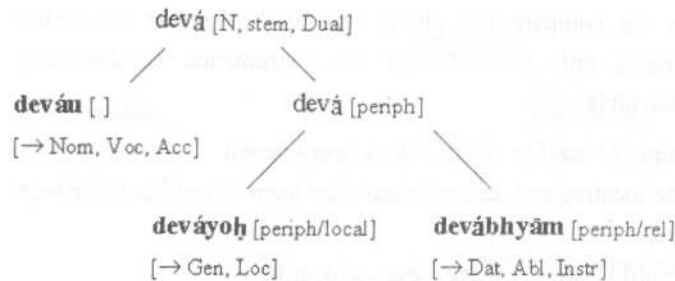


And for the dual:

(8)(c)



In these inheritance trees the learner must identify affix templates. Every time he investigates a set of more complex word forms, he has to readjust the position class of all the affixes already identified (Wunderlich 1996: 276). The paradigms are built up only from the positively marked instances, and they define the dimensions in which the other elements may receive minus values by entering the unmarked cells. These elements, for instance the nominative singular or the nominative dual, obtain their syntactic potential from their place in a paradigm.

Taking into account the features that have morphological representations, we get the following results for the three numbers:

(8)(d)

Sg.:	-	outside,	hr,	periph/hr,	nom,	with,	place,dir,wh
Pl.:	-		hr,	concern,	nom,	with,	place
Du.:	-			rel,	local		

Now for the unpredictable affixes: in the singular these include all but the nominative und accusative:

[ ] [+ outside] -e (with accent shift to the root) → vocative  
 [+ periph] [+ nom] -ásya → genitive

- [+ periph] [+ adv] [+ with] *-éna* → instrumental
- [+ periph] [+ adv] [+ place] *-é* → locative
- [+ periph] [+ hr] *-āya* → dative
- [+ periph] [+ adv] [+ direct] [+ wh-direct] *-āt* → ablative

When we compare the plural with the inflection of further paradigms, only the affix of the instrumental is absolutely unpredictable:

- [+ periph] [+ adv] [+ with] *-āiḥ* → instrumental

For the locative and dative/ablative the stem vowel has to be kept in mind:

- [+ periph] [+ adv] [+ place] *-éṣu* → locative
- [+ periph] [+ concern] *-ébhyaḥ* → dative/ablative

On the contrary, the accusative and genitive show *-ā*:

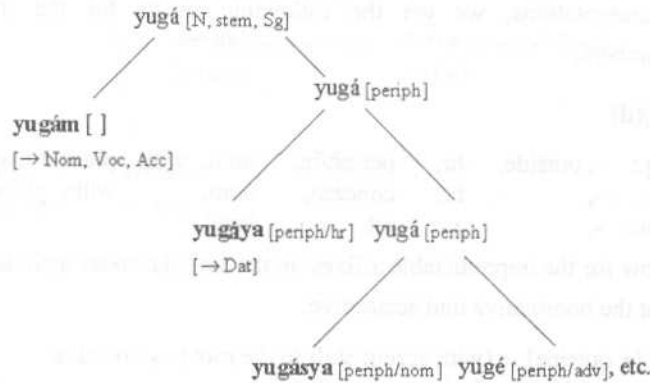
- [+ periph] [+ nom] *-ānām* → genitive
- [ ] [+ hr] *-ān* → accusative

And for the dual:

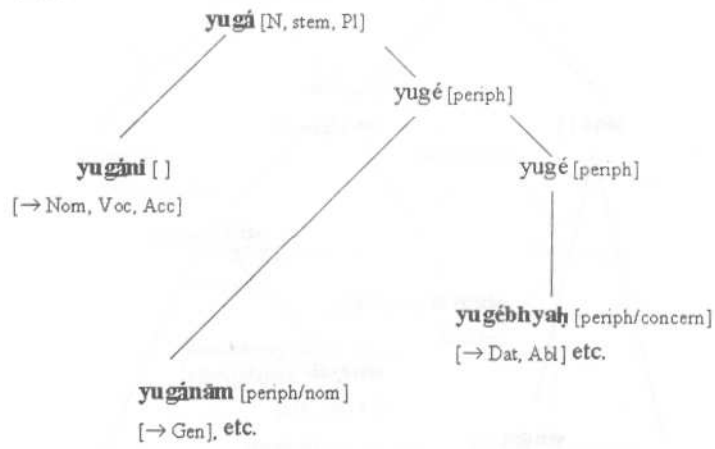
- [ ] *-au* → nominative/accusative/vocative
- [+ periph] [+ rel] *-ābhyām* → dative/ablative/instrumental
- [+ periph] [+ local] *-āyoḥ* → genitive/locative

We must also consider the neuter *yugá-* ‘yoke’:

(9)(a)

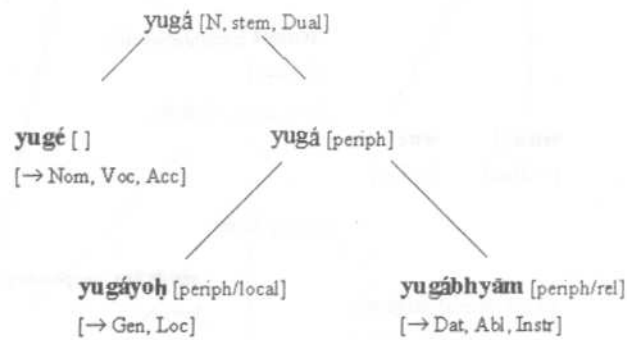


(9)(b)



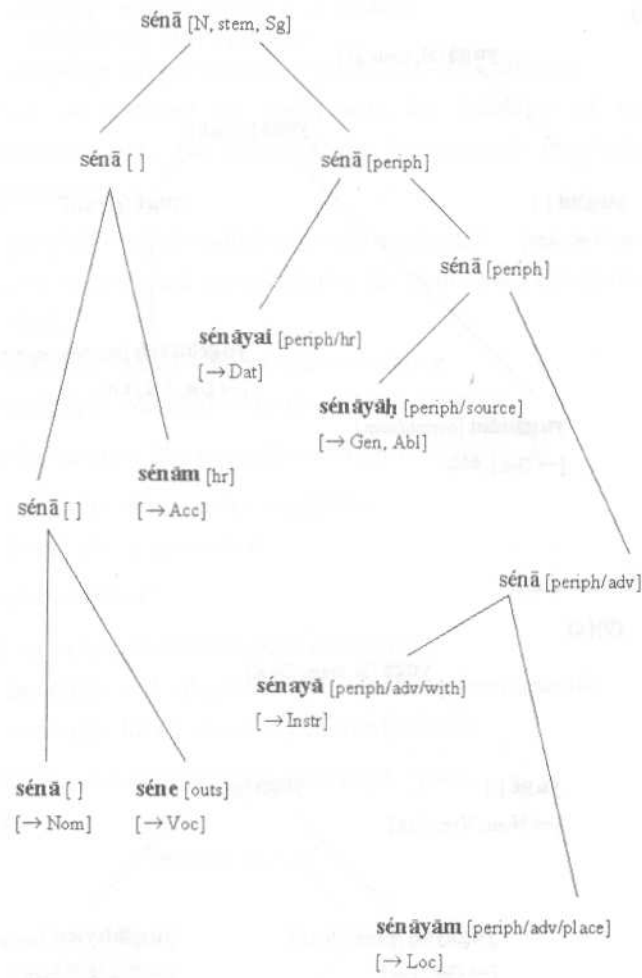
And for the dual:

(9)(c)



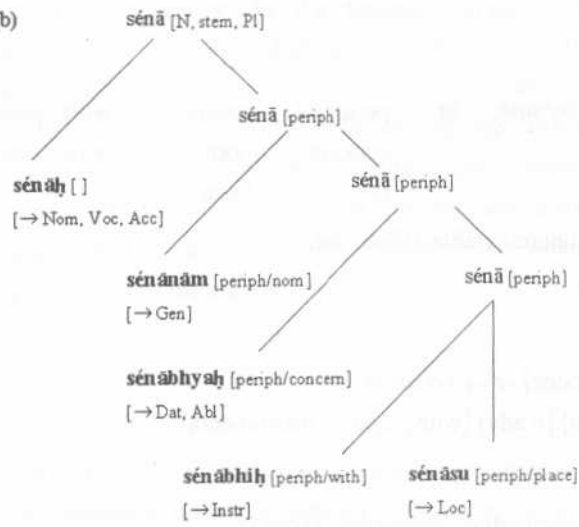
Now let us consider the inheritance tree of the feminine *ā*-stems (*sénā*- 'army'). For the coincidence of genitive and ablative we need a common feature [ ] vs. [+ source].

(10)(a)



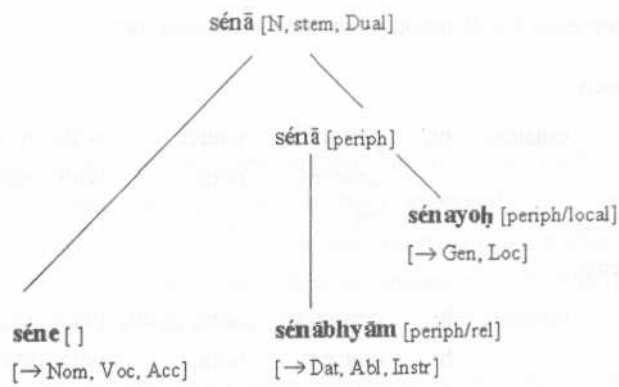
The plural:

(10)(b)



And for the dual:

(10)(c)



Which features do have morphological representations?

$\bar{a}$ -stems:

(10)(d)

Sg.:	-, outside,	hr,	periph/hr,	source,	with, place
Pl.:	-,		concern,	nom,	with, place
Du.:	-,		rel,	local	

And the unpredictable affixes are:

$\bar{a}$ -stems:

Sg.

[ ] [+ outside]  $-e \rightarrow$  vocative

[+ periph] [+ adv] [with]  $-ay\bar{a} \rightarrow$  instrumental

Dual:

[ ]  $-e \rightarrow$  nominative, accusative, vocative

[+ periph] [+ local]  $-ayo\bar{h} \rightarrow$  genitive, locative

If one generalizes the  $\bar{a}$  in the other cases those forms are regular.

Let us now compare the data with respect to the features we considered to be subnodes. For the following we will confine ourselves to the dichotomy feminine vs. masculine:

$\bar{a}$ -stems

Sg.:	-, outside,	hr,	periph/hr,	source,	with, place
Pl.:	-,		concern,	nom,	with, place
Du.:	-,		rel,	local	

$a$ -stems:

Sg.:	-, outside,	hr,	periph/hr,	nom,	with, place,dir,wh
Pl.:	-,	hr,	concern,	nom,	with, place
Du.:	-,		rel,	local	

With respect to underspecification, the following has to be kept in mind: in the singular masculine, the  $a$ -stems do not show

syncretism. The neuter has the same form for the nominative, accusative and vocative. In the feminine singular, there is syncretism in the genitive and ablative. In the dual, all the three genders behave in the same way: there is syncretism among the nominative, accusative and vocative; among the instrumental, dative and ablative; and between the genitive and locative. In the plural there are differences again: in the feminine *ā*-stems the nominative/vocative and accusative are identical, whereas the masculine differs in these cases.

#### 1.c. Number

Let us briefly consider number with regard to underspecification. In every paradigm no single singular form is identical with a plural form. Only in the dual of the *ā*-stems does one find the nominative, accusative, vocative identical with the vocative singular. However, we should remember that the vocative occurs outside the sentence. Inside the sentence in the mentioned nouns there is no instance of underspecification concerning number.

#### 1.d. Gender

Now let us turn to the question: why do the given paradigms appear the way they do? Why are there apparently pronominal endings in some cases? Why does the syncretism in the singular diverge from that in the plural? Why is syncretism in the feminine different from that in the masculine?

I think the answer to all these questions is that, as in other languages, in Old Indian it is the importance of the conception of gender that lies behind nearly all the kinds of syncretism mentioned above. Following Corbett (1991: 44), the defining

property of gender is agreement. Compare the following generalization:

“If a language distinguishes gender, there is always agreement with respect to gender.

Second, gender is the most idiosyncratic of the functional categories of the noun,” since it is “either specified by virtue of inherent ... properties (natural kinds, of ‘sorts’), or it is arbitrarily specified and hence must be learnt for the noun in question.” Gender is more important than number, since gender “is inherently fixed for a noun, whereas [number] is usually instantiated and gives rise to different word forms in the paradigm of a noun.” In Old Indian for a core of the noun inventory, gender is assigned according to semantic criteria. On the other hand gender is assigned to nouns in an arbitrary manner. However, the gender specification of a given noun is invariant (Ortmann 1998: 62).

As Ortmann points out (1998: 76f.) there are languages with special inflectional allomorphs to distinguish the dichotomy [+/- animate]. In German for instance the weak declensional class is increasingly confined to nouns denoting persons, as seen with suffixes such as *-at*, *-ist* in *Demokrat*, *Sozialist* (accusative *den Demokraten*, *den Sozialisten*, also consider *den Typen* vs. *den Typ*). Therefore, [+ animate] clearly defines an inflectional noun class in German.

However, it is important for the following that the same trend as in noun inflection is observed for pronominal systems. For example in Swedish, which has maintained the tripartite sex-based gender in a reduced fashion, there is an innovative distinction [- neuter]. For nouns which denote non-human entities, and which were formerly masculine or feminine, the pronominal form *den* is used



for nouns such as *hunden* ‘a dog’ or *katten* ‘a cat’ as opposed to [+human], which are pronominally referred to as *han* and *hun*, respectively.

(11) *han* (male)    *hun* (female)    *den* (common)*det* (neut)  
 [+hum, -ntr, -fem]    [+hum, -ntr, +fem]    [-hum, -ntr]    [-hum, +ntr]

Persian is also an example of a language without gender that nevertheless has established a [+/-human] differentiation for third person pronouns. The same holds for Finnish, viz. *hän* vs. *se*.

From this point of view one can understand why languages which do not have articles, but demonstrative pronouns, take over endings from the pronominal system.

Turning now to Old Indian, we assume that the pronominal distinction between the genders was as relevant as in the just mentioned examples. The pattern is the demonstrative pronoun *tá-*. The nominal *a-* and *ā-* stems took affixes from this pronominal system and not from other classes of masculine and feminine nouns, because the gender dichotomy is the clearest in the pronominal system. And having not only natural but also grammatical gender the relevant affixes apply to nouns with grammatical gender, too.

Since the instrumental plays the same prominent role among the peripheral cases as the nominative among the full cases, it must be specified. In the singular an *\*-ā* from the masculine affix *\*-eh<sub>1</sub>/oh<sub>1</sub>* and the feminine affix *\*-ah<sub>2</sub>ah<sub>1</sub>* provided no distinction between the two genders. Therefore, the same affixes as in the pronominal system are found here: *téna* vs. *táyā*. In the instrumental of the masculine plural, the old affix *-aiḥ* could be kept because it differs from that of the feminine *-ābhiḥ*. But in the dative/ablative plural

and in the locative plural, the thematic vowel *-e-* vs. *-ā-* corresponds to that of the pronoun: *tēbhyaḥ* vs. *tābhyaḥ*, *tēsu* vs. *tāsu*. Thus the two genders are distinguishable. Like the instrumental singular, the dative singular is a case which would be assumed to have the same ending for the masculine and the feminine: *\*-āi* from *\*-ōj* vs. *\*-āj*. In both genders the form is remodeled (*-āya* vs. *-āyai*). The corresponding forms of the pronoun (*tāsmāi* vs. *tāsyai*) do not fit, because the ending *-āi* in both genders does not distinguish between masculine and feminine while the stem *-sm-* vs. *-sy-* does. Thus the dative singular of the masculine gets a second dative ending *-ay* form *\*-ej* of which the second *-j* may be dissimilated; *\*-āja* from *\*-ājaj* from *\*-ōj + -ej* (G.Klingenschmitt 1992: 105). Another device would have been the assumption of the whole pronominal affix *-smāi* in the masculine and *-syāi* in the feminine, but the elements *-sm-* and *-sy-* do not occur elsewhere in the inflection of the masculine and feminine nouns respectively. *-sy-* occurs only in the genitive singular masculine. Since no other remodeling after the *-sy-* element in the noun inflection is to be found one can assume that *-asya* in the genitive singular masculine of the noun is of the same age as the predecessor of *-oio* in Greek Homeric *ἴπποιο*.

As to the element *-āy-* in the singular of the *ā-* stems, I assumed some time ago that the *ā-* inflection in Old Indian started from the locative singular *\*-aj + vowel* from *\*-ah<sub>2</sub>i + vowel* (Lühr 1991). Whereas the short *a* was kept in the instrumental since *-ayā* is, as mentioned, identical with the instrumental singular feminine of the pronoun, *ā* was elsewhere generalized before *-y-*. The reason for the remodeling surely lies in the locative singular: the outcome of *\*aj* would have become identical with the *-e* in the locative singular of the masculine. Thus *\*aj* was remodeled after the locative singular of the feminine pronoun to *\*-ajām* and then lengthened to *\*-āyām* since *-ā-* is the stem vowel otherwise. In

analogy to that the remodeling of the ablative/genitive after the feminine pronoun *tāsyāḥ* took place, thus resulting in *-āyāḥ* in the paradigm of the feminine noun. A possible ablative *\*-āt* in the feminine singular, compare Latin *sententiād*, would not be possible because this form would coincide with that of the masculine. Also the ending *-e* in the vocative singular is due to the trend of distinguishing masculine from feminine. A possible vocative *\*séna* with shortened *\*-ah<sub>2</sub>* to *\*-a* as in Old Church Slavonic *ženo* ‘woman’ or Greek *νύμφα* (compare also Old Indian *dévi*) would have become identical with the masculine *déva*. Therefore, on the basis of a nominative *-ā* which could be interpreted as an outcome of *-āy* within a paradigm with *āy*-forms a new vocative *\*-aj* resulting in Old Indian *-e* was created. In the plural of the feminine the expected form *-āḥ* for the nominative and the accusative was maintained as it corresponds with that of the feminine pronoun: nom., acc.pl. *tāḥ* (: *sénāḥ*). The instrumental and dative/ablative of the masculine and feminine are distinguishable because of the pronominal *-e-* in the masculine: *devébhiḥ* vs. *sénābhiḥ*, *devébhyaḥ* vs. *sénābhyaḥ*. Only the ending of the genitive plural is identical: *devānām* = *sénānām*. The alternative would have been the ending of pronominal *tēsām* vs. *tāsām*: the question would be: why did the Old Indians not follow this analogy? I suggest the following explanation: in the plural there is only one affix beginning with *s*, i.e. the affix *-su*, which can easily be recognized as the ending of the locative plural; compare the locative singular masculine *devé* with the locative plural *devésu*. On the contrary, a genitive plural *\*-sām* does not have any connection to the singular. In addition, the regular form *\*sénām* of the genitive plural would have been identical with the full case accusative singular *sénām*. One can assume that to maintain the distinction between the numbers singular and plural, the expected type *\*sénām* was first enlarged with the result of *\*-*

*ḍm*. That means the original ending *\*-ḍm* was doubled. In a next step the genitive plural *\*devām* was remodeled after the genitive plural feminine, because the dative/ablative and the locative feminine and masculine also have the same endings.

With respect to the neuter plural and the dual of all genders and cases, the endings are identical with those of the pronoun: neuter *tāni*, dual *tāu* masculine, *té* neuter, *té* feminine, instrumental, dative, ablative *tābhyām*, genitive and locative *tāyoḥ* respectively. Therefore, with regard to the genitive plural of the masculine and feminine, one can state the generalization:

If the pronoun distinguishes gender, the noun also does. Thus one can say that the inflection of the *a*- and *ā*-stems in Old Indian is really determined by gender. Forms are specified regarding gender whenever it is possible.

In the treated stems the phenomenon of underspecification is only to be found in the case system. Number does not demonstrate underspecification. In general the expected forms are to be found with the exception of the just mentioned genitive plural masculine and the pronominal thematic vowel *-e-* in some plural forms of the masculine and neuter. Quite the contrary, in order to provide a clear distinction between the three genders, especially between masculine and feminine, many forms are remodeled by analogy. The pattern is that of the demonstrative pronoun.

## 2. Greek and Hittite

With regard to pronominal endings within nominal inflection let us take a look at two further Old Indo-European languages, Greek and Hittite.

In Greek *o*- and *ā*-stems correspond to the Old Indian *a*- and *ā*-stems. The *o*-stems show the pronominal ending of the article in the nominative plural masculine:

(12)

Sg.			Pl.	
Nom.	ἵππος	ὁ	ἵπποι	οἱ
Gen.	ἵππου	τοῦ	ἵππων	τῶν
Dat.	ἵππῳ	τῷ	ἵπποις	τοῖς
Acc.	ἵππον	τόν	ἵππους	τούς
Voc.	ἵππε			

The *ā*-stems behave in the same way, but pronominal *αῦ* is not original, it is remodeled after the nominative plural masculine *οἱ*:

(13)

Sg.			Pl.	
Nom.	τίμη	ἡ	τίμαί	αἱ
Gen.	τίμης	τῆς	τίμων	τῶν
Dat.	τίμῃ	τῇ	τίμαῖς	τῆσι
Acc.	τίμήν	τήν	τίμας	ταῖς

Old Greek, like Old Indian, is a language which maintains the distinction between singular and plural. Thus the singular and the plural of the *o*- and *ā*-stems always have different endings. If a singular form and a plural form threaten to become identical, another analogy occurs as in the case of the nominative plural feminine. The expected ending *\*-ῆς* from Indo-European *\*-ah<sub>2</sub>es* would have become identical with the genitive singular feminine. To distinguish singular and, first the pronominal *-αι* was taken over for the feminine nouns, and then pronominal *-οι* for the masculine nouns<sup>9</sup>. The result of this remodeling is not only a clear dichotomy between singular vs. plural in the *o*- and *ā*-stems. The

<sup>9</sup> But cf. Rix (1976: 140): "der Pronominalausgang hat, wohl von den Pronominaladjektiven aus (... z.B. *\*soljo<sub>i</sub>* = ai. *sárve* 'alle', gr. *ὅλοι* ~ lat. *salvī*), in vielen Einzelsprachen den alten Nominalausgang idg. *\*-ōs* < *\*-o-es*

feature singular vs. plural is also connected with an ending, which shows a distinction between masculine and feminine. There is one other exception: as in Old Indian, the genitive plural feminine and masculine/neuter is only specified regarding number and not gender; compare ἴππων and τῖμῶν with pronominal τῶν. But the predecessor of the genitive plural feminine ending, Proto-Greek \*-āsōn (hom. myk. -āōn, lesb. ἄν, ion. -εων, att. -ῶν), is from the pronoun; compare hom. τᾶων. Thus, the development to -ῶν in the genitive plural feminine occurred later, but the underspecification concerning gender was not abandoned.

The reason for this must be further investigated. We must remember, however, that the main function of the genitive is its adnominal use. A gender specification is possibly more necessary in the full cases than in the other cases. The distinction between the genders outside the full cases, however, may vary; consider the peripheral dative/ablative plural in Latin *dominīs, feminīs* and genitive plural *dominōrum vs. feminārum*.

Now let us further consider the Greek inflection of the pronoun. It is widely assumed that the dative singular masculine, neuter att. τῶ (: ai. *tásmai*), the genitive plural masculine, neuter att. τῶν (: ai. *tésām*), the genitive singular feminine att. τῆς (: ai. *tásyās*) and the dative singular feminine att. τῇ (ai. *tásyai*) are remodeled after the endings of the noun (Rix 1992: 183). But since feminine *\*tésjās*, *\*tésjāi* and masculine *\*tojōm* would hardly have resulted in other forms than τῆς, τῇ and τῶν<sup>10</sup>, one can state that the correspondence between nominal τῆς, τῇ, τῶν and pronominal τῆς, τῇ and τῶν caused the assumption of nominal dative singular masculine -ω by the pronoun — *\*m* resulting from *\*tesmōj* would

---

ersetzt".

<sup>10</sup> Rix 1976: 52f. Vgl. Schwyzer 1953: 236: οἱ may appear as ο before a vowel.

have been maintained.

Considering underspecification in the Greek *o*- and *ā*-stems, we should now keep in mind that this phenomenon does not occur in the case and number system. The only form *\*-ῆς* in the nominative plural feminine, being identical with the genitive singular feminine, was remodeled after pronominal *-αι*. *-οι* in the nominative plural masculine of the noun is also a pronominal ending. With respect to gender, the identity of the former distinguished forms of the genitive plural masculine and feminine was maintained. This is possibly because gender specification is not so necessary in other than full cases. Except the dative singular masculine of the pronoun *τῶν*, which was adapted to the corresponding form of the noun, the pronoun influenced the noun system for distinguishing gender:

Gen.Pl.f. hom. myk. *-āōn*, lesb. *-āv*, ion. *-εων*, att. *-ῶ* from *\*-āsōn*

: hom. *τᾶων*

Nom.Pl.f. *-αι* : *αί*

Nom.Pl.m. *-οι* : *οί*

As in Old Indian, the remodeling of the feminine noun has prevailed over that of the masculine noun.

Now, let us take a look at Hittite. This language has only two genders, commune and neuter. Pronominal *-e* from Indoeuropean *\*-oj* does not enter the noun inflection:

Compare nom.pl.m. *antuḫšeš* 'men' : *apē* 'they'<sup>11</sup>

Since Hittite does not distinguish between masculine and feminine, pronominal endings are not found in the noun inflection. Therefore, we can now define the function of the analogy to the pronoun in the oldest Indoeuropean languages. This

<sup>11</sup> In the nominative plural of the noun and pronoun the ending *-uš* is also

analogy has helped to maintain the distinction of the two genders masculine and feminine, i.e., in general, where the pronoun had a clearer distinction between masculine and feminine, the endings of the pronoun are taken on.

### 3. The Hittite neuter

Let us now take a more detailed look at the relationship between nouns and pronouns in Hittite. In Hittite the pronouns have another function rather than just to distinguish gender. In this connection the neuter is the relevant category. It has the feature [-animate]. You find neuters among the *a*-stems. Two have correspondences in other Indo-European languages:

(14)

*iugan* ‘yoke’ (ai. *yugám*, gr. ζυγόν, lat. *iugum*), *pēdan* ‘place’ (gr. πῆδον, umbr. *peřum*, *persom-e*). Other stems are *ais* ‘mouth’, *kard-* ‘heart’, *genu-* ‘knee’, *ešḫar* ‘blood’, *ḫaršar* ‘head’, *keššar* ‘hand’, *šakuḫa-* ‘eyes’, *meni-* ‘face’, *karaḫar* ‘horn’, *partaḫar* ‘wing’, *ḫettantatar* ‘period of a year’, *meḫur* ‘time’, *ḫengan* ‘pestilence’, *kurur* ‘enmity’, *takšul* ‘peace’, *uttar* ‘word, thing’, *ḫullanzatar* ‘tumult’, *ḫandāiš* ‘warmth’, *ḫengur* ‘gift, present’, *ḫulaleššar* ‘siege’, *erman* ‘illness’, *paprātar* ‘impurity’, *ḫattalu-* ‘bolt’, <sup>GIS</sup>*turi-* ‘weapon, spear’, *kullupi-* ‘sickle(?)’, <sup>GIS</sup>*zuppari-* ‘torch’, *šaḫatar* ‘horn (musical instrument)’, *ḫaršijalli-* ‘storage bin’, *ḫuppar* ‘tureen’, <sup>DUG</sup>*išpanduzzi-* ‘portion of wine’, *išpanduzzijaššar* ‘receptacle of libation’, *ištapulli-* ‘lid’, *pattar* ‘basket’, *zeri-* ‘cup’, *tunnakeššar* ‘room’, *pir/parna-* ‘house’, *ḫilammar* ‘gate’,

*memal* ‘grits’, *paršulli-* ‘breadcrumb’, *šakkar* ‘excrement’,

---

found which goes back to the accusative plural.



*taḥtumar* ‘incense’, *tuḥḥueššar* ‘fragrance’, *tetḥessar* ‘thunderstorm’, <sup>GIŠ</sup>*taru-* ‘tree’, *watar* ‘water’, *kunkumati* ‘pumpkin(?)’

Now on the contrary, the *communia* consist of nouns with the feature + and -animate: consider some *a*-stems: *aruna-* ‘sea, ocean’, *ḥapa-* ‘river’, *ḥappira-* ‘town’, <sup>NA4</sup>*peruna-* ‘rock, mountain’, *ḥišša-* ‘pole’ (ai. *īṣā-*), *ḥašša-* ‘hearth, fireplace’ (lat. *āra*, osk. dat. *aasai*, umbr. *are*), *ḥarša-* ‘shower of rain’,

*nepiš* ‘heaven, sky’, *tekan* ‘earth’, *utne-* ‘country’, *tarma-* ‘stake’, *tuppa-* ‘container’, *ḥuppara-* ‘pan, vessel’, *muriḫala-* ‘bread with grapes’, *tuekka-* ‘body’, *kalulupa-* ‘finger’, *lala-* ‘tongue’, <sup>KUŠ</sup>*kurša-* ‘fleece, skin’, *gapina-* ‘thread’, *ḥullanza-* ‘rebellion’, *zahḥa-* ‘battle’, *pittuliḫa-* ‘fear’, *tarlipa-* ‘a kind of liquid’, *ḥanna-* ‘grandmother’, *nega-* ‘sister’ etc. Also consider *communia* other than *a*-stems: *karat-* ‘interior of the body’, *puri-* ‘lipe’, KASKAL (= *palši-*) ‘way’, *šiyatt-* ‘day’, *ḫett-* ‘year’, *išpant-* ‘night’, *šagāi-* ‘omen’, *ḥenku-* ‘gift, present’, <sup>GIŠ</sup>*intaluzzi-* ‘shovel’, <sup>NA4</sup>ARÀ ‘millstone’, <sup>DUG</sup>*teššumi-* ‘cup’, *ḫurtiḫal(l)ali-* ‘basin, bowl(?)’, <sup>GIŠ</sup>*ḫuluganni-* ‘lorry’, *ḫalmašuit-* ‘throne’, *kutt-* ‘wall’, <sup>GIŠ</sup>*luttāi-* ‘window’, <sup>NINDA</sup>*ḫarši-* ‘some kind of bread’, GEŠTIN (= *ḫiḫana-*) ‘wine’, GADA ‘cloth’, TÚG ‘garment’, ZĀ.AH.LI ‘cress, weeds’, *šuli-* ‘lead’ (Zeilfelder 2001: 157f.).

If pronouns refer to *communia* and neuters you find:

(15)

Sg.

nominative c. *kās* ‘this’ *apās* ‘that’ vs. (akk.) n. *kē*, *apāt*

Pl.

nominative c. *kē* *apē* vs. (akk.) n. *kē*, *apē*

In the plural of the *communia* the expected ending *-ē* from Indo-

European pronominal *\*-oj* appears. But why does this ending also occur in the neuter? In the neuter plural of the deictic pronoun there is no specific pronominal ending. The adjectives and the possessive pronoun behave in the same way<sup>12</sup>. The corresponding singular forms occur most often in the adjective, and are compulsory in the possessive pronoun:

(16) *ud-da-a-ar-mit* ‘my words’

*ša-ku-ya-ša-še-it* ‘his eyes’

Often the singular of a noun and the plural of a verb are combined:

Compare the following data:

(17) KBo V 6 (CTH 40, yhitt.) II 5 f.:

(5) *na-an Š[A<sup>LÜ</sup>KÚR KUR-e-]an-za a-uš-ta*

(6) *na-at na-aḥ-šar-ri-ja-an-da-ri*

‘And the hostile country saw him and they were afraid’

A conception like ‘population’ may be interpreted in the same sentence both as a collective singular and a group of individuals<sup>13</sup>; compare also *tuzzi-* ‘army’, which is mostly singular, but if the word occurs as an ideogram, it is written with the plural determinative ÉRIN<sup>MES</sup>. In traditional terms this construction is called *constructio ad sensum*<sup>14</sup>, but in reality it concerns the phenomenon of underspecification. Only the context, the kind of agreement, permits the right interpretation.

This means that the neuter must be underspecified for [+/-collective]. *tuzzi-* ‘army’ for instance is a so-called “genus

<sup>12</sup> Friedrich 1960: 117: “Der neutrische Nom.-Akk.Pl. der Adjektive ist schwach, der der Possessivpronomina gar nicht entwickelt”.

<sup>13</sup> Compare KUB XIX 22 (CTH 40) 26 f.: *na-an GIM-an LÜ<sup>MES</sup> URU La-la-an-da [a-ú-e-ir na-at na-aḥ-š]a-ri-ja-an-ta-at* “Und als die Leute von Lalanda ihn sahen, da fürchteten sie sich.”

<sup>14</sup> Friedrich 1974: 115.

collective”<sup>15</sup>. Words like *tuzzi-* or *army, cattle* in the singular refer not only to a group of individuals, but also to the whole kind. If the conception refers to individuals, then the plural pronouns *kē*, *apē* often occur together with the plural ending of the verb. If the conception is considered collective, the pronoun *apāt* appears and possibly the verb has the singular ending. With regard to the possessive pronoun only the conception as collective is developed, therefore the possessive pronoun occurs only in the singular. On the contrary, if *kē* refers to a neuter the individuals of the group are meant. The conclusion is: whereas the genus commune is specified for singular and plural, the gender neuter is underspecified. The pronoun neuter singular *apāt* ‘that’, plural *kē*, *apē* refer either to the collective as a whole or to a group of individuals.

### III.

To sum up: our consideration of the inflection of the oldest Indo-European languages has shown different kinds of underspecification. With regard to the *a-* and *ā-*stems in Old Indian, the most frequent stems in this language, the case system shows the most instances of underspecification. Our representation, which follows the principles of Minimalist morphology, has shown this. Number is not underspecified in the singular and plural, but only in the dual; and gender, except that the genitive plural, does not display underspecification. In recognizing the important role of gender-based inflection for the pronoun, a lot of remodeling after the pattern of the pronoun becomes clear. The distinction between masculine and feminine defines the gender paradigm. When a form threatens to become

---

<sup>15</sup> Leisi 1975: 32; Vogel 1996: 125.

identical with one of the opposite gender, a form analogous to the pronoun usually occurs. Since pronouns are those parts of speech which copy natural gender the best, endings of the pronoun can be taken on within the noun system, and this may occur not only in the nouns with natural gender, but with grammatical gender, too. In Greek, remodeling analogous to the pronoun is also to be found in the *o*- and *ā*-stems, which is motivated by the distinction between the genders masculine and feminine. The feminine is always more frequently remodeled than the masculine. This is quite the contrary for Hittite, which has only the two genders, commune and neuter, and does not demonstrate such analogies. Hittite does, however, have a remarkable kind of underspecification, a *constructio ad sensum*, for which pronouns are also relevant. The neuter which has the feature [- animate] is underspecified with respect to the features [+/- collective]. The deictic pronouns *kās* 'this' and *apās* 'that' occur in the nominative (accusative) neuter as *apāt* vs. *apē, kē*; their use is dependent on the conception of neuter. If the neuter is imagined as a whole, the singular of the pronoun occurs, whereas the plurals *apē* and *kē* refer to a neuter, when a group of individuals is the underlying conception. Thus, in the oldest Indo-European languages pronouns play an important role for the inflection and conception of categories of the noun.

Gender and collectivity are undoubtedly decisive functional categories. In a language like the Indo-European languages which marks gender, the one category depends on the other: individual nouns are typical of these languages and determine the "primary" lexicon, whereas collectives or mass nouns belong to the "secondary" lexicon and are often generated from individual nouns. Therefore, we can say that gender influences division of

nouns on the basis of the mass/count distinction<sup>16</sup>.

### Literature

Alexiadou, Artemis/Wilder, Chris (Ed.): "Possessors, Predicates and Movement in the Determiner Phrase." Amsterdam/Philadelphia: John Benjamins (*Linguistik aktuell* 22).

Blevins, James P. (1995): "Syncretism and paradigmatic opposition". *Linguistics and Philosophy* 18, 113-152.

Corbett, Greville G. (1991): *Gender*. Cambridge University Press (Cambridge textbooks in linguistics).

Friedrich, Johannes (1974): *Hethitisches Elementarbuch, I*. Heidelberg: Winter.

Gallmann, Peter (1998): "Case Underspecification in Morphology, Syntax and the Lexicon". In: Alexiadou/Wilder: 141-175.

Jakobson, Roman (1936): "Beitrag zur allgemeinen Kasuslehre. Gesamtbedeutungen der russischen Kasus." In: Roman, Jakobson: *Selected Writings, II: Word and Language*. The Hague/Paris: Mouton. (1971), 23-71.

--- (1984a): "Structure of the Russian" Verb. In: Jakobson 1984d: 1-14.

--- (1984b): "Contribution to the General Theory of Case: General Meanings of the Russian Cases." In: Jakobson 1984d: 59-103.

--- (1984c): "Morphological Observations on Slavic Declension (The Structure of Russian Case Forms)". In: Jakobson 1984d:

---

<sup>16</sup> Vogel 1996: 147.

105-133.

--- (1984d): *Russian and Slavic Grammar. Studies 1931-1981*. ed. by Linda R. Waugh/Morris Halle, Berlin/New York/Amsterdam: Mouton (Janua linguarum. Series Maior 106).

Klingenschmitt, Gert (1992): "Die lateinische Nominalflexion." In: Oswald Panagl/Thomas Krisch (eds.): *Latein und Indogermanisch. Akten des Kolloquiums der Indogermanischen Gesellschaft. Salzburg, 23.-26. September 1986*. Innsbruck (IBS 64), 89-135.

Leisi, Ernst (1975): *Der Wortinhalt: Seine Struktur im Deutschen und Englischen*. Heidelberg: Quelle & Meyer (Uni-Taschenbücher 95).

Lühr, Rosemarie (1991): "Analogische 'formae difficiliores'. Analogie und innerparadigmatischer Ausgleich bei den a-Stämmen im Indoiranischen." *Historische Sprachforschung* 104, 170-185.

Lumsden, John S. (1987): *Syntactic Features: Parametric Variation in the History of English*. Doctoral dissertation, MIT, Cambridge, Massachusetts.

--- (1992): "Underspecification in Grammatical and Natural Gender." *Linguistic Inquiry* 23, 469-486.

Ortmann, Albert (1998): "The Role of [+/- animate] in Inflection." In: Fabri, Ray/Ortmann, Albert/Parodi, Teresa 1998 (eds.): *Models of Inflection*. Max Niemeyer: Tübingen, 60-84.

Rix, H. (1992): *Historische Grammatik des Griechischen. Laut- und Formenlehre*. Darmstadt: Wissenschaftliche Buchgesellschaft.

- Schwyzler, E. (1953): *Griechische Grammatik, I: Allgemeiner Teil, Lautlehre, Wortbildung, Flexion*. München: Beck'sche Verlagsbuchhandlung (Handbuch der Altertumswissenschaft II 1,1).
- Vogel, Petra Maria (1996): *Wortarten und Wortartenwechsel. Zu Konversion und verwandten Erscheinungen im Deutschen und in anderen Sprachen*. Berlin, New York: de Gruyter (Studia Linguistica Germanica 39).
- Wackernagel, Jacob/Debrunner, Alfred (1929/1930): *Altindische Grammatik III: Nominalflexion - Zahlwort - Pronomen*. Göttingen: Vandenhoeck/Ruprecht [1975].
- Wunderlich, Dieter (1995): "Minimalist morphology: the role of paradigms." In: *Yearbook of Morphology 1995*, 93-114.
- (1996): "A Minimalist Model of Inflectional Morphology." In: Chris Wilder/Hans-Martin Gärtner/Manfred Bierwisch (eds.): *The Role of Economy Principles in Linguistic Theory*. Berlin: Akademie-Verlag, 267-298.
- (1997): "Der unterspezifizierte Artikel." In: Christa Dürscheid/Karl Heinz Ramers/Monika Schwarz (eds.): *Sprache im Fokus. Festschrift für Heinz Vater zum 65. Geburtstag*. Tübingen: Niemeyer, 47-55.
- Wunderlich, Dieter/Ray, Fabri (1995): "Minimalist Morphology: An Approach to Inflection." *Zeitschrift für Sprachwissenschaft* 14, 236-294.
- Zeilfelder, Susanne (2001): *Archaismus und Ausgliederung. Studien zur sprachlichen Stellung des Hethitischen*. Heidelberg: Winter.