manikänwam, manikänwäsi; wär, wärant, wäränwam; wäkäm, wäkänwam, wäkänwäm; šilrm, šurmäñäñi, šurmanyo, šurmäñwä; ispok, ispokant, ispokänwam. Obviously, in cases where we do not have the nominative/oblique or instrumental plural, we cannot tell whether we have this type or consistent -ntu-. I have listed all such cases under the latter.

## 1.2 Previous Solutions

There is general agreement on the elaboration of this formation within Tocharian. The internal situation in A, particularly the existence of the types listed under K. and L. above, and the number of cases where A plurals in *-ntu* match B plurals in *-nta* assure us that the addition of the *-nt* is a specific secondary development within Tocharian A (see Van Windekens, 1979: 206f. with refs. and Pinault, 1989: 93). For Proto-Tocharian we may operate with a single plural marker in *\*-nt-* (with the added collective ending *\*(e)h<sub>2</sub>* in the nominative-accusative). While the rampant productivity of the formation makes it difficult to determine its starting point, the synchronically alternating gender of the overwhelming number of examples argues strongly for an origin in neuter nouns.

Proposals regarding the pre-Tocharian source of the *-nt-* plural marker have been less satisfactory. There have been essentially two lines of argument. Several scholars have suggested that the *-nt-* plurals arose in Tocharian in the same way as other plural markers such as *-nta*, namely from an originally derivational suffix by false resegmentation triggered at least in part by the differing loss of final syllables in the direct and non-direct cases of the relevant noun paradigms: see Petersen (1939: 76f.), Pedersen (1941: 70f.), van Windekens (1979: 200ff.), and Adams (1988: 128f.). There is no doubt that this type of account is valid for several of the nominal plural types in Tocharian, and in purely formal terms this mechanism would also work for stems with a derivational *nt-* suffix (see the discussion by Adams).

The problem with this explanation is the supposed starting point. Adams refers blithely to "neuter nouns in *-nt-*", as if such a type were well-established for PIE. He cites no examples, however, and in fact I know of no such nouns in PIE, much less a stem class. The other scholars cited are aware of the problem, but Petersen offers the only detailed and explicit solution: the Tocharian type originates in substantivized neuter participles in *\*-nt-*.<sup>16</sup> For example, he claims that an example like A *klōp* is originally 'the paining sensation' and that *yārkyarke* is 'that which honors'.

This account by which nouns with *nt-* plurals originate as effectively agentive participles is highly implausible in terms of both Tocharian and PIE. In Tocharian A such nouns refer exclusively to inanimate objects, actions, or abstracts, and exceptions in B are vanishingly rare: the only native examples are *poysf* 'the all-knowing' (i.e. Buddha), *moko* 'elder', and *mārcuške* 'prince' (the last a diminutive, a category where neuter gender even for animate beings is not unusual). The same pattern extends even to the productive use with loanwords:

<sup>16</sup> Pedersen (1941: 71) also suggests that the B nouns in *-o* are originally neuter participles, but he gives no explanation for how these would appear in Tocharian as action and result nouns.

only *amāc* 'minister', *kdāstf* 'teacher', and *mahdršf* 'great-seer' have animate reference, out of more than ninety cases. A noun such as *pdltsak/palsko* 'thought' clearly is not 'the thinking thing/that which thinks', but an action or result noun 'thinking; that which is thought'.

Petersen's derivation also makes no sense in PIE terms. Outside Anatolian participles in *\*-nt-* famously have active meaning with transitive verbs. While participles in *\*-nt-* mechanically list neuter forms in paradigms, real examples are extremely hard to find in the oldest texts. For example, while neuter *nt-* participles are by no means rare with intransitive verbs in the Rigveda, I have found only four alleged examples from transitive verbs, and none of these is assuredly functioning as transitive with a neuter subject in context.<sup>17</sup> I am confident the results would be similar for other traditions. The reason for this is not obscure: grammatically neuter nouns refer almost exclusively to inanimate objects, and these do not typically function in PIE as agents, i.e. subjects of transitive verbs. The *true* examples of substantivized *nt-* participles in Tocharian follow the pattern we expect, referring to animate agents: A *pekant* 'painter', *isepant* 'dancer', B *kausenta* 'murderer', *preksenta* 'judge' (see Krause-Thomas, 1960: 151&2288f.).<sup>18</sup>

Petersen is quite candid that he is using a "what else?" line of reasoning. He knows of only one PIE suffix of the required shape, and he does his best to invent a scenario by which it could have evolved into what we find in Tocharian *nt-* plurals. We have seen that this account is not credible in functional terms and need an alternative. Such an alternative has been repeatedly proposed,

<sup>17</sup> The example *śāhisat* in RV 6.23.5 is not a participle at all (contra Grassmann), but a pres. 3rd sg. injunctive (with *hoṛ* as the understood subject), as per Geldner (1951: 2.122), following Oldenberg (1909: 382). On the intransitive/reflexive value of *pēpīsat* (*dāmas*) 'darkness adorned (with stars)' in RV 10.127.7 see Schaefer (1994: 45f. & 152f.) with references. There is also wide agreement that *mīnāt* (*dātīkam*) in RV 5.2.1 is intransitive: 'altered or shrinking visage' (see Renou, 1964: 18; Geldner, 1951: 2.3; Grassmann s. v.). Only *vārdhat* in RV 5.1.62.5 has a chance of being transitive with an understood neuter subject (*vraīdam*). For this interpretation see Oldenberg (1909: 356), who cites an intransitive alternative in his note 2. Geldner (1951: 2.71) also takes *vārdhat* as transitive, but adverbial, with the effective subject being Mitra and Varuṇa, not a neuter. Renou (1959: 78 & 1960: 41) argues rather for adverbial *vārdhat* with *intransitive* sense, referring either to the image of the sun or to Mitra and Varuṇa. Joel Breton (pers. comm.) agrees with Renou but construes *vārdhat* with *rākṣamāna* 'you who protect with increasing strength.' It seems fair to say that the meaning of this difficult passage is less than certain. Even if this one example should turn out to be real, this one exception does not affect my claim that transitive neuter participles are vanishingly rare in the oldest extant IE texts and surely were so in PIE.

<sup>18</sup> The only Tocharian noun with an *nt-* plural that can be plausibly derived from a neuter participle is Tocharian B *cake* 'river', which *could* be from a *\*rékont* \* that which flows' instead of an *s-*stem *\*rékos* (both possibilities are cited by Adams, 1999: 249). But this one example could not realistically have served as the model for the entire class with its heavy concentration of action/result nouns.

beginning with Benveniste (1935: 126ff.), who compared certain Anatolian forms in *-nt-* with an alleged plural or "collective" function. The idea was revived in various forms by Machek (1949), Kretschmer (1950: 552ff.), building on Kretschmer (1925), and by Solta (1958). It is easy to see, however, why this alternative has never won acceptance (see the doubts of Krause, 1956, and the criticism by Lane, 1976: 158f.). On the one hand, the comparison has been too unfocused, including much extraneous Anatolian material; on the other, the true Anatolian cognate forms have been misrepresented in their function.

## 2. A New Look at *-ant-* in Anatolian

### 2.1. Non-cognate *-ant-* in Anatolian

In order to isolate the true Anatolian cognates of the Tocharian *nt-* plurals, we must first eliminate the irrelevant material. First, the Luvian plurals in *-nt-* have nothing to do with *\*-nt-*. They are all built on the inherited animate accusative plural ending *\*-ns* (or *\*-ms*, if one prefers).<sup>19</sup> Second, most of the very numerous Anatolian stems in *-ant-* also belong to types that are not cognate with the Tocharian *nt-* plurals. Although they are archaic in not showing a fixed diathesis, Anatolian participles in *-ant-* obviously are derived from the same *\*-e/on-* suffix as active participles elsewhere. Possessive adjectives in *-ant-* (such as Hittite *nadānt-* 'having a drinking-straw' < *nada-* 'reed, drinking-straw') reflect either inherited denominative *\*-ant-* (cf. Av. *barāz-ant-* 'high' < *barāz-* 'height') or secondary use of the participle (cf. the type of English 'bearded'), or both.<sup>20</sup> The isolated *išpan-* 'night' probably reflects a secondary *t-*-stem to an *n-*-stem *\*k<sup>h</sup>sp-er-* comparable to Av. *xšapan-* (for the process see Oettinger, 1982).<sup>21</sup> Most importantly, contra Benveniste, Solta, and others the Anatolian ergative suffix *\*-anti* (sic!) has no connection with the Tocharian *nt-* plurals or their true Anatolian cognates.<sup>22</sup>

<sup>19</sup> See already Forrer (1938: 191) and also Gusmani (1960: 502ff.), following Pisani, among others.

<sup>20</sup> Per Oettinger (to appear) the participial suffix *\*-e/on-* is ultimately identical in origin with the "individualizing" suffix *\*-e/on- $\bar{\theta}$* . This may well be true, but the well-established use of *\*-e/on-* as a verbal adjective in Anatolian argues that the suffix was inherited in this function and with this fixed shape, already distinct in PIE from individualizing *\*-e/on-* and its extended form *\*-e/on- $\bar{t}$* .

<sup>21</sup> There is absolutely no basis at all in this case for an "expressive" value as claimed by Solta (1958: 17f.).

<sup>22</sup> For a historical account of the ergative suffix *\*-anti-* see Garrett (1990). I stress, however, that even if one does not accept his derivation, his demonstration of the synchronic value of the suffix (ergative, *not* inherently "personifying") and its preform still stands. As shown by the form of the vocative in true cases of personification, the preform of the ergative is *\*-anti-*, not *\*-ant- $\bar{s}$* . This fact precludes derivation of the ergative from the "individualizing" *\*-e/on-* suffix described below, pace Oettinger (to appear), whose account of the functional development to an ergative is also unpersuasive. Despite Oettinger and Solta, there is no

## 2.2. Anatolian Cognates of Tocharian *-nt-* Plurals

When we have eliminated the types above, we are left with the true cognates of the Tocharian *nt-* plurals. The most direct comparanda are the cases where *-nt-* is used to form distributive plurals to collectives. This usage has long been recognized, but unfortunately has been mislabeled "collective", a practice that has obscured the true function and blocked a proper appreciation of the relationship of the Tocharian and Anatolian forms (and those elsewhere). The same misappellation has been applied to cognate forms outside Anatolian: e.g. Machek (1949: 93) erroneously characterizes Slavic forms in *-et-* as collectives, when they are in fact just the opposite, as seen by Solta (1958: 13). Solta (1958: 15ff.) also ably refutes the alleged collective value of Hittite *-ant-*. Indeed, he recognizes the distributive, "individualizing" force of the suffix (1958: 22f.). For reasons quite unclear to me, he unfortunately then ignores this insight and insists that the original value of the suffix is "expressive" or "intensive". In order to maintain this claim, he must dismiss the fact that there is no evidence for such a function in most examples in the oldest languages as due to the limitations of written texts. He even goes so far (1958: 22) as to claim that Tocharian *-nt-* plurals to abstracts are "unquestionably" cases of intensive plurals. His reasoning here is bewildering. Surely the motivation for providing a plural to an abstract is rather concretization, where references to particular instances make sense: e.g. 'thoughts' (i.e. instances of thinking), 'kindnesses' (i.e. acts of kindness). On the source of the expressive value of some instances of *\*-e/on(t)-* see 4.2 below.

For the distributive use in Hittite one may cite examples such as: *oš<sup>h</sup>harpa* = *ma* 1-*anta* LUGAL-*aš* GIR = *ši* *kitta* MUNUS.LUGAL-*š* = *a* 1-*anta* *kitta* '(As for) woodpiles, one set lies at the feet of the king, and one set (at those) of the queen.' (KBo 17.3 iv 25-26; CTH 416; OH/OS).<sup>23</sup> As a true collective, *harpa* 'woodpile(s)' cannot be directly construed with a number, and one must use a form of the numeral with an *nt-* suffix indicating 'unit, set, piece'.<sup>24</sup> The ending *-a* merely expresses agreement with the antecedent *harpa*. Eichner (1992: 36f.) accurately describes the use of 1-*anta* here as marking an individual unit (and recognizes the equivalence with 1<sup>num</sup>—see

evidence that the "individualizing" suffix *per se* has an animating force. Note especially for Anatolian that addition of this suffix does *not* animate the word for 'place' in Luvian and Lycian (see 2.2 below), vs. the ergative *\*-anti-* in the Hittite vocative *pe $\bar{d}anti$*  '(oh) Place!').

<sup>23</sup> For the citations of Hittite texts see Laroche (1976). The following designations OH/OS, MH/MS, and NH/NS refer to the date of composition/date of manuscript: Old, Middle, and Neo-Hittite respectively.

<sup>24</sup> Just as I in my dialect of English cannot say \*'three cattle', but must say 'three head of cattle'. 'cattle' is thus a rare English example of a true collective.

below), but does not clearly discern the distributive function, citing one possible derivation for *-ant-* from a collective/abstract suffix *\*-ḡd-*.

Direct examples of *-ant-* in this function are rare in Hittite, though one may also compare 9'-*andaš ḫappesnaš ʒer* 'on the nine members' (KUB 43.60 i 23; OH/NS). The plural of the neuter noun *ḫappesšar* 'limb, member' is a collective and reference to a specific number of body parts again requires the *-ant-* suffix on the numeral.<sup>25</sup> More often this Hittite usage is hidden by logographic writing. *1-ant-* 'one unit' is written as *1<sup>num</sup>num* (= Akkadian *ištenūtu* 'unit, set'): e.g., *1<sup>num</sup> kuwappala* 'one k.' (Bo 86/299 ii 15.18; KBo 4.10 Ro 36.37; Bronze Tablet; NH/NS); *1<sup>num</sup> TUG.GÚ.È.A ḫurri ʔmaršaranna* 'one set of *m*. Hurrian clothing'. For numbers above 'one' (*\*2-ant-* etc.) the Hittites (mis)use the Akkadian word *tapal* 'pair': e.g. 9 *TAPAL* <sup>nisda</sup>*šarāma* 'nine bread provisions' (KUB 46.6 i 6, etc.). See also 4-*ta TAPAL* EZEN ITU.KAM *kuit karšan ʔšta* 'that four (sets of) monthly festivals had been neglected' (KUB 5.7 Vo 30; thus contra Eichner, 1992: 75, not 'four pairs of...'). For a demonstration that *tapal* here is the functional equivalent of *ištenūtu* and does not mean 'pair' see Neu (1992: 206), who does not, however, recognize the equivalence with Hittite Numeral + *ant-*.

The same usage is also attested in Lycian, as seen by Shevoroshkin (1979: 191), who misnames the examples as "collective".<sup>26</sup> In reality, the same distributive force as seen in Hittite Numeral + *ant-* is clear from the following two passages. In TL 111.4 we find *ānāmama kbišitāta uwa* 'as penalty x units (of) cattle': the collective *uwa* demands that the numeral be extended by *-nt-*, thus *kbišita-(n)ita* (the final *-a* merely marks agreement with the head noun *uwa*, as in Hittite). This contrasts neatly with TL 149.9 *ānāmāna kñima šfita wawā* 'as the total penalty *s*. cow(s)'.<sup>27</sup> As shown by Hittite, Anatolian languages can construe a numeral with a singular count noun.<sup>28</sup> Lycian *wawā* is animate accusative singular, and the number *šfita* (whatever its exact meaning) predict-

<sup>25</sup> See also [(n)] = *āšta anda 4-taš ḫalḫaltāmar* [(ya)ʃ] *laiukkitzi* 'It becomes light in the four regions' (KUB 33.57.7').

<sup>26</sup> Contra Eichner (1992: 87ff.), it is the second *-nt-* of Lycian *nuñitāta* 'nine' which equates to Hittite *-ant-*, not the first. The *-V* of *\*nuñitV-* probably is analogical to *\*aitV-* 'eight' attested in *aitāta*.

<sup>27</sup> For *ānāmāna* as 'fine, penalty' see Starke (1990: 297f.). For *kñima* as 'whole, total' see Carruba (1979: 192ff. with note 12), but I cannot follow him in his further idea that in this passage the word means 'five'(!). Just as Hittite *ḫāman-* 'all; entire' often follows its head noun, here too *kñima* is modifying *ānāmāna*, not the following *šfita wawā*.

<sup>28</sup> See e.g. 5 *gāpinan* (acc. sg.) 'five threads' or 5 *alkitāš=šiš* (nom. sg.) 'five (are) its branches' (KBo 17.1 iv 15-16).

ably lacks the *-nt-* suffix.<sup>29</sup>

Cuneiform Luvian shows a slightly different use of the same *-nt-* to provide count plurals to collectives. Luvian uses a synchronic collective to refer to several paired body parts: *iš(ša)ra* 'hands', *tāwa* 'eyes', *ḠIR.MEŠ-ta* (*pāta\**) 'feet' (of one person).<sup>30</sup> In KUB 35.88 ii 5ff. we learn how Luvian refers to several sets of such body parts: *IGI.ḪI.A-wanta...ŠU.MEŠ-anta...[ḠIR.MEŠ-anta* 'eyes...hands...feet'. The same suffix is also used to provide a count plural to the neuter noun *āšš-* 'mouth' (*āššanta* ibid. ii 6).

The resemblance of the usage just cited to the Tocharian "pluratives" should be obvious. Tocharian *\*aiwent-* 'unit' differs from Hittite *1-ant-* (*\*ant-*) only in the suffix of the base stem for 'one' (for the reading of the Hittite see Eichner, 1992: 37f.). Tocharian does the syntax somewhat differently from Anatolian. Rather than add *-nt(a)* freely to numerals, it creates a noun 'unit' and uses this in apposition to the collective, hence a univerbation like *mīsa+aiwenta* 'meat units' = 'pieces of meat' (see Winter, 1992: 116). Likewise *eš-aiwenta* 'eye-pair sets', but the functional equivalence of the latter to CLuvian *tāwanta* cannot be doubted.<sup>31</sup>

### 3. Collective vs. Count Plural in PIE

The need to provide a means of expressing several sets of things that themselves were collectives or pairs would have arisen only for a few lexical items. The number of naturally occurring pairs (duals) and of collective pluralia tantum inherited by Anatolian and Tocharian was surely limited. A much broader and more fundamental question is the status of the plural for grammatically neuter nouns in PIE. Eichner (1985a), pursuing facts noted by Neu (1969: 239ff. & 1970: 56) and Watkins (1969: 239), argued that PIE had a contrast of singular, dual, plural and "comprehensive" (= collective) for animate nouns, while neuter nouns lacked the plural. Since in all cases known to me the non-direct cases of the collective/comprehensive are identical to those

<sup>29</sup> The correlation of collective and use of distributive *-nt-* on the modifying numeral is also attested in TL 131.3: *me ritāi : ʔni qlahi : ebijeḫi nuñitāta : ʔñimāima* : *owa* 'he shall pay to the mother of this local sanctuary nine units (of) penalty, cattle'. While the position of *ānāmāna* is unexpected, it is also a collective and is predictably modified by the *nt-* form of the numeral, with *owa* 'cattle' in apposition (analysis as per Starke, loc. cit., but the verb *it(e)j-* is transitive).

<sup>30</sup> These examples probably reflect prehistoric duals in *\*-oh<sub>1</sub>*, but synchronically they have been assimilated to the pattern of collective plurals to count nouns (see Eichner, 1985b: 9, with notes 24-26).

<sup>31</sup> I note with pleasure that V. Ivanov has independently recognized this matching use of an *nt-* suffix in Anatolian and Tocharian, as indicated in a remark in his paper "Southern Anatolian and Northern Anatolian as Separate 'Indo-Hittite' Dialects, and Anatolian as a Late Linguistic Zone", presented at the Colloquium Greater Anatolia and the Indo-Hittite Language Family, Richmond VA, March 19, 2000.

of the ordinary plural, I prefer to think in terms of a contrast singular, dual, and two subclasses of plural, count/distributive and collective. The crucial point, however, is whether the contrast of distributive vs. collective for animate nouns can be demonstrated for PIE.

Eichner's arguments have been explicitly rejected by Hardarson (1987: 83f.), Tichy (1993: 7) and Prins (1997: 188ff.). The first two authors claim that the Hittite type of *alpa* 'cloudbank, Gewölk' beside *alpeš/alpuš* 'clouds' to animate *alpa*- 'cloud' is as marginal as that of Latin *locus*, *locf*, *loca*, and that there is no basis for assuming that the collective was ever integrated into the paradigm of such animate nouns. Prins (1997: 61ff.) reviews only the Hittite examples that show the ending *-a*, failing to recognize those in *-i* and *-u*.<sup>22</sup>

### 3.1. Collective vs. Count Plural in Anatolian

Unfortunately, Eichner in his 1985a presentation cited only a handful of Hittite cases of collectives formed to animate stems, thus permitting the conclusion of the opposing authors that this phenomenon never achieved grammatical status. In fact, there is much more evidence to support the claim that animate nouns in Old Hittite *productively* formed collective plurals beside count plurals, and there is evidence from Luvian and Lycian to attest that this was true already for Proto-Anatolian. In order to reconfirm the validity of Eichner's claim for PIE, it seems necessary to cite this evidence in full here.

I have found at least twenty assured examples, and there are likely many more (see Prins, 1997: 61ff. for several not included here). I give only the certain cases.

*alpa*- 'cloud': nom./acc. pl. *alpeš/alpuš* 'clouds, Wolken' vs. coll. pl. *alpa* 'cloud-mass, Gewölk'.

*aniyatt*- 'task, work': acc. pl. *aniyadduš*, but coll. pl. *aniyatta* lexicalized as 'regalia'.

*armizzi*- 'bridge': usually coll. pl. in reference to a total structure (NB *KBo* 22.6 i 18 dat.-loc. pl. *armizziyaš* referring to a single bridge), but see *ar-mi-*

<sup>22</sup> She also fails to take into account the evidence of Hittite pluralia tantum of various stem classes, such as nom.-acc. pl. *karza* to *karzan*- 'wool-basket & contents' (dat.-loc. *karzanaš*) – for the meaning see Melchert (1999) –, nom.-acc. pl. *šarāma* to *šarāman*- 'bread provision' (dat.-loc. *šarāmanaš*) – meaning after Harry Hoffner, pers. comm. –, or nom.-acc. pl. *warpa* to *warpa*- 'enclosure' (dat.-loc. *warpaš*). She thus misses the crucial evidence for the plural inflection of the collective in Hittite and wrongly claims that the neuter had never developed a plural in Hittite. The above cases of plural inflection clearly falsify this claim (see already Watkins, 1982: 262<sup>2a</sup>). See also below on *laḫḫurnuzzi*-. Prins also ignores the corroborating evidence of Lycian and Lydian for the plural status of collective *-a* already in Proto-Anatolian: note Lycian nom.-acc. *arawazija*, dat. *arawazije* 'memorial monument', nom.-acc. *mara*, dat. *mere* 'laws', among others. For Lydian note nom.-acc. *laqrisa*, dat.-loc. *laqrisan* (part of the grave) and see Carruba (1959: 16ff.) for further examples.

*zi-iš-ti-i[š]* 'your *a*.' (anim. nom. sg.) at *KBo* 13.86 Vo 2 with an indeterminate sense.

*stōštri*- 'fleece': nom. sg. *ššriš* & acc. sg. *ššrin*, but coll. pl. *ššri*.

*ḡakḡannai*- 'flask': nom./acc. pl. *ḡakḡanaš/ḡakḡanauš*, but coll. pl. *ḡakḡannai* at *KUB* 31.86 ii 19-20 in unclear sense (see Puhvel, 1991: 10, with refs.).

*ḡarpa*- 'pile, heap': acc. pl. *ḡarpuš* (for coll. pl. *ḡarpa* see above).

*ḡuknai*- 'conjunction': acc. pl. *ḡuknauš*, but coll. pl. *ḡuknai* at *KUB* 9.34 iii 6.

*ḡada*- 'alacrity': anim. nom. sg. *ḡadaš*; coll. pl. in expression *ḡada ḡark*- 'have alacrity' = 'be ready'.

*kalmara*- 'ray, beam': cf. *nu* 'UTU-uš *kalmaruš* *dān* EGIR-*pa* *waḡnuš* 'The Sun-god turned back his rays a second time' (*KBo* 26.58 iv 41-42) vs.

*na*-ZI.KIN KÜ.BABBAR 'UTUš *šer*-*ši*=*kan* *kalmara* KÜ.BABBAR DÜ-an 'A silver cult-stone of the sun-deity. On top of it rays of silver are made.' (*KUB* 2.1 ii 12-13; *CTH* 413, ?/NS)

*gul(a)šša*- 'fate': 'Gulšš/Gulšš' the Fates' vs. coll. pl. '(personal) fate'; see *n*=*ašta* ANA DINGIR.MEŠ GAL<sup>TM</sup> *tuliya anda tuel*=*pat* *gulašša tarrauuš* 'He made powerful *your* fate in the assembly before the gods' (*KBo* 3.21 ii 3-4; *CTH* 313, ?/NS; Hymn to Adad; cf. Samsuiluna C.73 'EN.LİL *šimatt*=*ka* *ušarbi*) and 'EN.LİL-*aš*=*ma*=*šši*=*kan* *gulašša dušgarawaḡda gulašša* 'Enlil inscribed for him a joyous fate.' (ibid. iii 19-20)

*kuranna*- '?': acc. pl. *kurannuš* at *KUB* 13.1 i 30 and coll. pl. *kuranna* ibid. i 9&13 in very similar context (for the problem of the meaning see Prins, 1997: 83f.).

*lāri*- 'loss; dishonor; deficiency': nom./acc. pl. *lāriš/lāriuš*, but coll. pl. *lāri* (see exx. in *CHD L-N* 86f.).

*mena*- 'cheek': acc. pl. *mēnuš*, but coll. pl. *mēni* 'face' (not singular, pace *CHD L-N* 289!); prob. orig. dual (see Rieken 1994: 52).

*naḡsarati*- 'fear': nom./acc. pl. *naḡsarates/naḡsarattuš*, but coll. pl. *naḡsaratta* at *KUB* 29.1 ii 50 & *Bo* 2490 ii 10 (no justification for emendation!).

*paḡḡi*- 'storage vessel': nom./acc. pl. *paḡḡiš/paḡḡiuš*, but coll. pl. *paḡḡi* at *KUB* 17.10 iv 15 (NB following *ištappulli*=*šmet* 'their lids!').

*pašša*- 'way, path': for coll. pl. see *nu*=*ššan* 'Telipinuš I.DÜG.GA-*it* *pappar-šanta* KASKAL-*ša* *iyanni* 'Oh Telipinu, walk on the path(s), sprinkled with fine oil' (*KUB* 17.10 ii 29-30; *CTH* 324; OH/MS); i.e. a single path made up of parallel paths of various enticements, for which see *n*=*ašta* *ḡureššar ištū*<sup>us</sup> BANSÜR AD.KID *katta ḡuitiyanzi n*=an KASKAL-an *ienzi namma PANI* <sup>ḡḡ</sup>*ḡurešni* ŠA BA.BA.ZA KASKAL-an *ḡuitiyanzi* ŠA BA.BA.ZA=*ma* KASKAL-*ši* *kēz* ŠA LAL KASKAL-an *ḡuitiyanzi* *kēz*=*ma* ŠA GEŠTIN I.DÜG.GA *anda immiyanda* <*š*> KASKAL-an *ḡuitiyanzi*

'They pull down the head-scarf from the reed-table and make it (into) a path. Then in front of the head-scarf they draw a path of gruel. On one side of the path of gruel they draw a path of honey, while on the other side they draw a path of mixed wine and fine oil.' (KUB 15.34 i 21-25; CTH 483) *šakwai*- 'omen': acc. pl. *šagauš*, but coll. pl. *šagae* at KBo 16.46 Ro 8.10. *šankawai*- 'finger-nail': nom. pl. *šankuwaiš* but coll. pl. *šankuwai* at KUB 4.47 Ro 14.

*šarhuwanti*- 'foetus': acc. pl. *šarhuwanduš* and coll. pl. *šarhuwanda* (see Hoffner, 1997: 178f., on Laws §§17-18).

*šeknu*- 'robe': acc. pl. *šeknuš*, coll. pl. *šeknu=šit*, and *šeknu* (I remain unpersuaded by the arguments of Rieken, 1999: 197ff., for a neuter stem *šeknuš*!).<sup>33</sup>

*šuhha*- 'roof': acc. pl. *šuhhuš*, coll. pl. *šuhha*.  
*šumanza(n)*- 'bulrush': anim. nom. sg. *šumanzāš*, but coll. pl. *šumanza*.<sup>34</sup>  
*wellu*- 'meadow': nom./acc. sg. *welluš/wellun*, but coll. pl. *wellu* and *welluwa*.

The fragmentary nature of many of our texts inevitably precludes our determining in many cases the motivation for the use of a collective instead of a count plural. However, there are enough clearly motivatable examples to assure us that the distinction was a living one. When *kalmara*- refers to the real rays of the Sun it predictably has an ordinary count plural. The use of the collective *kalmara* undoubtedly reflects the fact that the silver replica was a sun-disk, a single solid piece with the rays marked by etching or molding, not a set of individual strands of silver. A person's assigned fate is a collective notion (*gudšša*), but the Fates as individual goddesses naturally appear as a count plural. Finally, the well-established practice by which the Hittites lured deities by laying down *parallel* paths of various enticing materials makes clear why Telipinu is invited to step on a collective *palsa*.<sup>35</sup> Compare also the functional

<sup>33</sup> In her interpretation of the passage KUB 7.2 iv 4-8, she ignores the evidence that the gods must be the subject of the action *šeknuš pippa-*, which constitutes a curse: see Melchert (1983: 141ff.). For coll. pl. *šeknu* as the object of *pippuwar* see unpublished 839/f Vo 12 cited by Rieken.

<sup>34</sup> For the correct definition of (<sup>h</sup>)*šumanza(n)*- as '(bul)rush' - and *only* that! - I am indebted to Norbert Oettinger and most of all to Harry Hoffner. A full discussion of the evidence is not possible here, but see already Archi (1988: 36<sup>45</sup>) and Burde (1974: 46). For the collective status of *šumanza* in KBo 3.8 iii 24 note the modifier *šuppi*. As pointed out by Hoffner, there is also a neuter singular *šumanzanan* at KUB 39.8 iv 2 & 6. This is a trivial backformation of the sort of Greek *ἄστρον* to *ἀστρα*.

<sup>35</sup> Note the collective plural modifying adjective *papparianta*. Attributive adjectives of collective plural nouns always show plural agreement in Hittite (likewise *dušgarauanda gudšša* above). The use of the neuter singular in *predicate* adjectives (especially *predicate participles*) with collective plural subjects is a trivial innovation in analogy to the singular verb, as per van den Hout (1984: 63), contra Prins (1997: 137ff.). If Prins is correct that this

difference seen in the reverse examples *paršulli-* and *lahhuruzzi-* below.

We have already seen above some of the Lycian and Luvian evidence for collective plurals to animate nouns: Lycian *nwa* 'cattle' to *nawa-*nwa**- 'cow' (animate *a*-stem), CLuvian *da*u*wa* 'eyes' to *ta*wa*/i-* (animate *a*-stem with '*i*-mutation'), *išš(a)ra* 'hands' to *išš(a)r(i)-* (animate *r*- or *ra*-stem with '*i*-mutation'), GIR.MEŠ-*ta* 'feet' to *pa*ta*-* (animate *a*-stem). While the Luvian examples cited probably reflect remade duals, it is important to note that there are clear examples that are true collectives having nothing to do with natural pairs: CLuvian *dušdama* to *dušdama/i-* 'manifest, voucher' and *lalama* to *lalama/i-* 'receipt' (both animate *a*-stems with '*i*-mutation', pace Starke, 1990: 268f.). See also the Hieroglyphic Luvian examples cited by Eichner (1985b: 9 with notes).

I believe that the full Hittite evidence just presented justifies the conclusion that the collective plural was a fully living category in Old Hittite.<sup>36</sup> This claim is further supported by the usage of *-nt-* to provide count plurals to collectives cited above, by the following reasoning. If the collective was still a living category and distinct from the ordinary count plural as I have claimed, then what we call the plural of neuter nouns was also still necessarily a true collective in Old Hittite and could not have served as a count plural. Hence the need for the device of using *-nt(a)*.

I would contend that this was not the only Hittite solution to the problem of providing grammatical neuter nouns with count plurals. The most commonly attested plural for Hittite *luttai-* 'window', a neuter noun, is nom. pl. *luttašš*, acc. pl. *luttauš*. The authors of the *CHD* (Vol. L-N 88) term this alternating gender, but this is to misconstrue the facts. There is no true gender alternation here: the noun is neuter. But its ordinary collective plural *luttai* (probably attested once at KUB 17.10 iv 21) would not ordinarily have been suitable to express reference to several instances of discrete objects like windows. Hittite thus employed the only count plural it had, that marked by *-eš/-uš*.

There are a few other examples of the same use of *-eš/-uš* with neuter nouns. The word *halgaltumar-* 'corner' (< \*'bending') uses a collective plural for the four 'directions, regions of the world': \*UTU-*i šarku LUGAL-ue* 4

usage is restricted *only* to predicate participles, then this fact would argue against her and for an innovation, since predicate participles formed effectively a periphrastic passive with the verb 'be' in Hittite with transitive verbs (see Friedrich, 1960: 111 & 137), and a combination like *anayan ešta* 'was made' was a syntactic, if not morphological, unit.

<sup>34</sup> I have found no evidence for collective plurals to animate nouns in assured Neo-Hittite compositions. While this could be due to accident, I find it more likely that the entire contrast of collective vs. count plural had been lost in Neo-Hittite, with the plural of the neuters, formally the continuum of the old collective, finally reinterpreted merely as one of the forms of the single category of plural, as happened in other traditions. We do not have enough evidence to assess the synchronic vitality of the collective in Luvian and Lycian.

*laḫḫatamari ukuri ištarna arḫa iyattari* 'Oh Sun-god, mighty king, you walk through the four eternal regions' (KUB 31.130 i 58). But for the corners of a concrete building we find the count plural: *nu = wa = ššan ŠA É.MEŠ maḫḫan* 4 *laḫḫatamaritēš (daganzipi šer)] ukuriēš* 'As the four corners of the dwelling are permanent upon the earth' (KBo 4.1 Ro 14//KUB 2.2 i 14). *ḫarganau-* 'palm, sole' (< \*'extent, surface') is neuter: nt. sg. *ḫarganau* in KUB 9.4 i 14 and 9.34 (neuter gender is also confirmed by the ergative *ḫarganauwanza* ibid. i 32). But we find a count plural *ḫarganauwiš* at KUB 33.66 ii 3 with other plural body parts (a back-formed animate sg. [*ḫarganauwiš* may be attested at KUB 9.34 ii 32). *ištaman-* 'ear' (< \*'slit, aperture') is originally a neuter *n*-stem (cf. CLuvian *tammant-* and Greek *στομάχ* 'mouth'), and we find in fact nt. nom.-acc. sg. GEŠTU-*an* at KUB 8.83, 4.5 etc. But the only attested plural is *ištamanēš/ištamanuš*, a count plural, from which was eventually back-formed an animate *a*-stem *ištamana-*. (NB) *paršulli-* 'morsel, crumb' is usually neuter in the singular (the gender shown by other stems in *-ulli-*) with a collective plural 'crumbs'. But cf. also *peran = ma aški* (NB) *antia paršif/yan n = at* (NB) *paršuf/jiēš ien[zi]* 'In front at the gate warm loaves are broken, and they make them (into) morsels' (KBo 17.65 Vo 21-22; MH/NS). I believe the unique count plural is conditioned by the context, which clearly is emphasizing the division of the loaves into individual bits. We also find also once 2ary anim. sg. *paršullin* (KBo 15.37 ii 56-57; MH/NS). Finally there is *laḫḫurnuzzi-* 'foliage, leafy crown'. This word is a collective plurale tantum. It most frequently refers to cut foliage used as a material upon which to serve sacrificial offerings: cf. ŠA *as* *laḫḫurnuzzi*. KUR.RA *as* *laḫḫurnuzzi išparanzi ... namna = an = šan* *as* *laḫḫurnuzziš šara ḫukanzi* 'They spread foliage of the mt. apple ... then they slaughter it upon the foliage.' (VBoT 24 ii 30-36; CTH 393, pre-NH/NS). However, it can also refer to foliage on a tree or a forest: see the discussion by Puhvel (1998: 34f.). As per Puhvel, the ergative *laḫḫurnuzziyan[es]* at KBo 17.22 iii 12 (OH/NS) confirms neuter gender. However, in the image of a sunset at KBo 14.142 ii 17 (?/NS) the emphasis is on the action of the individual branches, hence we find a count plural: *maḫḫan = ma* 'UTU AN[*as* *laḫḫurnuzziēš apparziš*] 'When the leafy boughs catch the Sun-god of heaven.' One should note crucially that in the first example the nom.-acc. collective plural *laḫḫurnuzzi* is resumed with a dative-locative plural. This usage, consistent for all collectives in Hittite, refutes the false claim by Prins that Hittite does not distinguish neuter singular from collective plural.<sup>37</sup>

<sup>37</sup> The consistent resumption of collective nominative-accusatives (including those in *-i* and *-u*) by plural non-direct cases makes it clear that the collectives are synchronically plurals, contra Prins (1997: passim). Despite her protestations (1997: 207ff.), the evidence argues decisively for the claim of Watkins (1982) that plural *-i* and *-u* reflect \**-ih*<sub>2</sub> and *-uh*<sub>2</sub>.

That this solution to providing count plurals for neuters was not common is understandable: use of the endings *-eš/-uš* ordinarily associated with animate nouns with neuters would likely have caused some confusion. One is not surprised that this difficulty was removed in the case of 'ear' by forming a new animate *a*-stem and restoring regularity.

3.2. Neuter Plural in PIE, Anatolian, and Tocharian  
Evidence that the use of the collective marker \**-h*<sub>2</sub> (in its various reflexes) as a plural with animate stems was fully productive in Hittite (and in all likelihood in Proto-Anatolian) strongly supports in my view Eichner's contention that the collective plural was already integrated into the paradigm of animate nouns in PIE. The status of the neuter plural in PIE is less clear. Eichner supposes that neuters in PIE had only a collective plural and no count plural. This is a viable possibility. PIE speakers surely had a way of expressing a count plural to neuters if the need arose, but nothing requires that there have been a grammatical category for this purpose.<sup>38</sup>

Be that as it may, Anatolian speakers eventually felt the need to provide a formal expression for count plurals to neuters, and the device most widely used was an *nt*-suffix, attached to a modifying numeral or (in the case of some CLuvian nouns) directly to the noun itself. Van Windekens (1979: 203), while rejecting any connection of Tocharian *nt*-plurals with Anatolian formations, does acknowledge that Tocharian speakers might have faced the same problem: "il faut aussi tenir compte de la nécessité qui a peut-être existé en tokharien, d'une distinction entre le pluriel proprement dit et le 'collectif'."

Based on the material presented above, I suggest that Tocharian came up with a similar solution. In the CLuvian examples such as *dānuwanta* 'eyes' we cannot tell whether the *-nt*-suffix has been added directly to the underlying stem or to the collective \**ntwa*. In its productive guise Tocharian *-nt-* obviously is added to stems, but there are also signs that it could be added to the inherited

<sup>38</sup> Since there is no evidence anywhere for the collective being inflected as anything but a plural (including Anatolian, pace Prins), I find it likely that the collective form of neuter nouns was already a plural in PIE, resumed in the non-direct cases by plural forms. However, as Alan Nussbaum has reminded me, a true collective can only be formed to a count noun. It makes no sense to speak of a collective to a mass noun. Prins (1997: 194ff. & 250) makes the same point. The status of the collective plural to neuters in PIE thus depends on whether one thinks PIE already had some neuter count nouns, to which \**-(e)h*<sub>2</sub> would then have been the collective plural. Prins (1997: 194ff.) cites the very interesting proposal of Ostrowski (1985), according to which in early PIE the only neuters were mass nouns. I would characterize this stage as pre-PIE, but the point may be argued. I insist only that *animate* nouns already had a collective plural beside a count plural in PIE (as per Eichner) and that by Proto-Anatolian and Proto-Tocharian neuter nouns also had a collective plural, modeled after that of the animate nouns. Just what the synchronic value was of the collective plural to a mass noun (Hittite *wiđār*, dat.-loc. *weternaš*, beside singular *wiđar*) remains hard to determine.



collective plural. Pinault (1997a: 225) argues that Tocharian A *ākār* 'tear' reflects an old collective \**ākrow* 'mass of tears' and that the attested plural *ākrunit* continues the same preform with *-nt-* added. He has similarly argued (Pinault, 1997b: 204ff.) that Tocharian B plural *śārita* 'sheep' is the reflex of a collective plural \**śā-* extended by *-nt(a)*, while *śāyīye* is a newly created singular.<sup>39</sup>

Both Tocharian and Anatolian, then, show the use of an *nt-* suffix to form count plurals to collectives. In Tocharian the suffix came to be used productively to form plurals, first to neuter nouns and then more widely (see Van Windekens, 1979: 4 & 205, for how the use might have spread from neuter *s-* stems to masculine *o-* stems). I leave open whether the use with neuter stems took place directly or via reanalysis of cases like 'tear(s)'. While I would not claim to know what the situation was in PIE, there are enough formal differences in the way that the *nt-* suffix is employed in Tocharian and Anatolian that I find it unlikely that we are dealing with the reflex of a PIE usage. Rather, the two branches seized upon the same formal device for dealing with a similar problem.

#### 4. Source of the *-nt-* Plural Suffix

##### 4.1. "Individualizing" *-nt-* in Anatolian

The immediate source of the *nt-* suffix employed here was identified long ago by Goetze.<sup>40</sup> As he showed, Hittite employs two contrasting forms for the names of the (three) seasons, one with the suffix *-ant-* and one without. Goetze defines the difference in usage as follows (1951: 470): "Whenever *ḫamešḫant-* is employed, the speaker conceives of 'spring' as an indivisible whole which together with the other seasons forms the year. Whenever, on the other hand, he uses *ḫamešḫa-*, he thinks of a stretch of time which in its entirety makes up the season 'spring'." More concretely, the base stem *ḫamešḫa-* occurs only in the dative-locative 'in springtime' and the genitive singular as (festival) 'of spring' (i.e. any festival held in the spring). On the other hand, *ḫamešḫant-* occurs chiefly in the nominative *ḫamešḫanza* in the phrase 'when the spring comes (*kišari*)', referring to a specific spring. One also finds EZEN *ḫamešḫandaš* 'festival of the spring' (i.e., with Goetze, the spring-festival that characterizes the spring, as in KUB 13.4 ii 54). Compare also the allative *para ḫamešḫanda* 'through to the (next) spring' in the Laws §100. Similarly, we find *zēni* 'in autumn' (generally) vs. *maḫḫan zanza kišari* 'when the autumn

<sup>39</sup> I am not persuaded by the critique of Pinault's analysis by Winter (1999: 249ff.) on this point. The very creation of the singularive *śāyīye* supports the existence of a collective.

<sup>40</sup> The relevance of this Anatolian material was already seen by Benveniste (1935: 126f.), but he fatally undercut the force of his argument by defining the function as "collective" and by wrongly bringing in the Hittite ergative type and the Luvian animate plurals as well.

comes', referring to a particular year. The force of *-ant-* here may be described as "individualizing" or "delimiting": it is used to refer to a particular instance of the season named or to one season as contrasted with the others. For the individual seasons contrasted see *kimmantan ... ḫamešḫantan* (KUB 4.4 Ro 3&5) or *zēnanti ḫamešḫant(i)* (KUB 22.27 i 32).<sup>41</sup>

There is other evidence in Hittite and elsewhere in Anatolian for such a use of *-ant-*. Eichner (1992: 36) properly cites KBo 5.4 Vo 9 as evidence for 1-*ant-* (1<sup>st</sup> year) used to stress 'one' as an indivisible unit: [nu=*šmas*] NIŠ DINGIR<sup>LM</sup> *kuit* 1-*an* ADDIN nu=*šmas* NIŠ DINGIR<sup>LM</sup> *maḫḫan* 1-*an* 1<sup>st</sup> year [M=*y*]a=*šmas* *ēšten* 'Because I have given you an oath as an indivisible unit, as the oath is an indivisible unit for you, may you also be an indivisible unit.' We also occasionally find *-ant-* used with animate nouns in Hittite where emphasis is being placed on discrete individual exemplars: [I]ŠTU2 QAT1=KA 10-*antit kalulupit* 'with your two hands and ten fingers' (KBo 17.32 Ro 12) – Hittite *katulupa-* is grammatically animate. In Hieroglyphic Luvian and Lycian we find the word 'place' (an inherited neuter *o-* stem) regularly extended by *-ant-* when the reference is to a specific place or places. For HLuvian contrast (LOCUS) *pi-ta-ha-li-ya* 'hurl/smash to the ground' (thus with Poetto) vs. LOCUS-*ta*-*IV* = \**pidant-* 'a specific place': *za-ti* LOCUS-*ta*-*ti-ti* 'in this place'; *á-pa-ta*-*za* LOCUS-*ta*-*ta*-*za* 'in those places'. Similarly in Lycian one finds *se Urāna: stitai: sttala: ēti Malijahi: pddāiti* 'And likewise in Hytenna a stele is placed down in the place/precinct of Malija' (TL 44c,5) or *s=ed=de tuwetē: kumezija: tere tere Trqñiti: pddātahi* 'And he established sanctuaries in every district to the local Storm-god' (TL 44b,51-52).<sup>42</sup>

##### 4.2. "Individualizing" \**-e/ont-* < \**-e/on-*

For \**-e/ont-* as an "individualizing" suffix outside Anatolian see Solta (1958) and Oettinger (1997 and to appear), who adds the case of Skt. *mahānt-* 'the great (one)'. I follow Solta (1958: 6f.) and Oettinger in analyzing "individualizing" \**-e/ont-* as an extension of "individualizing, substantivizing" \**-e/on-*. As is well-known, the latter often has an affective value, especially used in names (Grk. Στραβων 'the squinting one', Lat. *Catō* 'the sharp, cunning one', etc.). This makes it likely that the same suffix is the source of the Hittite type where *-ant-* is added to an already adjectival stem without any apparent functional

<sup>41</sup> There is also an extended stem \**widant-* to *wē/nt-* 'year', attested indirectly in the further derivative *wē/ntantatar* 'interval/period of a year'. The delimiting sense of *-ant-* is reflected in the nuance of 'period, interval'.

<sup>42</sup> I find it likely that the frequent use of the *-nt-* form in Hittite *dapia(ant)* 'entire, whole' and consistent use in Lycian *krunēti(ē)* 'how/as many' and Hittite *ḫimant-* 'every, all; entire' reflects the same delimiting use of *-nt-*. For this analysis of the *-ant-* of *dapia(ant)* and *ḫimant-* see already Puhvel (1991: 380), who also correctly compares Greek *παντ-* and Tocharian *pan-* 'all', and Eichner (1992: 36).

difference (e.g. *daššu(w)ant-* to *daššu-* 'mighty').<sup>43</sup> It cannot be accidental that a high percentage of these, especially those for which the base adjective is unattested, have a derogatory value: *maktant-* 'thin', *marlant-* 'foolish', *paprant-* 'impure', *dudumiant-* 'deaf', *dudawarant-* 'lame', *wargant-* 'fat' (so also Oettinger 1997: 205 "stigmatisierend").<sup>44</sup> There is independent evidence for the underlying "individualizing" *\*-e/on-* in Anatolian, in Lycian personal names such as *Xudatijē* beside *Xudali* (probably 'the nimble one' or the like—cf. Hittite *hūda-* 'alacrity') and *Pigrēi* ('the splendid one' from a *ro*-adjective probably directly attested in Miyan *Pirre*). In the latter case the *\*-e/on-* suffix has been further extended by the so-called "mutation-*r*".

As indicated above, the underlying *\*-e/on-* suffix is substantivizing as well as individualizing. The same is true of the extended *\*-e/on-* variant. While this presents no problem for its use in forming plurals to neuter nouns, one may question the claim that it also underlies Hittite numerals in *-ant-* or the set of adjectives just cited. However, as is well-known, the *\*-e/on-* suffix serves as part of the basis for the weak declension of adjectives in Germanic (for a recent discussion see Hajnal, 1997: 42f.), so an adjectival use for the extended form *\*-e/on-* is also unproblematic.<sup>45</sup>

## 5. Conclusion

I may briefly summarize the major conclusions of this investigation as follows. First, there is substantial evidence to show that Old Hittite had the collective plural as a *fully productive* grammatical category contrasting with the count plural in animate nouns, and there is corroborating evidence from Luvian and Lycian that this state of affairs is at least as old as Proto-Anatolian. These facts strongly support the claim of Eichner for such a contrast in animate nouns in PIE, despite assertions to the contrary. As per Eichner, neuter nouns in PIE probably had only a collective plural. Both Anatolian and Tocharian came to feel a need for a count plural for neuters and in slightly different ways exploited

<sup>43</sup> Eichner (1992: 36) already suggests a connection between the *nt-* suffix of the numerals and the "functionless" *nt-* suffix of these adjectives, but he does not identify the "individualizing" value.

<sup>44</sup> I cannot follow Solta (1958: 3 and passim) in taking the affective value as the original, nor is there any basis for Krause's claim (1956: 199) of an original "intensive" value. This is merely a pragmatic effect. Human beings tend to be made uncomfortable by being singled out by one of their physical characteristics, even if the trait is not inherently negative (expressions like 'the tall kid', 'the big guy' quickly acquire an affective value, one that easily turns negative). Likewise, the diminutive sense of a number of examples is a secondary specialization (pace Solta, 1958: 12), as in other IE suffixes such as *\*-(i)ko-*.

<sup>45</sup> For the possibility of a phonological rather than morphological source for the extended form in *-i-* see Oettinger (to appear).

for this purpose an existing derivational suffix, an extended variant *\*-e/on-* of the well-established PIE suffix *\*-e/on-* which had an individualizing (and originally substantivizing) value. Besides showing the *\*-e/on-* suffix in its derivational function, Anatolian also added it to numerals modifying collective plurals to express 'so many (units of) X'. Only in a few cases did Anatolian add *\*-e/on-* directly to nouns. Tocharian on the other hand employed *\*-e/on-* directly as a nominal plural morpheme. It eventually achieved rampant productivity, becoming the plural marker for many classes of nominal stems, but examples like the so-called "pluratives" betray its original locus in the neuters.

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