

# The Nominative of the Hysterodynamic Noun-Inflection

*To the memory of Jaap Smit<sup>1)</sup>*

INTRODUCTION: 1. Aim, 2. The problem, 3. Full grade + lengthened grade suffix, 4. Forms with ablaut, 5. Some special cases, 6. Some full grades.

MATERIAL:

<i>Ablaut</i> : Greek	7. <i>r</i> -st.	8. <i>n</i> -st.	9. <i>i</i> -st.	10. <i>u</i> -st.	11. <i>s</i> -st.
Sanskrit	12. „	13. „	14. „	15. „	16. „
<i>Accent</i> : Greek	17. „	18. „	19. „	20. „	21. „
Sanskrit	22. „	23. „	24. „	25. „	26. „

27. Comparison, 28. Conclusion, 29. Lithuanian.

## § 1. *The Aim*

The aim of the present article is to demonstrate that the nominative of the masculine and feminine hysterodynamic nouns in PIE had full grade of the root and had the accent on the root.<sup>2)</sup> I am not the first to suggest this. Recently Schindler, *Die Sprache* 13 (1967) 201 has—en passant—defended it. The justification of this discussion is that I shall both consider the problem as a whole with all relevant material, and shall discuss it in some detail.

## § 2. *The Problem*

Accent shift in some nouns has been first defended by Meillet, *MSL* 8.172 ff. In itself it is a simple and probable solution for such cases as *πέλεος*: Skt. *paraśú-*.

The problem, however, arises with the theory of the hysterodynamic and proterodynamic inflection. This theory, first proposed by Pedersen,

<sup>1)</sup> The article is dedicated to my friend J. P. Smit, who died in a motoring accident. When I had made a first draft of the present article, I saw that he suggested the central idea defended here in a note to a scriptio.

<sup>2)</sup> I use the following abbreviations: *AiGr*: Wackernagel-Debrunner, *Altindische Grammatik*; *Bally*: Ch. B., *Manuel d'accentuation grecque*, Bern 1945; *Chandler*: H. W. Ch., *A Practical Introduction to Greek Accentuation*, Oxford 1881<sup>2</sup>; *Dev.*: R. S. P. Beekes, *The Development of the PIE Laryngeals in Greek*, The Hague 1969; *Form.*: P. Chantraine, *La formation des noms en grec ancien*; *Notes*: F. B. J. Kuiper, *Notes on Vedic Noun-inflection*, MKNW 5.4, 1942; *Schwyzler*: E. S., *Griechische Grammatik*, 1; *Stang*: Chr. S. S., *Vergleichende Grammatik der Baltischen Sprachen*, 1966.

*La cinquième déclinaison latine*, pp. 23-6, has been established by Kuiper in his *Notes on Vedic Noun-inflexion*, who demonstrated that the theory explains many problems in Vedic, Greek and Hittite. The essential thing is that there were two inflection types, to be characterized as follows:

hyst. nom. - <i>ór/ér</i>	prot. <i>mén-ti-s</i>
acc. - <i>ér-ṃ</i>	<i>mén-ti-m</i>
gen. - <i>r-ós</i>	<i>mṇ-teí-s</i>

One might doubt many aspects of the concept: how did it function for the neuters, were there no other types: the theory should not be an obstacle to further research. But nobody can deny the existence of the two types, and certainly not that of the first, which only concerns us here; it is found in *πατήρ πατέρα πατρός*, which is evidently an archaic paradigm in Greek, to give one piece of evidence.

Now it was supposed that the first type always had the accent on the last element. For the nominative there were many types with this accentuation in Greek and Sanscrit, and the lengthened grade of the suffix seemed to ask for accent, while the opposition to the proterodynamic type may have been a factor: the accent had to be different, i.e. not on the root. On the basis of this accent it was supposed that the root could not have full grade in the nominative.

Kuiper therefore supposed original reduced grade. Partly this was possible because in Sanskrit reduced and full grade are indistinguishable, both giving *a*. In Greek, however, the difference is mostly evident. So he posits for (Av.) *nasāum* *\*n<sub>e</sub>k-* (p. 47), but *\*nek-* for *νέκως* (p. 37). In fact it appears that many hysterodynamic words have full grade and/or root accent. For *δώτωρ*, against *δοτήρ*, Kuiper considers (*Notes* 11) the possibility that the nominative originally did have no accent. This is not probable to my mind, because then the—secondary—accent would certainly have been in accordance with the other cases, that is, it would have been on the suffix (as in the accusative) or on the last syllable, which coincide in the nominative.

### § 3. Full grade of the root with lengthened grade suffix

To show that this full grade originally belonged to the nominative, I shall demonstrate that it is often found together with the lengthened grade form of the suffix (which can only derive from the nominative), while on the contrary zero grade of the root is mostly

found together with zero grade of the suffix. This opposition is, I think, reflected by ἐλεύθερος : ἐρυνθρός,  $*\tilde{h}_1leudh\text{-}er\text{-}$  :  $*\tilde{h}_1rudh\text{-}r\text{-}$  (note the accent).

(In the following paradigms the accent will be put where I suppose it stood, though the argumentation follows later.)

When we assume that in ἀλείτης -της is secondary for -τηρ as often (*Form.* 321) and as is indicated by ἀλιτήρος ἀλιτήριος, we can reconstruct:

$*\tilde{h}_2lei\text{-}(-)t\text{-}\bar{e}r$	(ἀλείτης)
$*\tilde{h}_2li\text{-}(-)t\text{-}r\text{-}\acute{o}s$	(ἀλιτήρος)

It is generally assumed that λειμών and λίμν-η originally belonged to one paradigm:

$*lei\text{-}m\text{-}\bar{o}n$	(λειμών)
$*li\text{-}m\text{-}n\text{-}\acute{o}s$	(λίμν-η)

In both the foregoing cases there is evidence that a secondary nominative in -ηρ, -ην (λιμίν) was built on the forms with zero grade of the root. This means that δώτωρ δοτήρ derive from:

$*d\acute{e}h_3\text{-}t\bar{o}r$	δώτωρ
$*dh_3\text{-}tr\text{-}\acute{o}s$	(δοτήρ)

Parallel are βώτωρ βοτήρ, and (παν)δαμάτωρ, if for  $*dé\acute{m}a\tau\omega\rho$ , as against  $\delta\mu\eta\tau\acute{\eta}\rho$  ( $*d\acute{e}m\tilde{h}_2\text{-}t\bar{o}r$   $*d\eta\tilde{h}_2\text{-}tr\text{-}\acute{o}s$ ).

To the same situation point ἀλέκτωρ ἀλκτῆρ:

$*\tilde{h}_2lék\text{-}t\bar{o}r$	ἀλέκτωρ
$*\tilde{h}_2lk\text{-}tr\text{-}\acute{o}s$	(ἀλκτῆρ)

The word for 'hill' may have had the following shape:

$*kol(\tilde{h})\text{-}\bar{o}n$	(κολωνός)
$*kl(\tilde{h})\text{-}n\text{-}\acute{o}s$	(OE <i>hyll</i> < Gmc. $*huln\text{-}i$ )

Here there are other forms, Lith. *kálnas*, Lat. *collis*, Goth. *hallus*, which all probably derive from  $*kol(\tilde{h})\text{-}n\text{-}$ .

One of the most perfect cases, of course, is:

$*p\acute{o}nt\text{-}\bar{e}h\text{-}s$	<i>pánthāh</i>
$*p\eta t\text{-}\tilde{h}\text{-}\acute{o}s$	<i>pathás</i> <sup>3)</sup>

<sup>3)</sup> As Kuiper (*IJ* 1 [1957] 86–95) has shown the inflection of Av. *mazdā-* is parallel to that of *pánthāh*, continuing a hysterodynamic noun in  $*dhe\tilde{h}_1\text{-}$ , with a root  $*m\eta s\text{-}$ . However, there are indirect traces for full grade, in the verb *mazdā* beside *mazdā*, and LAv. *mazdra* beside Ved. *medhirá-*, representing  $*mens\text{-}dh\tilde{h}_1\text{-}ro\text{-}$  :  $*m\eta s\text{-}dh\tilde{h}_1\text{-}ro\text{-}$ . As the *-ro-* adjectives are almost certainly

Here we may also cite:

* <i>ueíd-uōs</i>	( <i>εἰδώς</i> )
* <i>uid -us -ós</i>	<i>vidúšas</i> ( <i>ιδυῖοι</i> )

On *ιδυῖοι*, which can hardly be derived from the feminine and must come from the weak cases of the masculine, see Chantraine, *Dict. étym.* s. v. *βιδυ(ι)ος*.<sup>4)</sup>

When the Sanskrit absolutive, type (*i*)-*tvā*, originally belonged to the same paradigm as the infinitive endings in (*e*)-*tum* (*e*)-*tave*, (*e*)-*toḥ* (*AiGr.* II 2 p. 653), then the type must have been hysterodynamic. This is strongly confirmed by the Old Prussian infinitives in *-twei*, a dative form that is isolated in Baltic; Stang (*Vgl. Gr.* 215) considers only types (*-t*)-*e/oṡai* and therefore supposes a basic form *\*-tuwei*, which is not necessary (though it might be a Sievers form after double consonant). Now the other endings have full grade of the root, so Kuiper rightly reconstructs (*Notes* 35, 53):

* <i>eí-t-ēu-s</i>	( <i>étum</i> )
* <i>i-t- u-ós</i>	( <i>itvā</i> )

derived from the original paradigm of *mazdā-*, it seems we are allowed to reconstruct:

* <i>méns-dhēh<sub>1</sub>-s</i>
* <i>mṛs -dhh<sub>1</sub> -ós</i>

This would give the rather surprising result that we have the same type of ablaut also in compounds.

<sup>4)</sup> Ruijgh (e.g. *Lingua* 19.421f., and in his review of *Dev.*, *Lingua* 26) holds *εἰδώς* secondary for *\*FidFōs* after *εἰδέvai* etc., on the basis of the Mycenaean personal name *wi-dwo-i-jo*, supposed to be 'Widwohijos'. The interpretation of the Mycenaean form is tempting, but Ruijgh's conclusion is certainly wrong. It is improbable that an original *\*FidFōs Fidvīa* should have been replaced by *εἰδώς ιδυῖα* through the influence of *εἰδέvai* etc.: 1) the forms with *εἰδ-* outside the participle are less frequent than those of the participle (supposed to be originally *Fid-*): in Homer I count 38 : 65 participle forms (with *εἰδ-*), Iliad 19 : 33, Odyssey 19 : 32. I do not believe in a present *\*ueid-mi* (*Lingua* 26), for which there is no evidence; the author moreover forgets that the old perfect originally was probably a present itself. 2) it is improbable that only the masculine (and neuter) forms should have been changed; there is no reason why the feminine forms should have been less subject to this influence. 3) it is improbable that an opposition masculine : feminine was recently created. Two interpretations of the Mycenaean form are possible, to my mind. We have *\*ueiduōs* *\*uidyes-* *\*uidus-* levelled down to *\*weidwōs widwos-*. Otherwise Mycenaean had replaced *\*ueiduōs* by *\*widwōs*, in contradistinction to all other Greek dialects. In any case the Mycenaean form would give an important confirmation of zero grade in the masculine, though *ιδυῖοι* (from *\*uidus-*) must be older.

(Note the accent.) There is no comment on the full grade in the *Notes*. Kuiper supposed that the Greek nouns in  $-\tau\bar{o}\varsigma$  derived from the same paradigm, which would explain the long  $v$ , as in  $\nu\acute{\epsilon}\kappa\bar{o}\varsigma$  etc. (*Notes* 47 ff.). Now one of the few words that is not explainable as a recent Greek formation is  $\kappa\lambda\epsilon\iota\tau\acute{o}\varsigma$ , which shows full grade.

A few cases with laryngeal could as well have reduced grade, as  $\bar{h}$  and  $\bar{h}_e$  mostly have the same reflex as  $e\bar{h}$  and  $\bar{h}e^5$ ), but as there is little evidence for reduced grade, we may safely assume full grade.

$*\bar{h}_2e\acute{u}s-\bar{o}s$	( $\eta\acute{o}\varsigma$ , <i>aurora</i> )
$*\bar{h}_2us - s-\bar{o}s$	$u\acute{s}\acute{a}h$

For  $\eta\acute{o}\varsigma$  see Kiparsky (*Lg* 43 [1967] 619–35), who convincingly demonstrated a development  $*aus\bar{o}s > *auh\bar{o}s > *ah\bar{u}\bar{o}s > *h\bar{a}\bar{u}\bar{o}s$ .

$*\acute{e}\bar{h}_1t-m-\bar{o}n$	$\bar{a}tm\bar{a}$
$*\bar{h}_1t-m-(e)n-\acute{o}s$	$tm\acute{a}n\acute{a}h$

See *Notes* 19f.

The word for 'sun' has:

$*se\bar{h}_2u-\bar{o}l$	
$-el-\eta\eta$	( $\eta\acute{\epsilon}\lambda\iota o\varsigma$ )
$*s\bar{h}_2u - l-\acute{o}s$	( $s\acute{u}rya-$ )

$H\acute{\epsilon}\lambda\iota o\varsigma$  has  $e$ -grade of the suffix from the accusative, but the full grade of the root probably derived from the nominative; the demonstration is therefore not strict. (Note Ernout-Meillet s.v. *sol* on  $\eta\acute{\epsilon}\lambda\iota o\varsigma$ : 'le vocalisme à double forme pleine  $*s\bar{a}u\bar{w}el-$  est surprenant.') Skt.  $s\bar{u}r-$  is due to metathesis, which is often found. In Lat. the root form  $s\bar{h}_2u-$  was generalized, whence  $s\bar{h}_2u-\bar{o}l > sol$  (the only form from which the word may be explained, see Ernout-Meillet).

#### § 4. *Forms with ablaut*

Some other forms may be given which present full grade beside zero grade, but where it cannot be shown that the full grade form specially belongs to the nominative.

$\acute{E}\nu\acute{\alpha}\tau\eta\theta$ , Skt.  $y\bar{a}tar-$  reconstruct into:

$*\acute{\lambda}\acute{e}n\bar{h}_2-t\bar{e}r$	( $\acute{e}\nu\acute{\alpha}\tau\eta\theta$ )
$*\acute{\lambda}\acute{e}\bar{h}_2-tr -\acute{o}s$	( $y\bar{a}tar-$ )

<sup>5</sup>) In *Dev.* 236 I supposed that in Sanskrit  $\bar{h}_e-$  before consonant developed into  $i-$ . If this is right, Skt.  $\acute{a}sm\bar{a}$  can be neither  $\bar{h}_2\bar{k}-$  nor  $\bar{h}_2e\bar{k}-$  but only  $\bar{h}_2ek-$ .

Hardly less strong is the evidence of ἔρσην, ἄρσην (ἄρρην; for the forms see Lejeune, *Traité de phonétique grecque*, p. 106, Buck, *Greek Dialects*, p. 69). There can be no doubt that they contain *ers-* and *rs-*<sup>6</sup>), the first of which is confirmed by Avestan *aršan-*. Zero grade of the suffix is found in Skt. *ṛṣa-bhā-* (and *ἀρνεῖός*); with full grade of the root in *Εἰραφιώτης*, though old *\*ers-ṛ-bho-* is hardly to be expected (*ε-* secondary? <sup>7</sup>). Or should the etymology be given up? See Solmsen, *KZ* 7.47 n1 on Mac. Ἀρραβαῖος Ἀρριβαῖος Ἀρριδαῖος *Ερριδαῖος*). They will derive from:

<i>*érs-ēn</i>	ἔρσην, Av. <i>aršan-</i>
<i>*ṛs- n-ós</i>	( <i>ṛṣa-bhā-</i> , ἄρσην)

(Solmsen's suggestion *\*ṛsén*, vocative *\*érson*, *KZ* 7.49, is not probable.) On the accent see below.

<i>*nék-ēus(-ōus?)</i>	(Av. acc. <i>nasāum</i> , νέκυσ)
<i>*ṛk- ṛ-ós</i>	(OIr. <i>éc</i> , Welsh <i>angheu</i> )

The Greek form can only have full grade.

<i>*pékt-ēn</i>	(Lat. <i>pecten</i> )
<i>*pkt - n-ós</i>	(κτελής)

Greek κτελής is secondary for *\*κτην*.

*Αἰθήρ*, -έρος has the full grade generalized; zero grade of the suffix is only retained in derivations: *αἰθήρη*, *αἰθριός* *αἰθρός*. Double zero grade has Indo-Ir. *\*idhra-* in Ossetic *ird* (Benveniste, *Langue ossète* 96). This gives

<i>*h<sub>2</sub>eídh-ēr</i>	(αἰθήρ)
<i>*h<sub>2</sub>idh - r-ós</i>	(Oss. <i>ird</i> )

### § 5. *Some special cases*

Three more difficult cases may be discussed here.

The words for 'sweat' form a great complex. Lat. *sudor* is by Walde-Hofmann not considered as an original noun in *-ōs*, probably because of the *o*-vocalism of the root. This is no obstacle, but it is possible that *sudor* was derived from *sudare*, which is denominative

<sup>6</sup>) As I pointed out *Dev.* 91 the word cannot have had a laryngeal, since *h<sub>2</sub>* would have given *ἀρσ-* always and *h<sub>1</sub>* would have given *ἐρσ-* < *h<sub>1</sub>rs-* (on this development now Rix, *MSS* 27 [1970] 79–110).

<sup>7</sup>) *Έλαφος* may derive from *\*h<sub>1</sub>lṛ-bho-*, and *ἐλλός* < *\*élnos* < *\*h<sub>1</sub>l-n-*, the weak grade form of *\*h<sub>1</sub>el-ēn* (> *\*élṛn*, of which the secondary weak grade *ἐλεν-* is probably found in *ἐνελός*, standing for *\*élenos*).

from *\*sṷoido-* (Skt. *svéda-*, OE *swāt*). In any case the neuter *\*sṷeid-os* (*εἶδος*, *ἶδος*, Frisk s.v. *ιδίω*) cannot have given the ending *-or*. *Ἰδρῶς* is an *s*-stem, but we do not know how old it is (*ἰδρῶς* either *\*ιδῶς* contaminated with *ιδρ-*, or *ιδρ-* rebuilt into *ιδρῶς*; Schwyzer's *\*Fheidar* [p. 514] is unwarranted). As, then, *sudor* is doubtful (*\*sṷoid-ōs*, *sṷoid-ōr* or from *sudare*) and *ἰδρῶς* does not point to full grade, they are not of importance here. Double zero grade has Welsh *chwys* < *\*sṷid-s-o-*, which may be from *\*sṷe/oid-ōs* as well as from *\*sṷeid-os*. Here is then important only Lett. *sviédri* (pl.) < *\*sṷe/oidr-*, which supposes:

<i>*sṷe/oíd-ēr/ōr</i>	(Lett. <i>sviédri</i> )
<i>*sṷid - r-ós</i>	(Arm. <i>k'irtn</i> < <i>*sṷidr-</i> , <i>ἰδρ-ῶς</i> )

(On *ἰδρῶς* in Homer see *Dev.* 277.)<sup>8)</sup>

Neither Gr. *δρῶς* nor the forms pointing to *\*deru-*, Lith. *dervà*, Sl. *drěvo*, Welsh *derwen* can be derived from *\*doru* *\*dreus*. A hystero-dynamic paradigm could have been at the basis: *\*der-ēu-s* *\*dṛ-u-ós*, but it requires for Greek generalization of the zero grade form of the root, combined with the nominative form of the suffix, represented by *ṽ* (as in *ρέκῶς*), and full grade of the root with zero grade of the suffix for *\*deru-*. This is not very probable. It is much easier to start from:

<i>*dér-u-ēh-s</i>	(Lith. <i>dervà</i> etc.)
<i>*dr -u- h-ós</i>	( <i>δρῶς</i> )

This paradigm has been established by Kuiper (*Notes* 14ff.) for the Vedic type *tanúh tanvāh* (*tanúah*). This explains *δρῶς* by generalization of the weak stem form (*\*dr-u-h-*), for which we have a parallel in *ὄφρῶς*, from *\*h<sub>3</sub>bhrēuh-s* *\*h<sub>3</sub>bhruh-ós* (*Notes* 9). It also agrees with the feminine gender of *δρῶς*. The other forms have their stem *\*deru-* from the nominative.

Ved. *Pūṣā* has been connected with *Πάυ*, Arc. *Παονι* (VI B.C.) as *\*pūs-/pāus-*. Since PIE had *ā* only from *eh<sub>2</sub>*, we would have to suppose *\*peh<sub>2</sub>us-*. Though *\*peh<sub>2</sub>us-* (> *\*pāus-*) may not be impossible, there is no need to assume such a form: *\*peh<sub>2</sub>us-* > *\*πανσ-* > *πᾶF-* (with compensatory lengthening upon the loss of *-σ-* according to Kiparsky; see on *ῆῶς* above). (For the loss of the *F* in Arcadian see Thumb-Scherer p.124.) *\*Ph<sub>2</sub>us-* should then have had meta-

<sup>8)</sup> Note that three or four nouns seem to be PIE: *\*sṷoido-s*, *\*sṷeidos* (ntr. *s*-stem), *\*sṷeid-ōr* and perhaps *\*sṷeid-ōs*!

thesis to *\*puh<sub>2</sub>s-* > *pūs-*, as must often have happened (see on *sūrya-* above). We get then:

<i>*péh<sub>2</sub>-us-ōn</i>	( <i>Παοι, Pauso</i> )
<i>*pĥ<sub>2</sub> -us- n-ós</i>	( <i>Pūsān-</i> )

Connection with *pusyati* is hardly possible because of the short *u*. I would rather think of *pāti* 'protect' (*\*peh<sub>2</sub>-* > *\*pā-*; *\*peh<sub>2</sub>s-*, Hitt. *pahs-*, Lat. *pastor*; *\*poĥ<sub>2</sub>-i-* in *ποιμὴν* etc.). As to the formation, there may have been a *\*peh<sub>2</sub>-u-ōs* (beside *\*peh<sub>2</sub>-u-ōn* in Skt. *-pāvan-*), which was rebuilt into *\*peh<sub>2</sub>-us-ōn*. (Typologically the form is the same as *\*poĥ<sub>2</sub>-i-m-ōn*, Lith. *piemuō*.) As to the accent, *Παοι* would show root accent, but it is not reliable, for, firstly, it is pure hypothesis; and secondly, it can hardly be right, since *Πάον-* would contract to *\*Πāv* (but there seem to be no words in *-āv* with circumflex, Chandler p.167). The whole, of course, is doubtful, though the Illyrian name *Pauso* seems a confirmation; it should be retained that the Greek has no sure evidence for *u* or *s*.

Skt. *yúnā yūnāḥ* points to the following paradigm:

<i>*h<sub>2</sub>iéu-ĥ(-)ōn</i>	Av. <i>yava</i> ?
<i>*h<sub>2</sub>iū -ĥ(-) n-ós</i>	<i>yūnāḥ</i> , Av. <i>yūnō</i>

Sanskrit has the zero grade in the nominative. The full grade is attested by Welsh *ieuanc* (OIr. *óanc*) < *\*h<sub>2</sub>iéuĥ<sub>2</sub>-ko-* (Skt. *yuvaśá-*, Lat. *iuuencus*, Goth. *juggs* < Germ. *\*h<sub>2</sub>iuhungaz* all suppose *\*h<sub>2</sub>iūĥ<sub>2</sub>-ko-*). Though *-av-* is often written for *-(u)v-*, Av. *yava* might represent original full grade; this might be confirmed by the Armenian loan *yavanak*, *yovanak*, as Hoffmann already pointed out, *MSS* 6 (1955) 35–40. (The nominative accent seems to have been retained when the zero grade was introduced.)<sup>9</sup>

<sup>9</sup>) Hoffmann assumes a suffix *-hōn* on the following evidence: 1) Av. *maqθrā*, which must be read trisyllabic (Y. 50,6; 51,8), supposed to derive from *\*mentro-hōn*; 2) *-ōn-* from *-o-ĥ(ō/o)n-* in all cases (as is found with *maqθrā*); 3) *μελαν-* < *\*mel-ĥn-*; 4) the Sanskrit suffix *-in-*, which in some cases would be *-ĥn-*; 5) *kanyā* (*kanīyā*) *kanīn-* (*ām-*, *-ā*); 6) *yúnā*. The idea is very difficult to prove or disprove. We do not know which laryngeal to assume. Lat. *iuuēnis* more probably derives from *\*h<sub>2</sub>iūh<sub>1</sub>en-* than from *\*h<sub>2</sub>iūh<sub>2</sub>-* (where I would expect *-an-* from *-n-* by influence of [any] laryngeal, though such influence has not been proven), but *iuuencus* most probably has *-ĥ<sub>2</sub>-n-*. If it is *h<sub>1</sub>*, *μελαν-* cannot have *-ĥ<sub>1</sub>n-*.

I object to the idea (originally from Meillet, e.g. *Introduction*<sup>8</sup> 263), that PIE had forms with *-ōn-* in all cases that originated from *-o-ĥ(ō/o)n-* (note that *-o-ĥen-* would not give *-ōn-* so easily). First it is not sure that PIE had such forms; the agreement between two languages could as well be the result of parallel development. Secondly, if there are, they might easily be ex-



§ 6. *Some Full Grades*

Several instances could be adduced where only the full grades of original hysterodynamic nouns are preserved. They appear in the discussion of the material; here I cite some examples.

*κλειτορίς* points to *\*κλειτωρ* ('hill'?), which is known as the name of an Arcadian city.

Goth. *menops*, Lith. *mėnuo* seem to point to *\*mēnōt-* (objections from Stang p. 224); an *s*-stem is better attested. As lengthened grade is impossible, *\*mē-* represents *\*meḥ<sub>1</sub>-* (a curious confirmation of the assumption of laryngeals; this is the root 'to measure', which must be *\*meḥ<sub>1</sub>-*, since *\*mē-* is an impossible root structure). Note the root accent. (Specht's assumption, KZ 66.53, of an old abstract on the basis of this accent is in the light of our theory unfounded.) There is abundant evidence for *\*meḥ<sub>1</sub>-n-s-*, but not for *\*mḥ<sub>1</sub>-n-s-*.

*\*H<sub>2</sub>népōt*, Lat. *nepōt-*, Skt. *nápāt* (note the accent) has full grade. Zero grade of the suffix is presented by Av. *nap̄tya-*, ἀνεπίος, but *\*ḥ<sub>2</sub>np̄-t-* is unknown.<sup>10)</sup>

plained as early instances of ablaut levelling. Most important is that the type *-o-ḥōn* can hardly be PIE. There are no words of the type *-o-tōr*, *-o-mōn*, *-o-ḡōs*, *-o-iōs*. With zero grade of the suffix we have forms with a preceding ('thematic'?) vowel *e/o*, but these are always thematic nouns: *-tro-*, *-dhlo-*, *-mno-* (*dátra-* < *\*dḥ<sub>3</sub>-e-tro-*, μέτρον < *\*mḥ<sub>1</sub>-e-tro-*, Dev. 183). Moreover, the vowel is mostly *e*, not *o*, and the forms without such a vowel predominate. The only formation of the type *-o-ḥōn* are the words in *-o-went-*, though I must say that I am not quite sure that they are normal hysterodynamic words, as there are no traces of *o*-vocalism and as it is the only suffix to end in two consonants. Here Indo-Iranian and Greek have forms derived from *o*-stems (for Mycenaean see Chadwick-Baumbach, *Glotta* 41 [1963] 189 s.v. *-εις*). It is then not probable that the type *-o-ḥōn* was PIE. If *-ḥōn* existed, *-o-ḥōn* could be an Iranian innovation. It is therefore almost impossible that the generalization of *-ōn* was due to a suffix *-ḥōn* (as it did not appear after *-o-* at an early date).

As regards *kanyā kanīn-* it will derive from *\*kenihon-*. However, this does not prove the existence of a suffix *-ḥon-*; the laryngeal might be part of the preceding element.

For *yávā \*ieuḥ-ōn* is the most easy solution. Only if one wants to retain the connection with Av. *āyā yaoš* from *\*ḥ<sub>2</sub>oīu* *\*ḥ<sub>2</sub>ieuš*, the laryngeal makes a problem. Now this connection could be given up; otherwise the formation could be explained as derived from a noun in *-ḥ*. *Yōsan-* could in the same way be derived from an—intermediate—*s*-stem; and here nobody assumes a suffix *-son-*.

<sup>10)</sup> We may expect an inflection type *-ōt/-et/-t-*. In *αἰετός* < *\*ḥ<sub>2</sub>euḡ-et-* we may have such *-et-*. One might ask whether the suffix *-to-* of the verbal adjective is not a thematization of the zero grade of this suffix, which agrees with the zero grade of the root in these forms.

### The Greek and Sanskrit Material

The conclusion of the foregoing pages is that there are instances of, probably old, hysterodynamic words with full grade of the root. This full grade is often found combined with the lengthened grade form of the suffix, so originally belonged to the nominative, while the other cases have double zero grade (the accusative—and the locative—are not considered here). If this is true, it seems probable that this full grade root had the accent, what would explain many cases of root accentuation with hysterodynamic nouns. More and more we find the idea confirmed that only full grade could have the accent in PIE (lengthened grade not considered), and that full grade mostly or always did have the accent.

We now have to see whether this hypothesis is confirmed by a survey of the most important categories concerned. I shall therefore briefly discuss the Greek and Sanskrit evidence, for *r*-, *n*-, *i*-, *u*- and *s*-stems respectively, in this order:

Ablaut Greek	( <i>r</i> -, <i>n</i> -, <i>i</i> -, <i>u</i> -, <i>s</i> -stems)
Sanskrit	(id.)
Accent Greek	(id.)
Sanskrit	(id.)

to be followed by a comparison and the conclusion.

A noun in *-ōt* may be found in Skt. *jāmātā*, which may be discussed here. The words for 'son-in-law' present us with problems that will probably never be definitely solved. I confine myself to a few remarks: 1) it is evident that not all forms found derive from one root (e.g. *m* in *γαμβρός*, *jāmātā* etc. against *n* in Lat. *gener*); 2) it is possible that some verbs (specially *\*ĝenh<sub>1</sub>-* / *ĝneh<sub>1</sub>-* 'be born', perhaps *\*ĝnō-* 'know') influenced the existing form(s); 3) it is evident that Lett. *znuōts* is derived from *\*ĝnō-*, and was not a word specially made to denote the 'son-in-law', but only one that came to be used for it; 4) though *γαμβρός* might have been influenced by *γαμέω* this does not prove that the *μ* of *γαμβρός* is secondary; the agreement with the *m* of Indo-Iranian rather proves that it is old. An original relation with *γαμέω* is as natural as one with *\*ĝnē-* 'be born': the son-in-law is as much 'the one who marries (your daughter)' as 'a (new) son'. *Γαμβρός* may represent *\*ĝmr-o-* (weak grade form of *\*ĝem-ōr*). Av. *zāmātar-* is probably secondary, perhaps for *\*zāmā* < *-ōr*, but more probably for *\*zāmāt* < *-ōt* (like *nápāt*, which was changed to *\*núpātar-*). In any case it probably was a hysterodynamic noun with full grade of the root, certainly not lengthened grade. Short *o* (*\*ĝom-ēr/ōr* > *zām-*) is possible, but a form *\*ĝeh<sub>2</sub>m-ōr* or *\*ĝeh<sub>2</sub>m-ōt* must also be considered. The weak case form *\*ĝh<sub>3</sub>ṃ-r-o-* could give *γαμβρός*, as well. *H<sub>2</sub>* (necessary for *γαμβρός*; *h<sub>1</sub>* would give *\*γεμβρός*, *h<sub>3</sub>* *\*γομβρός*) would exclude original identity with all forms with *e* (*gener*, *zentas* etc.): these have either *e* analogically from *\*ĝenh<sub>1</sub>-*, or they are not cognate at all.

Only substantives and adjectives are studied, neuters and names are not considered.

For the Greek accent I rely upon Chandler and Bally (Vendryes' *Traité* does not give sufficient details), for Sanskrit on *AIGr* II 2.

In the following I shall sometimes use a consideration which may be presented here in the form of a rule:

*When a word has the accent on a zero grade element, this indicates that this element had full grade in one or more forms of the original paradigm.*  
and as a corollary:

*When a word has the accent on a zero grade element, the place of the accent is old in one or more forms of the paradigm.*

I shall not try to prove this rule. We have seen an example in discussing *γύνᾱ* above. To my mind it is evident in itself, and the reader is asked to consider its validity on the cases where I shall use it. (It might be added that it is by no means essential for the following demonstration.)

## Ablaut

### Greek

#### § 7. *r-stems*

*-er-*

The only ancient nouns are *ἀνήρ* *ἄήρ* *αἰθήρ* *δαήρ*. They do not allow conclusions (*ἀνήρ* probably zero, the others full grade).

*-ter-*

Of those in *-τωρ* *-τηρ* few are ancient. Those in *-τωρ* have generally full grade ('généralement long', *Form.* 323). There are some cases where the difference with those in *-τηρ* is striking: *δῶτωρ* : *δοτήρ*; *βῶτωρ* : *βοτήρ*; *ἐπιβήτωρ* : *ἐπαμβατήρες*, *βατήρ*; *ἄλέκτωρ* : *ἄλκτῆρ*; *-δαμάτωρ* : *δητήρ*. They are few, but important because they belong to the oldest words, and because the ablaut types are from a Greek point of view quite different, but in PIE all full : zero (*\*deh<sub>3</sub>-*/*\*dĥ<sub>3</sub>-* etc., *\*h<sub>2</sub>lek-*/*\*h<sub>2</sub>lk-*, *\*demh<sub>2</sub>-*/*dĥh<sub>2</sub>-* if *δαμα-* is secondary for *\*δεμα-*, which is nowhere retained in Greek).

*Conclusion*: The forms in *-τωρ* seem originally to have had full grade.

#### § 8. *n-stems* (Greek)

There are no general rules.

With *-ων*, *-ονος* we have *τέκτων*, *γείτων*, which may be ancient.

With *-ων*, *-ωνος* there are hardly old words: *ἀγών*, *ἀγκών* may be full or zero grade.

*-ην*, *-ενος* is rare: *ἔρσην ἄρσην* see above p. 35.

*-ην*, *-ηνος* is not known from surely PIE words.

*-μων* (*-μονος* and *-μωνος*) has often full grade (*πλεύμων*), but also zero (*ἰδμων*), *Form.* 170.

*-μην* (*-μενος*) is rare. Full grade in *ποιμήν*, zero in *λιμήν*. The others are *ἀντμήν* *πυθμήν* *ὕμήν* (two words).

*Conclusion*: The only conclusion is that there is no rule. In any case full grade is surely attested for ancient words in all categories (*γείτων* *ἔρσην* *πλεύμων* *ποιμήν*). *Λειών* : *λιμήν* is unique in opposing full grade with *-ων* to zero with *-ην*.

### § 9. *i*-stems (Greek)

Type *ῥις*

Of this inflection (*Notes* 68) *ῥις*, *οῖς* is almost the only instance (*φθόις*; Kühner-Blass 1.441). It has full grade (as Sanskrit and Latin).

Words in *-ω*

There are no ancient words (though the type must be ancient).

*Conclusion*: Only one word is relevant, *ῥις*; it has full grade.

### § 10. *u*-stems (Greek)

*-εως*

Nothing can be said.

*-ως*

Since *πάτρωος* *μήτρωος* cannot be used, only *ἄλωος*<sup>11)</sup> *γάλωος* (*λαγώος*?) *δμώος* remain<sup>12)</sup>. *Δμώος* has zero grade, *ἄλωος* and *γάλωος* rather point to reduced grade. This could be important in two ways. First, the reduced grade might come from the accusative. This would be understandable, since this type is based on the accusative: as *-ου-s* would have given *-ους*, the nominative must be analogic after the accusative, which has *-ων* from *-ōn* dissimilated from *-ōu-m* (itself analogical for *-ōu-η*, just as *Ζήν*, *Δυῖν*). This would not only prove that the accusative had reduced grade of the root, but it also shows that, if the nominative would have had reduced grade, we should have found much more direct evidence for it (in the shape of *a-*

<sup>11)</sup> See on this word my article in *Mnemosyne* 24, Appendix I.

<sup>12)</sup> *Ἡρώος* is no *u*-stem, when Myc. *tiriseroe* (*tris-ērōei* dat.) contains this word.

vocalism in Greek). But the interpretation of these words is not sure enough.

- $\check{u}\varsigma$ , - $\bar{u}\varsigma$

For these words I follow *Notes* 40–53. Kuiper there established as hysterodynamic:

- $\check{u}\varsigma$	$\pi\check{\eta}\chi\upsilon\varsigma$	- $\bar{u}\varsigma$	$\nu\acute{\epsilon}\kappa\bar{u}\varsigma$
	$\pi\acute{\epsilon}\lambda\epsilon\kappa\upsilon\varsigma$		$\chi\acute{\epsilon}\lambda\bar{u}\varsigma$
	$\xi\gamma\chi\epsilon\lambda\upsilon\varsigma$		
	$\pi\rho\acute{\epsilon}\sigma\beta\upsilon\varsigma$		
	$\nu\acute{\iota}\acute{o}\varsigma$		

both - $\check{u}\varsigma$ , - $\bar{u}\varsigma$   $\gamma\acute{\epsilon}\nu\upsilon\varsigma$

All have full grade, except  $\nu\acute{\iota}\acute{o}\varsigma$  (of which the accent is also exceptional).

*Conclusion*: No evidence from - $\epsilon\upsilon\varsigma$ , - $\omega\varsigma$  seems to have reduced grade; - $\upsilon\varsigma$  has full grade.

#### § 11. *s-stems (Greek)*

- $\omega\varsigma$

We only have  $\eta\acute{o}\varsigma$   $\alpha\acute{\iota}\delta\acute{o}\varsigma$   $\alpha\acute{\iota}\bar{\omega}$  (acc.)  $\gamma\acute{\epsilon}\lambda\omega\varsigma$   $\xi\rho\omega\varsigma$   $\acute{\iota}\delta\rho\acute{o}\varsigma$ . They all probably have full grade, except  $\acute{\iota}\delta\rho\acute{o}\varsigma$  (see above p. 36).

- $\eta\varsigma$

On the origin of these forms see under Accent. (In any case the oldest words have full grade:  $\nu\eta\mu\epsilon\rho\tau\acute{\eta}\varsigma$   $\acute{\epsilon}\nu\delta\epsilon\lambda\epsilon\chi\acute{\eta}\varsigma$ .)

The comparatives originally have full grade (type  $\kappa\rho\acute{\epsilon}\sigma\sigma\omega\upsilon$ ).

Though it is mostly stated that the perfect participle had *e*-grade, this appears only from  $\epsilon\acute{\iota}\delta\acute{o}\varsigma$  (see above).

*Conclusion*: There is evidence for full grade in all categories.

#### Sanskrit

#### § 12. *r-stems*

-*er*-

With -*er*- there are only five words in the R̥gveda. Full grade have  $\text{dev}\acute{r}\text{-}$ ,  $\text{sv}\acute{a}\text{sr}\text{-}$ , zero  $\text{n}\acute{r}\text{-}$ ,  $\text{u}\text{sr}\text{-}$  (full grade in  $\acute{a}\eta\rho < *\acute{h}_2\text{eus-}\bar{e}r$ ); not clear is  $\text{n}\acute{a}\text{n}\bar{a}\text{n}\bar{d}\text{r}\text{-}$ .

-*ter*-

Full grade has been generalized;  $\text{ú}\text{sr}\text{r}\text{-}$  is probably the only old example with zero (the accent—also  $\text{u}\text{sr}\text{r}\text{-}$ , but compare  $\text{ú}\text{sr}\text{ra}\text{-}$ —indicates the existence of old full grade according to our rule).

The relatives names have the same form as in Greek (see Accent), except *yātar-*, which is zero (see above p. 34).

*Conclusion*: Full grade is mostly generalized.

### § 13. *n-stems (Sanskrit)*

*-an-* (*AiGr* II 2 p. 175–80)

With the inherited nouns with *-an-* zero grade of the root prevails. Only *tákšan-* has full grade (but zero would give a phonetically difficult form). Avestan *aršan-* (above) testifies to full grade in the paradigm. As both accentuations occur, the forms with root accent on zero grade testify to a full grade in the paradigm: *vřšan-* (for which it may be confirmed by Lat. *verrēs* if this is secondary for *\*verrē* < *\*uers-ēn*), *yúvan-* (above p. 37).

*-man-* (*AiGr* II 2 p. 754–68)

Those in *-man-* have full grade. Ablaut has been preserved in *ātmā tmánah* (above p. 34).

*-van-* (*AiGr* II 2 p. 894–905)

Those in *-van-* have zero grade, but forms with *ā* in the root retain it (*-pāvan-* ‘protecting’, *grāvan-*); exceptions are *sanítvan-* and *pátvan-* (where zero would phonetically be difficult). As the words have root accent (on zero grade), they will have had full grade in the paradigm. The accent is confirmed by the only Greek form that can be compared, *πίων* — *pívan-* (thus pointing to *\*peihūōn*, or *\*piéhūōn*?).

*Conclusion*: There is ample evidence for full grade in the paradigm, confirmed by special cases: *aršan-* (*ῥοσην*), *vřšan-* (*verres*), *yúvan-*, *ātmā*.

### § 14. *i-stems (Sanskrit)*

*sákhā*

The only clear instance is *sákhā sákhye*, for which we may reconstruct:

<i>*sék-h-ōi</i>	<i>sákhā</i>
<i>*s(e)k-h- i-eí</i>	( <i>sákhye</i> )

(Kuiper, *Notes* 64, posits a reduced grade *\*s<sub>e</sub>k-*.)

Type *ávi-*

Hysterodynamic are also *ávi-*, *páti-* and *arí*, *rayí-*, *Notes* 66. All have full grade (or reduced, but this is hardly in question).

*Conclusion*: Both *sákhā* and all forms of the type *ávi-* have full grade.

§ 15. *u-stems (Sanskrit)*

For the *u-stems* in Sanskrit I follow *Notes* 40–53. Kuiper there found hysterodynamic:

full grade	<i>krātu-</i>	<i>paśú-</i>
	<i>mádhu-</i>	<i>paraśú-</i>
	<i>vásu-</i>	<i>bāhú-</i>
	<i>pársu-</i>	<i>palātvāḥ</i>
	<i>hānu-</i>	
zero grade	<i>kṛtu-</i>	<i>pitú-</i>
	<i>śísu-</i>	<i>rjú-</i>

*Conclusion:* Most *u-stems* have full grade.

§ 16. *s-stems (Sanskrit)*

There are only two inherited words in *-as-*, *usás-* and *jarás-*, one with zero, one with full grade (zero would be *\*jiras-* < *\*ǵr̥h₂-os-*). We can hardly base a conclusion on them. Important is *púmān*, of which the accent testifies to full grade; it is the more important, as the weak cases have the accent on the ending, so the full grade was original in the nominative.

The comparatives with *-(i)yas-* have full grade of the root (which bears the accent; the same situation is found in other languages).

The perfect participle with *-vas-* has zero grade (and the accent on the suffix). That this is a new situation (parallel with *δοτήρ* against *δότης*) appears from the old full grade *εἰδώς* (above), which is confirmed by Goth. *weítwods*.

*Conclusion:* The nouns being divided, the comparatives generalized full grade, the perfect participle zero grade: this situation points to an original inflection with full grade in some form(s) of the paradigm.

**Accent****Greek**§ 17. *-r stems*

There is a general rule that nouns in *-ωρ* are paroxytona, those in *-ηρ* oxytona. The only exception to the first rule is *ιχώρ*. To the second we have *μήτηρ θνγάτηρ εἰνάτηρ (?) φράτηρ*.

Even for the nouns in *-ηρ* we can demonstrate the other accentuation. Of the words designating relatives we have *πατήρ* against

*μήτηρ θνγάτηρ φράτηρ*. For Greek a rule was given that the feminine words are paroxytona. This rule may be useful, but it is not probable that this was the cause for a change from oxytonon to paroxytonon: first there is no parallel for such a rule in Greek, secondly this would not explain *φράτηρ*. For *φράτηρ* the barytonesis is confirmed by Skt. *bhrátar* and Goth. *broþar*. The transference to the other category can also be seen in this word: it is often oxytonon in our manuscripts, and cf. *φράτηρ Ἀπτικοὶ μὲν βαρύνουσιν, οἱ δὲ Δωριεῖς ὀξύρουσιν* (on Attic cf. below on *ἔως*). Of course, one could argue that there are irregularities in this special group of words; this is a good possibility, but when something is possible, it is not yet proven that it really is so, and methodically we should not assume exceptions unless they are unavoidable. For our problem there is no reason to suppose that the words discussed were irregular in accentuation in PIE. In Greek some are irregular, but they can, and can only, be explained as archaisms, which may be expected in these words. Indeed, *μήτηρ* stands alone in continuing the PIE accentuation type (even more so than the Sanskrit type *pímān* etc., as the Greek accentuation of the accusative is probably original, compare § 29):

<i>μή-τηρ</i>	<i>*méh<sub>2</sub>-tēr</i>
-τέρ-α	-τέρ-η
-τρ -ός	-tr -ós

As to the accent of *εἰνατηρ*, the word occurs in (late) inscriptions (where it has no accent) and in Homer, where *εἰνατέρων* is of no use, the nominative plural being given as *εἰνάτερες* or *εἰνατέρες*. The last would be of no use (both *μήτηρ* and *πατήρ* giving -τέρες). The first undoubtedly points to *ἐνάτηρ*, which is also confirmed by Herodians genitive *εἰνάτερος* (the vocative *εἰνατερ* being of no use, cf. *πάτερ*). However, Chantraine, *Dict. étym.* s.v., explains this as 'barytonèse éolienne', and this possibility cannot be excluded (Herodian having the form with *εἰ-*). If the accent of *γάταρ*- (gramm.) is reliable, it is old according to our rule.

The perfect agreement of all forms concerned makes it probable that PIE had *-ēr* in these forms. We cannot controll whether they are early cases of the elimination of *-ōr*. Gr. *φράτωρ* is recent (a third century B.C. papyrus); on *πάτωρ* see below. In any case it seems most probable that even these cases with PIE *-ēr* had the accent on the root (in some forms). Perhaps it is not accidental that *\*méh<sub>2</sub>tēr* and *\*bhréh<sub>2</sub>tēr*, with full grade of the root, have root accent, while *\*pñ<sub>2</sub>tēr*, with zero grade of the root, has in all languages final accent.



It seems not too bold to assume *\*péh<sub>2</sub>-tēr* or *\*péh<sub>2</sub>-tōr* as the oldest nominative (but *πᾶτωρ* Hesychius, conjecture in Kritias 15, 4 cannot be used as evidence for it). The idea of a basic 'Lallwort' *pā* (*AiGr* II 2 § 505) is already impossible because of the laryngeal (see Kuiper, *Notes* 20ff. on forms with non-vocalic laryngeal), and an original meaning 'protector' (*\*péh<sub>2</sub>-*) would be perfectly acceptable (for the head of a nomadic clan); specially the use as epithet of *Diēus* makes such a meaning more probable than simply 'pappa'.

*Conclusion*: There is evidence for root accent, *ᾠωρ*. As *-τωρ* was the ending of the nominative, the root accent may originally have belonged specially to the nominative. The distribution *ᾠωρ* : *-τήρ* (together with full: zero grade of the root) makes it probable that the two types (in some cases: two words, as *δῶτωρ* *δοτήρ*) derive from one paradigm. That we do have this indeed, and not two originally distinct formations, will be shown when discussing the Sanskrit accent, because exactly on the basis of Sanskrit the existence of an original distinction has been defended.

The words with evidence for root accent with *-τηρ* may never have had *-τωρ*. In this sense I would not, at present, deny the possibility of two types, but they would *only* differ in the fact that they have *ē* instead of *ō* in the nominative, which is quite different from the above mentioned assumption.

#### § 18. *n-stems* (Greek)

*-(o/ω)ν-, -μο/ων-*

The situation is very complicated, but I think it is possible to arrive at a general conclusion. I first describe the facts without comment (the reader is warned to note 'e.g.' in opposition to the cases where *all* forms are given).

##### A. *-(o/ω)ν-*

1. *-ν-*: only *κῶν κινός*
2. *-ον-*: both accentuations  
     paroxyt. e.g. *ᾄξων, γείτων, τέκτων, κίων*  
     oxyton. e.g. *ἄλαζών, εἰκών, κανών, χελιδών*
3. *-ων-*: oxytona  
     exceptions a) *κλύδων* and *κώδων*  
                   b) some 'appellatifs familiers', e.g. *στράβων, φεῖδων*

B. -*μο/ων*-1. -*μον*-: both accentuations

paroxyt. e.g. *ἄκμων*, *δαίμων*, *πλεύμων*, *τέρμων*

oxyton. (all cases): *ἀκρεμών* (but -*έμων* codd.), *δαιτυμών*,  
*ἡγεμών*, *θηλαμών*, *κηδεμών*

2. -*μων*-: oxytona (all cases): *θημών*, *κενθμών*, *λειμών*, *τελαμών*,  
*χειμών*

I think we can draw a conclusion from this situation. In both -*ο/ων*- and -*μο/ων*- it appears that:

-*ων*-, -*μων*- are oxytona (with few exceptions for -*ων*-);

-*ον*-, -*μον*- have both accentuations, in which:

paroxytone -*ον*- has some old forms: *τέκτων*, *γείτων*, *ἄξων*, while oxytone -*ον*- has no old forms: *κανών*, *χελιδών*;

paroxytone -*μον*- has some old forms: *ἄκμων*, *πλεύμων*, perhaps *τέρμων*, *δαίμων*, while oxytone -*μον*- has not (none of them can plausibly be considered as of PIE date).

It is understandable that -(*μ*)*ων*- has only oxytone forms, the younger type, because this is the more recent type in which the old ablaut has been wholly abolished. That is, the new accentuation is found in the youngest type, while in the older type (with ablaut) the old accentuation has been partly preserved. And there it appears that the oldest forms are mostly paroxytone, while the oxytone group has no old forms.

I must confess that it is difficult to imagine how the development exactly was. Suppose:

<i>*leí-mōn</i>	replaced by	<i>*λείμων</i>	or by	<i>*λείμων</i>
- <i>mén-η</i>		<i>*λειμόνα</i>		<i>*λειμῶνα</i>
<i>*li -mn -ós</i>		<i>*λειμόνος</i>		<i>*λειμῶνος</i>

It is easy to understand that from *\*λείμων* *\*λειμόν*- two types of accentuation originated. In *\*λείμων* *\*λειμόν*-, however, there is only one form (*λειμων*), which in one case form has an aberrant accent, which was given up. That is, in *\*λείμων* *\*λειμόν*- two different forms compete (both *\*λείμων* and *\*λειμον*- being retained), while in *\*λείμων* *\*λειμόν*- there is only one form, so that it is understandable that the aberrant accent of one of them was not retained.

We arrive at the conclusion that this group originally had the accent on the root in some forms.

This conclusion is confirmed by *κύων*, of which the accent is old according to our rule.

As strong is the confirmation of the adjectives (the above only concerned the substantives), which have all *-μων* *-μονος* and are paroxytona: *μνήμων*, *τλήμων* (*εὐδαίμων*). That is, they not only show root accent, but more specially confirm our observation that *-μον-* (as opposed to *-μων-*) is paroxytone. That there are no exceptions here is undoubtedly due to the fact adjectives are often stricter organised than substantives. This accentuation is the more probably old, as adjectives tend to get final accent; see on the adjectives in *-ης*.

It may lastly be remarked that the Greek substratum language had nouns in *-ων*, *-ην*, *-αν* with probably final accent, as appears from the names of places (*Βραυρών*, *Λωδών*, *Καλυδών*, *Κιθαιρών*, *Κολοφών*, *Μαραθών*) and from names of animals (*ἄτταγὴν*, *κηφὴν* / *κᾱφᾱν*), of peoples (*Κηφῆνες*) and other words (note *βαλ(λ)ήν*); *Form.* 161f., 167f.

*-ε/ην-*

Words in *-ην* are oxytona. (The only possible exception is *εἶρην*).<sup>13</sup>

The two adjectives are exceptions too: *τέρην*, *ἔρσην* *ἄρσην*. As regards *ἔρσην*, Solmsen (*IF* 7. 37–49) points out that Herodian I 15, 6 states that *ἔρσην* is oxytone. The accentuation of our (Hdt.) manuscripts should then be due to Attic *ἄρσην* *ἄρσην*. There are three possibilities, which all amount to the same for our purpose. 1) Herodian is wrong. 2) Herodian is right, but the form he found is—in whatever way—more recent than the one we have in our manuscripts. 3) (Perhaps the most probable:) Herodian is right, and Solmsen is right that the barytonesis of our manuscripts is due to Attic. In this case it is most probable that Attic retained the (or: an) old—because abnormal (at least when compared with the substantives); also compare our rule—accentuation, as it did in the case of *ἔως* (see § 21). The case is then even more interesting, as it would show the replacement of the accent to the last syllable (of the stem).

<sup>13</sup>) The details are given by Solmsen, *IF* 7 (1897) 37–49. It is not sure whether it had *εἰ-* or *ι-*; *ἱσμεν* gives Hesychius (long *a*? hyperdoric?). From Aristophanes of Byzantium derives *εἰρήν*, from Herodian *εἶρην*. Solmsen may be right in preferring *εἰρήν*, for *βαρυτόνως δὲ τὸ μελείρην ὥσπερ πυθμὴν ἀπύθμην, ἀρχὴν ὑπαύχην* has no sense if it is not *εἰρήν*, and this information seems too precise to be wrong. The etymology is not sure. Its connection with *ἔρσην* is probably wrong, for we would expect (in the Laconian word) *\*ἥρην*. (The suggestion that the accent was a determining factor in the development of *ρσ* is certainly wrong: there is no sure instance in Greek where the accent influenced the development of the sounds.) It is then not sure that the word is IE.

*Conclusion*: As with  $-\tau\omega\rho$   $-\tau\eta\rho$ , there is evidence that the words in  $-\omega\nu$  originally had root accent, which was not generalized here, while the recent nominatives in  $-\eta\nu$  are oxytona. Such a recent form is evident in  $\lambda\mu\acute{\iota}\nu$ . Here, as in the case of the relatives names, there are words which have  $-\eta\nu$  and (indication for) root accent:  $\acute{\epsilon}\rho\sigma\eta\nu$  (or, if this was  $\acute{\epsilon}\rho\sigma\acute{\iota}\eta\nu$ , indirectly in  $\acute{\alpha}\rho\sigma\eta\nu$ , which is old according to our rule),  $\tau\acute{\epsilon}\rho\eta\nu$ . They may never have had  $-\omega\nu$ .

### § 19. *i-stems (Greek)*

Words in  $-\omega$

They are all oxytona, as  $\acute{\eta}\chi\acute{\omega}$ ,  $\pi\epsilon\iota\theta\acute{\omega}$ ,  $\varphi\epsilon\iota\delta\acute{\omega}$ . The type is evidently strongly systematized, for the accusative, which has  $-\acute{\omega}$ , is analogical after the nominative (for  $-\bar{\omega} < -\acute{\omega}\alpha$ ); there was then an opposition between strong and weak cases,  $-\acute{\omega}$   $-\acute{\omega}$  :  $-\sigma\tilde{\omega}\varsigma$   $-\sigma\tilde{\iota}$ , which shows the interdependence of nominative and accusative.

Type  $\acute{\sigma}\iota\varsigma$

As  $\acute{\sigma}\iota\varsigma$  are only very few nouns inflected. The accent—on the root—is, then, not very important: it might have been analogical after the proterodynamic type ( $\pi\acute{o}\lambda\iota\varsigma$ ).

*Conclusion*: Words in  $-\acute{\omega}$  are oxytona,  $\acute{\sigma}\iota\varsigma$  is paroxytonon.

### § 20. *u-stems (Greek)*

Type  $-\omega\varsigma$

$\Pi\acute{\alpha}\tau\rho\omega\varsigma$ ,  $\mu\acute{\eta}\tau\rho\omega\varsigma$ ,  $\acute{\alpha}\lambda\omega\varsigma$ ,  $\gamma\acute{\alpha}\lambda\omega\varsigma$  are paroxytona; only  $\lambda\alpha\gamma\acute{\omega}\varsigma$  is oxytonon.

Type  $-\acute{\epsilon}\acute{\upsilon}\varsigma$

All oxytona.

We find, then, the same distribution as with  $-\tau\omega\rho$  :  $-\tau\eta\rho$  and  $-\omega\nu$  :  $-\eta\nu$ , the  $\bar{o}$ -forms paroxytona, the  $\bar{e}$ -forms oxytona.

Words in  $-\tilde{\upsilon}\varsigma$ ,  $-\tilde{\omega}\varsigma$

All are root accented (except  $\nu\acute{\iota}\acute{\upsilon}\varsigma$ ), see § 10. Kuiper has to explain their accent (*Notes* 46) by analogy of the type  $\pi\acute{o}\lambda\iota\varsigma$ , which is decidedly less easy. For  $\pi\tilde{\eta}\chi\upsilon\varsigma$ ,  $\pi\acute{\epsilon}\lambda\epsilon\kappa\upsilon\varsigma$ ,  $\pi\rho\acute{\epsilon}\sigma\beta\upsilon\varsigma$  this accent is not very surprising, since as a rule the masculines are barytona. The feminines however are oxytona, and here  $\acute{\epsilon}\gamma\chi\epsilon\lambda\upsilon\varsigma$  and  $\gamma\acute{\epsilon}\nu\upsilon\varsigma$  are exceptions. Nouns in  $-\tilde{\omega}\varsigma$  are also generally oxytona, on which  $\nu\acute{\epsilon}\kappa\upsilon\varsigma$  and  $\chi\acute{\epsilon}\lambda\upsilon\varsigma$  ( $\gamma\acute{\epsilon}\nu\upsilon\varsigma$ ) are exceptions. (But we should realize that all these groups are rather small.)

*Conclusion*: Root accent have  $-\upsilon\varsigma$  and  $-\omega\varsigma$ ,  $-\acute{\epsilon}\acute{\upsilon}\varsigma$  is oxytonon;  $-\omega\varsigma$  :  $-\acute{\epsilon}\acute{\upsilon}\varsigma$  present the same distribution as  $-\tau\omega\rho$  :  $-\tau\acute{\eta}\rho$ ,  $-\omega\nu$  :  $-\acute{\eta}\nu$ .

§ 21. *s*-stems (Greek)

The feminines are oxytona: ῥῶς, αἰδῶς.

The masculines are barytona: γέλως, ἔρως, except ἰδῶς. Their accentuation is explained from the oblique cases according to Vendryes' law: \*γελῶτα > γέλωτα. This may not be impossible, but we are not obliged to accept this interpretation.

Important is Attic ἔως. Since Wackernagel, *Gött. Nachr.* 1914, 49 ff. = *Kl. Schr.* 2.1151 f., its accent is explained, also according to Vendryes' law, from ἔωθεν < \*ἔῶθεν. This is even less probable as with γέλως above, as here the critical form does not even belong to the inflectional paradigm. The explanation is evidently based on the idea that the normal accentuation must be suffixal. It is of course much more probable that Attic here retained the original accentuation in an isolated form. (Cf. on φράττη and ἄρσσην above, § 17 and 18).

The final evidence comes from the comparatives. We know that these originally were *s*-stems, which is now confirmed by Mycenaean (*mezoe* 'mezohe' (du.), *mezoēs* (pl.), *mezoa*<sub>2</sub> 'mezoha', *mezo* m., f. and n. can be 'mezōs, mezos' but 'mezōn, mezon' would be possible too). They have root accent (ῥῆδιον).

The adjectives in -ης might seem problematic, for they are in great part oxytona. It could be supposed that they represent the type δοτήρ, but it seems that their history is different. There are only adjectives, and it appears that there are only a few simplicia (*ψευδής*, *σαφής*), while the vast majority are compounds, *Form.* 428. Exactly the same situation is found in Sanskrit (*AiGr* II 2 p. 224 § 124). As to the accent, a large group in Greek is not oxytonon. In Indian, they are almost exclusively bahuvrihi's (as is the majority in Greek, *Schwyzler* 513), which are only seldom oxytona: type *prá-mahas-su-mánas- puru-dámsas-*. It seems, then, that the simplicia—which are oxytona (in Sanskrit)—are not of PIE date, and that the compounds are older, but are not oxytonon. The accentuation of *σαφής*, *tavás-*, then, is of no importance for the PIE accent; it is a curious instance of parallel development. (How we must imagine the origin of the adjectives in -ēs I do not know. It may simply be a lengthening of the stem in -es of the oblique cases of the neuters; they would then be a parallel of the recent nominatives in -ηρ, -ην etc.).

The perfect participle is accented on the suffix. Goth. *weitwods* shows the original root accent (the fact that this word is a *t*-stem does hardly diminish the value of the argument, since *s*- and *t*-stems

are more often found side by side, cf. on the word for 'moon, month' above).

*Conclusion*: The adjectives in  $-\eta\varsigma$  are not old; the old adjectives in  $-\eta\varsigma$  are not oxytona. Att.  $\xi\omega\varsigma$  shows that also in the feminine the accent could be on the root, as it is with the masculines.

## Sanskrit

### § 22. *r-stems*

From the nouns in  $-\text{ar-}$   $\text{svásr-}$  (and  $\text{nánāndr-}$ ) has root accent, the others ( $\text{devr-}$ ,  $\text{nr-}$ ,  $\text{usr-}$ ) are oxytona.

For the nouns indicating relatives see Greek.

The most complicated problem is formed by the nouns with  $-\text{tar-}$ . We find both root and suffix accentuation in Sanskrit, but there is the curious fact that between the two there is a difference in construction, those with root accent having verbal rection, i.e. being constructed with an accusative, while the suffix accented forms govern the genitive, as IE nouns normally do. This situation has led to the postulation of two different PIE nouns, the type  $\delta\acute{\omega}\tau\omega\varrho$  against  $\delta\omicron\tau\eta\varrho$ . I think this conception is wrong; as it is vital to our theory, it must be discussed here at some length. We shall see that the phenomenon turns out to give a striking confirmation of our theory.

I make a few preliminary remarks.

It is well known that there is an  $e/o$  ablaut in PIE nominal paradigms. For  $-\bar{o}n/-en-$  we have  $\lambda\epsilon\mu\acute{\omicron}\nu/\lambda\epsilon\mu\acute{\eta}\nu$  cited above,  $\alpha\acute{\iota}\omega\nu/\alpha\acute{\iota}\acute{\epsilon}\nu$ , the Lithuanian type  $\text{piemu}\bar{o}/\text{piemen}\acute{i}$ , for  $-\bar{o}s/-es-$  one might think of Lat.  $\text{honor}/\text{hones-tus}$ ,  $\text{maior}/\text{maies-tas}$  etc.,  $\alpha\acute{\iota}\bar{o} < *a\acute{\iota}\acute{o}\sigma-a/\alpha\acute{\iota}\acute{\epsilon}\varsigma$   $\alpha\acute{\iota}\acute{\epsilon}\iota < *a\acute{\iota}\epsilon\sigma-t$ , Lith.  $\text{m}\acute{\epsilon}\nu\text{uo}/\text{m}\acute{\epsilon}\text{nes}\acute{i}$ . A rather convincing example, to my mind, because of its isolation, is  $-\bar{o}l/-el-$  in Lat.  $\text{sol}/\eta\acute{\epsilon}\lambda-\text{ios}$  (above).

That in our case we are concerned with a levelled paradigm may also be indicated by Lat.  $\text{d}\acute{a}\text{tor}$ , combining zero grade (of the  $e$ -forms) with  $-\bar{o}r$ .

Greek has, beside  $-\omega\varrho/-o\varrho-$ , both  $-\eta\varrho/-\epsilon\varrho-$  and  $-\eta\varrho/-\eta\varrho-$ . It is evident that the last is a simplification of  $-\eta\varrho/-\epsilon\varrho-$ . This type would in Indian have given  $-\bar{a}/-\text{ar-}$ , while only  $-\bar{a}r-$  is found (the relatives names excepted), so that the type  $-\bar{e}r/-er-$  seems not to have existed! Of course, this argument is not decisive, as Indian might have introduced the long vowel of the nominative<sup>14</sup>).

<sup>14</sup>) Even more important is the following argument. The distinction  $\delta\acute{\omega}\tau\omega\varrho$ :  $\delta\omicron\tau\eta\varrho$  implies, beside the accentual opposition, an opposition full grade: zero grade. In Sanskrit, however, the accentual opposition is not

A priori, then, a type  $\acute{a}t\bar{o}r$   $\acute{t}\acute{e}r\eta$   $\acute{t}r\acute{o}s$  is to be expected, and a case like  $\acute{\lambda}\acute{\alpha}\tau\omega\eta$   $\acute{\lambda}\acute{\alpha}\tau\acute{\eta}\eta$   $\acute{\lambda}\acute{\alpha}\tau\rho\acute{o}s$  is most probably explained as resulting from the levelling of one paradigm.

As a starting point for the study of the Indian accentuation I take Benveniste's conclusion, *Noms d'agent et noms d'action* p. 62, to point out a difficulty. We cite:

1.  $\acute{a}tor$  indique l'«auteur», désigné à partir de l'acte qu'il a accompli, et caractérisé par la possession de cet accomplissement. Expression quasi participiale, fortement attachée au verbe, et signalée par une rection verbale(. . .)

2.  $\acute{t}\acute{e}r$  indique l'«agent», voué par destination, aptitude ou nécessité à une certaine activité . . . Il se construit donc souvent comme prédicat de futurité, d'intention, . . .

And resuming he says: 'le premier se caractérise par son «avoir»; le second par son «être-à».'

I think there is an inconsistency in this description. This inconsistency I find in the second line of his description of  $\acute{a}tor$ . These nouns indicate 'the one who has done', or better 'the one who is the one who has done', describing more a state (the state of the agent) than an action (the agent acting). If this is right, it cannot be described as a typical participle, 'fortement attachée au verbe'; this better fits  $\acute{t}\acute{e}r$ , which—simply—indicates that somebody does, or is going to do, something. In other words, the first more resembles a substantive, the second ( $\acute{t}\acute{e}r$ ) an adjective, and it is the adjective which is more close to a participle than the substantive.

Renou, who discussed the problems *BSL* 39 (1938) 103–34, defines the opposition in meaning as 'duratif': 'ponctuel'; it is evident that this is another way of describing the same facts. Our difficulty is found back in Renou's article, when he—convincingly—explains the origin of the periphrastic future from the nouns in  $\acute{t}\acute{r}$  (not from  $\acute{a}tr$ ). He says (p. 126) that 'l'apparance plus verbale du nom en  $\acute{a}tr$ ' (which characteristic he derives from its accusative construction) makes us suppose that it was this noun that grew into the future.

accompanied by this ablaut opposition: all forms have full grade. This makes no difficulty when we start from one paradigm, in which the ablaut opposition was given up, but the accentual one not (or not so soon). But if we start from two different categories, of which the type  $\delta\acute{o}\tau\eta\eta$  had *only* zero grade (in *all* forms), the full grade of the Sanskrit forms can not be explained: it is very improbable that it was generally taken over from the other category, the more so as the type  $\delta\acute{o}\tau\eta\eta$  was ten times as frequent as the other in the *Rigveda*. The assumption of two categories must therefore be given up.

But it is that in *-tī*. This can only mean, to my mind, that the noun in *-tī* was (even) more verbal than the other, and that would make us expect the accusative construction with *-tī* instead of with *ιtī*.

Debrunner gives the following—to my mind excellent—description of the difference in meaning (*AiGr* II 2 p. 683 504a): ‘die Oxytona sind schlechtweg Nomina agentis, . . ., bezeichnen aber auch denjenigen, der den Verbalbegriff zu vollziehen verdient oder geeignet ist . . .; die Barytona dagegen bezeichnen denjenigen, für den der Vollzug des Verbalbegriffs Pflicht oder Gewohnheit ist oder der den Verbalbegriff richtig zustande bringt; d.h. die Oxytona sind mehr partizipial (Einzelfall), die Barytona mehr nominal (substantivisch)’. And in the following small characters he draws the inevitable conclusion: ‘Dieser Verteilung der Bedeutungen widerspricht die Verteilung der Kasuskonstruktionen.’

At this point I first make some remarks on the Greek and Iranian evidence, as it was treated by Benveniste.

Benveniste holds that *ιtor* cannot indicate professions (this is one point where the description of Renou and Debrunner is evidently superior to Benveniste’s).

A few remarks on some important Greek forms. I don’t think there is any reason to assume that *βώτωρ* is anything else than ‘shepherd’. Benveniste points to its adjectival use in *βώτορες ἄνδρες*, but this argument has no force, as Homer uses several nouns as apposition to *ἄνδρες*. Here *-τωρ* indicates a profession, as does *ῥήτωρ*. Benveniste’s excuse, p. 52–4, seems unnecessary: *βώτωρ* and *ῥήτωρ* are people who ‘always have done, are those who (have done and) do’ (Debrunner: Pflicht oder Gewohnheit). But in his excuse Benveniste shows that *ῥήτωρ* originally means ‘simplement «prendre la parole en public»’. This means that both functions were originally possible for *-τωρ*; only later the adjectival function becomes associated with the oxytone form (in *-τήρ*). The other way round, *ιατήρ* (Myc. *i-ja-te*) means ‘physician’: ‘le guérisseur professionnel, le médecin, aussi bien en cyprite que chez Homère’ (p. 46). This shows that at some time, probably originally, *ιατήρ* has exactly the same function as *βώτωρ*. \**Τάτωρ* most probably had the same function (it simply was another form of the same word), only it happened to die out; it did so in a time when you could as well use *ιατήρ* to indicate a profession.

In the same way it is remarkable that we have *σωτήρ*, not \**σώτωρ*. Benveniste 50f. has a long way to go to explain this: ‘Par ce détournement, *σωτήρ* a acquis la valeur du mot en *-τωρ*’ (p. 51). It would originally only have occurred to salute or invoke a god who *is to save*. But this



does not explain the absence *in the language* of \*σώτωρ, for if there is one case where we expect a development: somebody who once saved is a saviour for ever, it is here. It may be right that a god is called σωτήρ as if to ask him to (come and) save, the total absence of the qualification Saviour = \*σώτωρ cannot probably be explained so. The same holds for an expected \*δμήτωρ (or \*δεμάτωρ).

I think, then, the Greek facts rather point to an originally indiscriminate use of an older form in -τωρ and a younger in -τηρ (\*λάτωρ/λατήρ both for the profession, ῥήτωρ/\*ῥητήρ both for 'somebody who happens to speak', ῥήτωρ later for the profession; σωτήρ in all functions), while later there is a slight tendency for the, more recent, oxytone forms (in -τήρ) to get an adjectival function.

In Iranian no accent is known. Benveniste's statement 'que l'état iranien concorde exactement avec l'état indien' (p. 27) is simply not right. The formal distinction between root and suffix accent is supposed to be paralleled in Iranian by that between full and zero grade of the root; this is a probable supposition, though it must be remarked that it does not work in Indian (where we can control the assumption): in Indian full grade has been generalized whatever the accent. What we find, then, is that the nouns with full grade of the root admit the accusative, but also the genitive; with zero grades the accusative is not found. The last fact would be the *only* point where the two languages agree, but it is hardly of any value, since there are only a dozen of such (zero grade) forms and because the genitive is the normal construction. The only thing we can say, then, is that Iranian also has the accusative construction.

The conclusion is that the verbal rection is not found in Greek or anywhere else, except in Avestan. It is not clear whether this allows us to conclude Indo-Iranian origin for the construction, more probably it is independent. In any case there is no indication that the phenomenon is inherited. It is most probably an Indo-Iranian (or Indian and Iranian) innovation, the more as in Vedic 'les adjectifs de la provenance la plus diverse ont été aptes à porter un régime verbal' (Renou 125); see Delbrück, *Ai. Syntax* p. 181. The difference in meaning is hardly recognizable in Avestan (Renou 125: 'leur différenciation sémantique avec la masse des noms en -tar- est assez faible'); some Greek facts point to a similar distinction as in Indian, but it is probably a secondary development (and never was more than a tendency).<sup>15</sup>

<sup>15</sup>) Homeric -τήρ' ἔμεναι, -τήρα γενέσθαι, however, may be simply due to the fact that -τορ(a) is metrically impossible.

At present, I think, we have a better view on the problems concerned. It appeared that there is a difficulty, which was noted by Debrunner. It is this that *√tor* construes with the accusative, while it appears that this form has a typical substantival meaning, and that oxytone *-tér* has adjectival, participial function, but is not the form which is construed with the accusative. The conclusion from this can only be, to my mind, that the differences in meaning found have nothing to do with the difference in construction (in Indo-Iranian). The difference in meaning must be the more recent development, since we find it in historical times (in Indian as well as in Greek), and it is impossible that the accusative construction with the barytona originated when the oxytone forms had the more adjectival = participial meaning. Therefore the accusative-construction with the barytone forms must be an older phenomenon than the substantive : adjective opposition. This agrees with the Greek evidence, where the oldest forms do not (yet) show the opposition in meaning : it must therefore be a recent independent development of the two languages. The accentuation, however, probably is connected with the difference in construction, as this is simply an observed fact (exceptions are rare, Renou § 18 and 22).

This fact, that the verbal rection is found with root accented forms, must be explained. It should be stressed again that it has not been explained hitherto. It is suggested that the difference in meaning was parallel, and this probably must have been the cause (Benveniste, for example, nowhere discusses this problem). We have seen that this is not right. I think that an explanation can be given, and that it gives a striking confirmation of our theory.

In the present context I need only give one quotation from Renou to show what I think this explanation is: 'Un trait remarquable du nom verbal en *√tr* (with which the accusative construction is found) est la prépondérance des nominatifs. . . la limitation au nominatif du nom en *√tr*, même hors des emplois proprement verbaux, doit avoir une signification' (p. 108). This meaning is, that the accusative construction occurred almost exclusively with the nominative and that it was exactly the nominative, as opposed to the other cases, which had root accent, as proposed in this article. In this way we can explain the phenomenon starting from *one* noun with shifting accent, while it has appeared impossible to explain it from the presumed existence of two nouns.

The limitation of the root accent to the nominative can clearly be seen in words with the two accents in the R̥gveda. *Jānitā* nom.

(4×) against *janitā* (17×), *-ūr* (3×), *-ārā* (1×); *dātā* (8×) beside once *dātāram* against *dātā* (13×), *-āram*, *-ré*, *-ūr*, *-āro*, *-āras*, *-ān* once each; *sótā* (3×) beside once *sótrbhis* against *-ūr* (1×), *-āri* (2×), *-fbhis* (6×). Of the twelve words given by Benveniste, I counted (on the basis of Grassmann) 28 nominatives, 3 acc. sg., 3 nom. pl., 1 gen. sg., 1 instr. pl. A striking confirmation give *vānitā* (3.13,3): *vantāras* (3.30,18; 7.8,3). Kuiper, *India Antiqua* p. 206, has shown that the presence or absence of *i* is due to a vocalic or consonantal laryngeal, and that the last form was originally found in the weak grade forms, so that we may reconstruct *vānitā\** *vantrā*. For our problem it is relevant that the nominative has the supposed accent, and that the suffixal accent is combined with the absence of *i* characteristic of the weak grade forms.<sup>16)</sup>

I arrive then at the following history of events. The nouns with suffix *-te/or-* originally had a shifting accent, nom. *ātōr*, acc. *-tér-m*, gen. *-tr-ós* etc. These nouns were liable to acquire participial function, and this happened in Indo-Iranian. In this function the noun could be construed with an accusative. As this construction was found almost exclusively with the nominative of these nouns, this construction was found together with root accent. This situation lasted for some time, when the shifting accent was levelled. With the levelling of the accent, however, a quite different process began. There came into being an opposition between nouns with root and such with final accent, of which this time specially the last were given adjectival function, as often adjectives came to be characterized by final accent. This process occurred in Indian and Greek independently, and never became more than a tendency.

This interpretation, then, confirms our view that we are concerned with originally one paradigm with root accent in the nominative.

It may be added that the root accented nouns, 1/10 of the total in the Rígvēda, are a dying category in Indian (Renou § 30–38).

*Conclusion:* The nouns in *-tar-* had a shifting accent, with root accent in the nominative as can still be seen in several paradigms. The verbal rection is found almost exclusively with the nominative, which accounts for its root accent.

<sup>16)</sup> These forms present a difficult problem. Are we to assume *\*uénh-tōr* *\*uénh-tr-éh<sub>1</sub>* instead of *\*uénh-tōr* *\*uénh-tr-éh<sub>1</sub>* (> *\*vātrā*; cf. *yātar-*)? It seems more probable to me that in *\*uénh-tōr* the (consonantal) laryngeal was vocalized in Indian, while in (secondary) *\*uénhtréh<sub>1</sub>* it was not. But *pitar-* < *\*ph<sub>2</sub>tēr* cannot be so explained.

§ 23. *n-stems (Sanskrit)**-an-*

Both accentuations are found with *-an-*. We have with inherited words:

<i>tákṣan-</i>	against	<i>ukṣán-</i>
<i>vṛṣaṇ-</i>		<i>pūṣán-</i>
<i>yávan-</i>		( <i>śuván-</i> )

Most probably this situation points to a shifting accent. That the root accentuation here is old follows from our rule. *Śuván-* (*śvā*) in fact belongs to the other category, as appears from gen. *śúnah* etc. instead of \**śunáh* (it is then parallel to *yúvā yūnāh*). This accentuation is confirmed by *κῶον*, and it is old according to our rule. (Note the strange situation that *śvā śúnah* is exactly the opposite of *κῶον κινός*. It appears that, *śvā* being a monosyllable that could not be accentuated otherwise, *śúnah* confirms the root accent of *κῶον*. The original paradigm must have been \**kéuōn kunós*.)

*-man-*

Words in *-man-* are oxytone, but an important exception is *ásman-*, of which the accent is confirmed by *ἄσμων* (and Lith. *ákmuo*, Stang 296).

*-van-*

Those in *-van-* are root accented, notwithstanding the zero grade (our rule). Cf. *πίον*.

*Conclusion*: Old root accent is safely established.

§ 24. *i-stems (Sanskrit)**sákhā*

The isolated *sákhā* has root accent.

Type *ávi-*

We have *ávi-*, *páti*, but *arí-*, *rayí-*. For *páti-* Kuiper notes the 'irregular accent (from the vocative?)', but it is also found in *ávi-*. From the shifting accent, both accentuations can be easily explained.

*Conclusion*: Both accentuations are found, root accent in the oldest type, *sákhā*.

§ 25. *u-stems (Sanskrit)*

As appears from the survey given in discussing the ablaut (§ 15), both root and suffix accent are found.

§ 26. *s-stems* (Sanskrit)*-as-*

The two old words with *-as-* are oxytonon, but the evidently old form *pímān* (*pímāṁsam*) *pumsáh* not only has root accent, but shows that it originally belonged to the nominative only (the accusative not considered). This word in itself is enough, to my mind, to show the supposed accent shift for this category, as it is evidently the most archaic type. Its original form must have been:

<i>*peú-m-ōs</i>	( <i>pímān</i> )
<i>*pu -m- s-ós</i>	<i>pumsáh</i>

For the adjectives see at the Greek accent.

*-(i)yas-*

The comparatives have root accent (agreeing with the full grade).

*-vas-*

The perfect participle is oxytonon (with zero grade of the root; the type *δοτήρ*). In Sanskrit there is no indication for another accentuation.

*Conclusion:* The different accentuation of the comparative and the perfect participle (in accordance with the ablaut form of the root) points to a shifting accent. The original form of this accent is found in *pímān pumsáh*.

§ 27. *Comparison of the Greek and Sanskrit Evidence.**r-stems*

Greek opposes full grade + root accent + *ωρ* to zero + suffix accent + *ηρ*. Sanskrit has evidence for full grade and root accent, the last specially in the nominative. *Yátar-* is remarkable for its root accent (if it is reliable) on zero grade: this one form confirms ablaut *\*iēnh-* *\*iñh-*; the full grade is found in Greek (the accent of *ἐναιηρ* is not sure, but *ἐνάτηρ* may well represent old *\*ēvatiηρ*). The reconstructed accent paradigm is presented (and nowhere else so complete) by *μήτηρ μητέρα μητός* and *θυγάτηρ*, and by some Sanskrit words (*sótā sotúh* etc.). Note also the agreement between *svásr-* and *ἑορες*. (It does make no difference whether the word contains an original substantive *\*sōr* or not). In *úsťr-* the accent indicates full grade. For *usť-* the full grade appears in Gr. *ἄίρ*. Of course, we cannot demonstrate both features for each word, but we may be sure that this is due to our lack of material.

## n-stems

Greek evidence seems to point to the same original situation as with the *r*-stems, but it is much less evident. Full grade is predominant with *-μωv* (but zero also found); the original situation, parallel to the *r*-stems, is only found in *λειμῶv λιμῖv*. The accent of *-(μ)ωv* was often shifted to the end, always when *-(μ)ωv-* was generalized.

In Sanskrit *-man-* has full grade, but suffix accent, *-van-* zero grade with root accent, the last by itself indicating ablaut (and confirmed by *πίων*). With *-an-* anything is possible; full grade is rare, but indicated by root accent on zero grade (*vr̥ṣan-*), while there is the special case of *yávan-*, see above.

Skt. *ātmā tmānaḥ* preserved the ablaut.

*Ἐρσηv* (*ἐρσίv*) *ἄρσηv*, Av. *aršan-* shows ablaut and root accent.

*Ἀρήv*, *úrā úraṇa-* points to ablaut and root accent.

The accent of *ῥών* is confirmed by *ῥύναḥ*.

## i-stems

The situation with *i-* and *u-*stems is much less clear. Greek has *-ίω*, but Sanskrit *sákhā*. They agree in *ῥίς*, *ἀνι-*.

## u-stems

Greek seems to have the same accentual opposition as with the *r*-stems: root accent with *-ως* against *-εύς*. The forms in *-υς* have full grade and root accent, Sanskrit forms have mostly full grade and both accentuations.

## s-stems

The *s*-stems again are very instructive. The old—compound—adjectives have root accent, the oxytona are recent. The perfect participle has zero grade and suffix accent in both languages, but *εἰδώς* shows full grade, the root accent being indicated by Goth. *weitwods*; that the full grade did not belong to the weak cases appears from *ἰδνῖοι* (and Skt. *viduṣ-*). The animate nouns are oxytone in Sanskrit, in Greek only the feminines, but *ἔως* demonstrates original root accent for them, and also presents full grade. Root accent and full grade in both languages present the—archaic—comparatives. A precious instance is the accent of *púmān pumsáḥ*.

From other categories Skt. *nápāt* shows full grade and root accent for *\*h<sub>2</sub>népōt*. The evidence of *pánthāḥ patháḥ* is decisive, since its inflection is unique (*μῆτηρ* and *púmān* have no ablaut).

§ 28. *Conclusion*

There can hardly be any doubt. The evidence of all the stems in both languages points in the same direction.

There is abundant evidence for *full grade of the root* and for ablaut, and the full grade can only have come from the nominative. This is confirmed by the forms given in the beginning, that show full grade mostly combined specially with the lengthened grade suffix of the nominative, against forms with double zero grade. The original full grade is also indicated by those words that retained its (root) accent, though the zero grade form was generalized (our rule).

There is abundant evidence for *root accent*, even retained when zero grade was introduced (our rule). The suffixal accent is predominant in *e*-forms, which are mostly recent.

Both full grade and root accent are so frequent that it is impossible to assume that they were all introduced into the paradigm from without. I would like to add that, while in some of the paragraphs in which the evidence was discussed, the conclusion could not be as firm as in others, the whole seems now so well established that we may rely with some confidence on the conclusions in these paragraphs. This, to my mind, is valid specially for our interpretation of the Sanskrit nouns in *-tar-* (§ 22).

The *accent shift* is retained in a few words: *μήτηρ*, *θυγάτηρ*, *κύων*, *sótā* etc., *pūmān*.

The *whole paradigm* is preserved in one precious instance: *pánthāh patháh*.

As regards the distinction hysterodynamic : proterodynamic, our conclusion only modifies it in some respects. We now have the types:

hyst.	<i>*déh<sub>3</sub>-tōr</i>	prot.	<i>*mén-ti -s</i>
	<i>*-tér-ṇi</i>		<i>*mén-ti -m</i>
	<i>*dĥ<sub>3</sub> -tr -ós</i>		<i>*mṇ -teí-s</i>

We now see that both types opposed full and zero grade of the root in the paradigm, even in the same cases (on the hysterodynamic accusative see below). They both shift the accent, but in a different way. The two types remain in each case distinguished. On the other hand it is evident that the two paradigms might have become indistinguishable, when the ablaut and the accent shift were eliminated, as all IE languages tended to do. This elimination may well have set in, in some cases, in PIE. For example, the nominative of *ἀνήρ* may have been *\*h<sub>2</sub>nēr* in PIE, because there is no trace of full grade *\*h<sub>2</sub>en-*, which one might posit (unless it is a root noun).

A remark may be added on the accusative. Firstly it is not evident whether it had full or zero grade (though the last would seem to me more probable than the first). Secondly, there are cases where there is evidence for three ablaut phases in one paradigm: full, zero and reduced grade; see *Dev.* 195f. and compare on the words in - $\omega\varsigma$  § 10. I would suggest that the three ablaut grades correspond with the three accent places, on the root, the suffix and the ending. The least frequent of the two should go together, i.e. accentuation on the suffix and the reduced grade; from the accentuation this would appear to be the accusative (see the next paragraph). In this way, from  $\acute{\epsilon}\nu\acute{\alpha}\tau\eta\eta\varrho$  etc., we would have:

* $\acute{\imath}\acute{\epsilon}n\tilde{h}_2-t\bar{e}r$	$\acute{\epsilon}\nu\acute{\alpha}\tau\eta\eta\varrho$ , Lith. <i>jentė</i>
* $\acute{\imath}\acute{\epsilon}n\tilde{h}_2-t\acute{e}r-\eta\eta$	(Lat. <i>ianitrices</i> ) <sup>17</sup>
* $\acute{\imath}\eta\tilde{h}_2-tr-\acute{o}s$	( <i>yátar-</i> )

The accusative however, requires a separate treatment.

### § 29. *Lithuanian*

In the foregoing the Balto-Slavic evidence has been left out of account, because it is much more difficult to evaluate. A few remarks may now be made on Lithuanian, for which I base myself on Stang, *Vgl. Gr.* pp. 125–35, 159f., 295–7, 304–7.

In the categories that concern us we have either a fixed root accent (*mótė*) or a mobile accent of the type *piemuõ*:

sg. <i>piemuõ</i>	du. <i>piemeniũ</i>	pl. <i>piemens</i> < -enes
<i>piemenšs</i> < -enès		<i>piemenĩ</i>
<i>piemeniui</i>	<i>piemenim</i>	<i>piemenims</i>
<i>piemenĩ</i>	<i>piemeniũ</i>	<i>piemenis</i>
<i>piemenimĩ</i>	<i>piemenimĩ</i>	<i>piemenimĩs</i>
<i>piemenyjè</i>		<i>piemenysè</i>

As far as I can see from Stang this scheme as a whole is unexplained. Stang holds that the system can be easier explained from a PIE paradigm with shifting accent, i.e. one where some forms have the accent on the root, others on the ending. He rejects (p. 132–5)—I think on good grounds—the theory that the accent on the root was due to a withdrawal from the suffix, *piemenĩ* < \**pieménĩ*. But if this

<sup>17</sup>) On the supposed Phrygian *ıavatega* see Chantraine, *Dict. étym.* (it appears in a Greek inscription).



is rejected, the root accent must have come from the nominative. This is no difficulty, but it is discouraging that the nominative itself must then have lost this accent; this change, *\*piemuo* > *piemuō*, cannot be explained (as little as the root accent of the dative), Stang p. 307. That indeed the nominative accent must have been changed from the root to the final syllable seems to me a settled fact on the basis of Greek and Sanskrit, but Lithuanian gives no direct evidence for it. Only the fact that in dual and plural only the nominative and accusative are root accented seems to me a not unimportant indication that this was the older situation in the singular too.

Stang considers (p. 134, 307) the possibility of explaining the accusative in another way. He thinks the type *μήτηρ μητέρα μητρός* may derive from *μήτηρ \*μήτερα μητρός* by influence of the type *πατήρ πατέρα πατρός*. This seems to me an unhappy idea, that should be rejected as unnecessarily complicating. We know that the type *πατήρ* is a recent type, resulting from a levelling. The original type, from which it was levelled, should then be *μήτηρ \*μήτερα μητρός*. Now it seems to me not very probable that a type that is more levelled down (*πατήρ*) produces one that is only half levelled (*μήτηρ μητέρα μητρός*). In general, this—existing—type is the most complicated of all with its accent shifting from root to suffix and ending, and it is not probable that the most difficult type is the youngest.

Beside a noun with mobile accent there are sometimes forms showing a fixed root accent: beside *vanduō vāndenī* there is (e.g.) *wānduo, wādenes* etc. Stang reconstructs this (p. 159f.) (with Lett. *ūdens*) into *\*vāndō \*und(e)nēs*. Though I think this is right, I think we have in this case no special indication that the nominative had root accent, i.e. the situation is not more clear than in the *piemuō* type, from which *wānduo* might have been levelled.

I think we cannot go farther than the following statement. The Lithuanian shifting accent is most easily explained from a PIE shifting accent. Since in the accusative singular root accent is not of PIE date and since there is no indication that the accent of the accusative singular came on the root because it was withdrawn from the suffix, the root accent must come from elsewhere. Since we know that in PIE only the nominative had full grade of the root, the root accent can ultimately only have come from the nominative. This finds some confirmation by the fact that in the dual and plural only the nominative and accusative have root accent. The words with fixed root accent (*mótē*) may have it directly from the nominative, but this cannot be demonstrated.

In this way, then, Lithuanian confirms that PIE had in this type a shifting accent with root accent in the nominative.

### *Addendum*

Ad § 15 *pitú-*. Accepting Benveniste's connection (*BSL* 51, 32 ff.) of *pitú-* with Lith. *piētus*, we get a nice confirmation of our prediction, because *piētus* continues a full grade form *\*peitu-* (or *\*poitu-*). We reconstruct *\*peít-ēu-s* *\*pit-ŭ-ós*. (It should be remembered that in principle we did not use this comparative approach in the foregoing. We limited ourselves to a survey of the Greek and Sanskrit evidence.)

Ad § 16 (and 26). Add *bhiyás-*, for which *bhīṣā* and *bhayás-tha-* point to an inflection *\*bheíH-ōs* *\*bhiH-s-ós* (Kuiper, see references in Mayrhofer, *Etym. Wb.* II 472).

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