

GA_v. *mā* THE PIE WORD FOR 'MOON, MONTH,' AND THE PERFECT PARTICIPLE

R.S.P. BEEKES
Leiden University

The word for 'moon, month' is reconstructed as **méh₁nōt*, **meh₁nésm*, **meh₁nsos* etc. The form */meh₁ns-/* gives **maH_{as-}* in Indo-Iranian, but **mēns-* in other languages. This system is confirmed by the perfect participle, where the forms can only be understood by assuming a nominative in *-uōt*.

I. The Word for 'Moon'

1. The discussion on the inflection of the PIE word for 'moon, month' has not yet ended. Essential was the demonstration by J. Schmidt (1883, 345f) (who was followed by Specht 1944, 344), that the nominative ended in *-ōt* and that the oblique cases has *-(e)s-*. This reconstruction was accepted by Pokorny (1959) and Fraenkel (1962), but such eminent scholars as Vaillant (1958) and Stang (1966) held different views, and the treatment of Scherer (1953), who arrives at a number of parallel formations (**mēnōt*, n. or m. **mēnes-*, **mēns*, and **mēno-*), is quite unsatisfactory.

2. The Germanic forms (e.g. Goth *menoþs* and *mena*) were explained by J. Schmidt from an original nominative **mēnōt*. Scherer (1953, 61-71) doubts this, because it does not explain the distribution of the meanings ('month': 'moon'), and because, if the nominative resulted in *-a* (which was interpreted as an *n*-stem), *-oþs* must have been rebuilt from the oblique cases. I don't think we have to explain the distribution of the meanings. That the nominative would have been rebuilt on the oblique cases is no problem. I doubt, however, whether this is the correct interpretation. I think the nominative got a form with *-s* beside the old one without, i.e. I think it quite possible that the nominative was split into two forms. — Essential is that Germanic had a form in *-ōt*, and that the *n*-stem is an innovation, as Germanic very often has new *n*-stems and as there is no direct support for an *n*-stem in the other languages (Umbr. *menzne* and Slav. *měsęcь* < **mesŋ-ko-* have a suffix *n* after the *s*-stem).

3. Stang (1966, 224) rejects the explanation of Lith. *mėnuo* from **mēnot*. He thinks that it was an old *n*-stem, and assumes that in the oblique cases **mēnen-* was replaced by **mēnes-* to avoid the two *n*'s. This is for several reasons improbable. First,

there is, as we saw, no direct evidence for an old *n*-stem. Then, it is improbable that the oblique cases were reshaped into an *s*-stem, as there was no model for it. The inflection *mēnuo*, *mēnes-* is unique and quite irregular, and cannot have arisen from analogy. Also, it is much more probable that the *-(e)s-* of Lithuanian is identical with the *-s-* in the languages that point to **mēns-*. (Perhaps Stang means that there was a second word **mēnōs*, **mēnes-* beside **mēnōn*, **mēnen-*, but this is itself an improbable assumption, and it is also improbable that the oblique cases of the second word were introduced into the *n*-stem, whereas the nominative disappeared).

The system of Lithuanian must be old, exactly because of its irregularity, which cannot be explained from developments within this language. This is confirmed by the fact that its *-(e)s-* is found in many other languages and its nominative (without *-s-* and) with *-ōt* in Germanic. On the other hand it is quite understandable that this paradigm (*-ōt*, *-(e)s-*) was changed in different ways in the separate languages. It is just by chance that Lithuanian preserves these two elements in one paradigm.

4. If Ruijgh (1967, 237) is correct in interpreting Myc. *me-noeja* 'crescent-shaped, decorated with moons?' as *|mēnōheia|*, an adjective derived from Gr. **mēnōs*, this would confirm the *-ō-* in the nominative suffix. (**mēnōs* could stand for **mēnōt-s* or for **mēnō < *mēnōt*).

5. It is often supposed that Lithuanian *-es-* proves an old neuter. I don't see why it should (except that *-es-* is found with the neuters in *-os*). The word is everywhere masculine. What we have, of course, is that Lithuanian generalized the full grade form of the suffix *es/s*, as in *piemuõ*, *piemeni* Lithuanian has *-en-* throughout. Other languages point to **mēns-* (Greek, Latin, Celtic), which shows that we had *es/s* here, just like *en/on/n* where Lithuanian has *-en-*). For the paradigm see below. (Lith. *mēnas* does not prove an old neuter **mēnos* either; see Fraenkel 1962, 438ff).

6. Vaillant (1958, 196) assumes a paradigm **mēns > *mēn*, obl. *mēns-*. In Baltic the nominative would have become **mēnēn* "par une sorte de réduplication," and **mēns-* would have been replaced by **mēnes-*. It is clear that this is highly speculative. The creation of an *n*-stem nominative is quite understandable. Baltic **mēns-* and Slavic **mēsñ-* (*měse- cъ < *mēsñ-ko-*) would be different reshufflings of an original paradigm **mēn*, obl. **mēs-*. Both the rebuildings of this paradigm are not very prob-

able, but the paradigm itself is quite improbable. The author assumes that **mēn* resulted from **mēns*, and **mēs-* from **mens-* (in inlaut), already in PIE. Now it seems much more probable that **mēns* resulted in **mēs* and that **mēns-* remained unaltered, cf. Skt. *māḥ*, *māmsá-* 'flesh.' It is quite improbable that **mēns-*, which Greek, Latin and Celtic have is in all these languages due to restoration. Vaillant's interpretation, therefore, contains several improbabilities. Slavic *mēs-* must derive from **mēns-*, perhaps through dissimilation in **mēns-n-* (J. Schmidt compares *pěsňkь*, Skt. *pāmsú-*). (A Slavic nominative **mēns* is improbable, as it inherited BS **mēnōt*, preserved in Lithuanian. If Slavic nevertheless created a nominative **mēns*, this developed into **mēn* rather than into **mēs*). Given the evidence for **mēn-ōt*, **mēn-es-/mēn-s-*, an old form **mēs(-)* is improbable (on Indo-Iranian see below).

7. **mēnōt* had a laryngeal in the root. There are not less than four indications for it. 1) The acute of Lith. *mėnuo* is definite proof of a laryngeal (Kortlandt 1975, 20). 2) Nominative forms of this type do not have a lengthened vowel (Beekes, 1972, 38). 3) If the root is **mē-* 'measure,' as is mostly assumed (the objections disappear in the light of this reconstruction), the root was **meh₁-*. 4) GAv. *mā* is disyllabic, */maHah/*. As far as I see this fact has never been connected with the inflection of this word. The line Y 44.3d has 3 - 7 syllables instead of 4 - 7, which is exceptional. As it is certain that the word had a laryngeal, the two facts together make */maHah/* certain.

8. Kortlandt points out to me that the Lithuanian evidence is even more instructive. If the oblique cases (other than the accusative singular) all had **meHnes'* (with the accent on the ending) in Balto-Slavic, Lithuanian would have got mobile accentuation. Therefore the oblique cases must have had **meHns'*, where the accent was withdrawn onto the root according to Hirt's Law. This law, then, operated in all forms of the paradigm (**meHnōt*, *meHnésm*, *meHns'*), which explains why Lithuanian has fixed root accent. The Lithuanian accentuation thus proves the existence of a paradigm with both **meHnés-* and **meHns'* in Balto-Slavic.

9. The PIE word for 'moon, month,' then, was:

nom. **meh₁n-ōt* Goth. *menops*, Lith. *mėnuo*

acc. * **meh₁n-és-m* Lith. *mėnes-į*

gen. **meh₁n-s-és* OIr. *mís*, Lat. *mēns-is*, Skt. *mās-ás*

Specht mentions only **mēnōt*, **mēns-* (he is discussing Lithu-

anian only). When Pokorny (1959, 731) takes this over, writing “**mēnōt*, Gen. **mēneses*, woraus, **mēnes*, **mēns*-, **mēs*-, **mēn*-”, it is quite unclear how from **mēnes*- the form **mēns*- (from which came **mēs*-, **mēn*-[?]) could arise. Therefore the paradigm must have contained all three forms (as J. Schmidt stated). That **mēns*- is old, follows from the fact that it is the most widespread form.

An even older form should have had **mh₁n(e)s*- in the oblique cases. A form **mh₁ns*- would have given **mas*- in Indo-Iranian, but *candrá-mas*- is more probably recent. (If Indo-Iranian had **mas*- < **mh₁ns*-, it could not have had *mās*(-), for which **meh₁ns*- is required).

It is quite understandable that this paradigm was simplified in the different languages. Most of them generalized the oblique stem **meh₁ns*-. In Indo-Iranian **maHns*- the *n* was vocalized, giving **maHās*. For this vocalization compare GAv. *vāta*- Y 44.4d, /*vaHata*-/ < **h₂ueh₁nto*-; in the Rigveda *vāta*- has nine times disyllabic *-ā*-. In the other languages the nasal was not vocalized and the loss of the laryngeal resulted in a long vowel (cf. Beekes 1979, 19).

NPers. *māng* cannot represent an old **mānsa*-, as this form could not have arisen in Indo-Iranian.

This means that speculations about PIE *-ēns* > *-ēs* do not regard this word, because 1) the nominative was **meh₁nōt* in PIE; 2) PIE had a form with a laryngeal, **meh₁ns*-. It also shows that in the sequence *eh₁nC*- the laryngeal was preserved down to the separate languages. (Writing *-eh₁nC*- with a vocalic nasal instead of a phonemic writing /*eh₁nC*-/ only creates difficulties).

In this way is explained why Sanskrit has *mās*- throughout the paradigm, as opposed to *mās*, *māms*- ‘flesh.’ It was up to now explained (AiGr III 250) as generalization of the nominative (PIE **mēs* < **mēns*), but it is not probable that with this word the nominative was so much more important than with the word for ‘flesh.’ In the Rigveda there are 14 oblique cases but no nominative. The nominative is in fact only known from lexicographers and Garga.

10. There are two difficulties with the laryngeal/hiatus in Indo-Iranian.

The first is that GAv. voc. *maidyoī.mānhā* Y 51.19a has /*māha*/ with monosyllabic root. The laryngeal could have been lost in the second member of a compound.

In the Rigveda no disyllabic forms of *mās-* are given, but in 2.24.5 one might read *maadbhíh*. The word occurs 14 times, of which 6 times in book 10. I ascribe the absence of (more) disyllabic forms to chance. The absence of archaic forms in the Rigveda is never a decisive argument. (Note that *vāta-* had 9 times a disyllabic *-ā-* in the Rigveda, but out of 85 instances).

11. The above paradigm explains why Lithuanian does not have a form of the type *nepuotis*: there was no accusative in *-ōt-*, from which the *i*-forms originated.

The accusative with *-es-* explains Lith. *-es-*. There is no need to assume a neuter to explain it.

The accusative with *-es-* also shows that the full grade had *-es-*, not *-os-*. In this word *-es-* cannot have originated elsewhere (except in the locative, which was not a sufficient basis; the nominative and accusative plural put the same problem as to the vocalism of the suffix as the accusative singular). (1)

12. The *t/s*-stem is surprising, but this is no reason to reject it. We cannot reject new categories on the ground that we do not know them yet. In that way nothing could ever be found beyond what we already have. The comparative evidence has priority. It is not surprising that it is exactly this important word that preserves this archaic inflection. In the next section we shall see that there is an exact parallel.

(1) The generalization of the *eC*-form of the suffix in Baltic and Slavic cannot originate from the locative, as this was too weak a starting point. (In Germanic the situation is different, as the locative became a dative and, when the accusative had taken *o*-vocalism from the nominative, only the genitive remained, which naturally joined the dative rather than the accusative). Apart from such incidental – but decisive – evidence as Lat. *honor* : *honestus*, *maior* : *maies-tāt-*, the type is now found completely preserved in Hittite (Oettinger 1980, 47 and 60): *ishimās*, acc. *ishimenan*, obl. *-mn-* (Oettinger will show in the Gedenkschrift Kronasser that this belongs to the same type). The simplest explanation is that from PIE *-mō*, acc. *-mén-m*, gen. *-mn-és*. Surprisingly Oettinger rejects this explanation. He assumes a nominative **-én-s* and explains *-ās* as a phonetic development (47n. 11) or assumes that it was replaced by **-ōns* (p. 47). Apart from the problematic development of *-ns* in Hittite (on which I have no opinion; the evidence adduced for Hittite accent – in general – is as yet too incidental to be convincing), both these explanations are less probable and unnecessarily complicated. Oettinger is only forced to this explanation because he rejects the type *-ō*, *-én-m*, *-n-és* on aprioristic grounds: "Akzentwechsel innerhalb der starken Kasus ist unwahrscheinlich." This idea also forces him to reject the usual explanation of *hāras haran-* (from *-ō*, acc. *-on-* with the vocalism of the nominative), for which (isolated!) type he also needs an analogical explanation, which I think is improbable (p. 62).

II. The Perfect Participle

13. With the reconstruction of the inflection of the word for 'moon' a much discussed problem of Indo-European linguistics is solved: the inflection of the perfect participle. Literature see AiGr. III 299, II 2 909, 915; Szemerényi 1967). It has a long time ago been assumed that there existed a *t*-stem beside an *s*-stem, or *t*-stem forms beside *s*-stem forms. There is abundant evidence for an *s*-stem in the oblique cases, specially a suffix form *-us-*. The *-ō-* of the suffix and the full grade of the root of Goth. *weitwod-* < **uēiduōt-* show that the *-t-* belonged to the nominative. These facts suggest that the inflection was parallel to that of 'moon.' I think the inflection of the PIE perfect participle was:

nom.	* <i>uēid-uōt</i>
acc.	* <i>uīd-uēs-ŋ</i>
gen.	* <i>uīd-us-és</i>

This conclusion was reached already by Pedersen in his *Etudes Lituanienes* (1933, 47-53). His solution seems not to have been accepted. Though his study is sometimes cited in the handbooks, his conclusion is hardly ever mentioned. Schwyzler (1938, 540) seems most positive. Not quite clear is Specht's position (1944, 345).

14. Gr. *eid-ōt-os* is no longer a certain argument for an old *-t-*. We now know that Mycenaean had *-woh-* in these forms (*tetukowoha* /*tetukh-woha*/). Impressed by this evidence Szemerényi (1967) denies altogether that the *-t-* is old. His explanation of Gothic *weitwod-* is as follows. In an original inflection **nepōs*, **nepotŋ*, **neptos* the nominative **nepōs* was replaced by **nepōt*. This must also have happened in the word for 'moon.' Thus *s*-stems like the perfect participle were changed into *t*-stems. This interpretation is unacceptable. First, the nominative was **nepōt*, not **nepōs* (< **nepōts*). Nominatives of this type are asigmatic. Germanic points to this form for **nepōt*, because it became an *n*-stem, so there is no reason to assume **nepōs* as a starting point. In the case of the word for 'moon' his interpretation would even imply that the two forms we have (Goth. *mena* < **mēnōt* and *menops*) are both secondary, which is making things unnecessarily complicated. Secondly, if **nepōs*, which was a *t*-stem, was replaced by **nepōt*, this does not at all mean that it is understandable that forms that were *s*-stems throughout were replaced by *t*-stems.

Weitwod-, then, stands and must be accounted for.

How Greek got its *s*-stem is not easy to see. Szemerényi discusses it at some length and concludes: "In the light of these parallels it will be easier to understand how the original *s*-stem inflection of the perfect participle came to be replaced by the *t*-stem declension." In fact, his treatment shows how difficult it is. 1) "in Homer the process has either not yet begun, or the new stem only makes a tentative first appearance." This gives a difficulty, as the perfect participle already has its *t*-forms in Homer. Of course, the process could have developed earlier in this case, but then there are no parallels in Greek. 2) The parallels given are of the type *-ōs*, *-ōtos*, never *-ōs*, *-otos*. E.g. *khṛōs*, though it has *khṛōa*, *khroōs* in Homer, becomes *khṛōta*, *khṛōtos*, not **khrot-*. This means that there is no good model. It does not surprise when Szemerényi ends with adding that the present participle may have favored the development. (But there was no type *-ont-/at-*. Thematic participles had *-ont-* throughout, the athematic ones had *-ent-/at-*. Here *-at-* could not have been replaced by *-ot-*, as there was no *o*-vocalism in the paradigm. And in fact we see that *-t-* was replaced by *-nt-*. This means that influence of the present participle would not have occurred at all (as there was no *-ot-*), or would have resulted in *-ont-*). 3) As in 1200 BC the forms still had *-woh-*, the dialects must have innovated separately in the same way.

The alternative is that the dialects went different ways, some generalising *-t-*, others (keeping) *-s-*. I suggest that this is what actually happened.

15. From Celtic three forms are relevant: OIr. *bibdu*, *coimdiu* and *fiadu*. PIE *-ōt-* would have disappeared (with *u*-infection), and a *-u-* before it too. **-ōts*, with an added *-s-* would have given *-u*, as would have **ōs*.

fiadu can continue **u̯eiduōs* or **u̯eiduōts*. The word is an *n*-stem. I would not see this as an argument against an old *-t-*, as does Szemerényi, for the *n*-inflection is either not old, or it is not a perfect participle.

coimdiu, which is a *t*-stem (gen. *coimded*), has been interpreted as **kom-mēd-u̯ōt-*.

bibdu 'culprit,' gen. *bibdad*, is also a *t*-stem and could point to **-u̯ōt-s*, gen. **-u̯ōt-*. Its etymology is not certain. **bhi-bhid-u̯ōt* 'der geschädigt hat, or **bhe-bhud-u̯ōt-* (from a very doubtful root *bhud-* 'strike') have been suggested. Szemerényi points out

that it could as well have had a suffix $-\bar{o}t-$ (not $-\underline{u}\bar{o}t-$) or even be a compound with $-d\bar{o}t-$ (as in Lat. *sacerd\bar{o}t-*), which leaves a first element $*bibi/u-$ or $*bebi/u-$. But this analysis is not probable. A root with two identical consonants is extremely rare in PIE, so $*bhVbh-$ is a very improbable root. It is much more likely that the word has reduplication. And when the suffix can be $-\underline{u}\bar{o}t-$ as well as $-\bar{o}t-$, the possibility that it is a perfect participle is a real one. In that case the t -stem proves an old $-t-$ in the paradigm.

16. In Baltic the nominative was replaced by an nt -form, Lith. *lik-ēs*, OPr. $-(w)uns$. The questions that must be answered are, *why* the nominative was reshaped, and *why* the nominative *only*. If the nominative was $*\underline{u}\bar{o}s >$ Lith. $*uos$, it would be ununderstandable why it was changed. The answer to both questions is that the nominative was divergent (a t -stem beside the s -stem forms: $*\underline{u}\bar{o}t > *uo$, cf. *ménuo*). That it was reshaped after the other active participle is self-evident.

In Old Prussian it seems even more clear that we must not start from $*\underline{u}\bar{o}s$. This form probably developed into $*\underline{u}\bar{u}s > *ūs$ (Stang 1966. 266). To my mind it is not evident that a nominative in $*-ūs$ (with oblique cases with $-us-$) would have been reshaped into $-(w)uns$. This would be much more evident if we start from $*\underline{u}\bar{o}t$, which gave $*\underline{u}\bar{u} > *u$.

17. Most problematic is the situation in Indo-Iranian. The problem is the connection with the stems in $-vant-$. The facts are the following:

Skt. $-vant-$	pf. ptc.	Av. $-vant-$	pf. ptc.
nom.m. $-\underline{v}\bar{a}n$	$-\underline{v}\bar{a}n$	$-\underline{v}\bar{a}s : -\underline{v}\bar{a}$	$-\underline{v}\bar{a} < *v\bar{a}s$
nom.n. $-\underline{v}\bar{a}t$	$-\underline{v}\bar{a}t$	$-\underline{v}\bar{a}t$	—
voc. $-\underline{v}\bar{a}s$	$-\underline{v}\bar{a}s$	$-\underline{v}\bar{o}$	—
acc. $-\underline{v}\bar{a}ntam$	$-\underline{v}\bar{a}m\bar{s}am$	$-\underline{v}\bar{a}ntəm$	$-\underline{v}\bar{a}ṅhəm < *v\bar{a}sam$
gen. $-\underline{v}\bar{a}tas$	$-\underline{u}\bar{s}as$	$-\underline{v}\bar{a}t\bar{o}$	$-\underline{u}\bar{s}\bar{o}$

It is now fairly certain what the PIE forms were:

	PIE	PII		PIE	PII
nom.m.	$-\underline{u}\bar{e}nts$	$> -vants$		$-\underline{u}\bar{o}t$	$> -vat$
nom.n.	$-\underline{u}\bar{e}nt$	$> -vat$		$-\underline{u}\bar{o}t$	$> -vat$
voc.	$-\underline{u}\bar{e}nt$	$> -vant$		$-\underline{u}\bar{o}s$	$> -vas$
acc.	$-\underline{u}\bar{e}ntm̄$	$> -vantam$		$-\underline{u}\bar{e}sm̄$	$> -vasam$
gen.	$-\underline{u}\bar{e}ntes$	$> -vatas$		$-\underline{u}\bar{e}s$	$> -usas$

The plural forms of the type *-vadbhis* cannot have been essential, as they are almost non-existing: Vedic has only one form, and Avestan has *-užbīš*. So *-vad-* is secondary.

Pedersen (1933, 51) thought that the neuter sg. was the link: *-vat* was the regular form in both inflections. (Note that the neuter nominative has a zero grade of the suffix, but not — or it was reshaped at an early date — when the form would have the shape *-iC* or *-uC*; cf. the comparative form *-yas*). These forms, however, were not important enough either as they too are rare: the participial form is not found in Avestan and twice only in Vedic.

In Sanskrit the sandhi of both forms *-vān* points to **-vāns*. This identity could be secondary, but the acc. *-vāmsam* proves a real **-vāns* for the participle.

The *-n-* of **-vāns* must have originated in the *vant-* forms. Only the (former) identity of the two nominatives can explain why the *-n-* was introduced into the participle. Both nominatives therefore must have been **-vās* at one time. For the introduction of the *-n-* (in the *vant-* forms) compare the replacement of the voc. *-vas* by *-van* in the late Vedic period.

That the nom. **-vāt* in the participle was replaced by **-vās* is trivial. It is not easy to understand, however, why **-vants* was replaced by **vās*. "Von allen Versuchen, das Gesamtverhältnis von *-vāms-*, *-vas-*, *-vat-*, *-uṣ-* genetisch zu bestimmen, ist bisher keiner überzeugend gelungen." (Wackernagel, AiGr. III 298). Both forms have *-v-*, but that cannot have been sufficient. In Avestan the 'comparative' adjectives like *Θβāvąs* 'like you' retain *-vaṣ* < **-vants*, and only the 'possessive' adjectives got **vās* > *-vā*. This means that the similarity in meaning was a factor ('having lies' against 'having lied/being a liar'). Nevertheless it is hard to understand why **-vants* was replaced by a form that was less frequent (in Vedic I counted 87 nominatives of the *vant-* adjectives against 43 of the participle) and which was clearly distinguished by the reduplication. (Using *vidvān* as example creates a wrong impression. Or must we reckon with a greater number of perfects without reduplication)? I suggest that a long vowel nominative was preferred, because all nouns of this (hysterodynamic) inflectional type have such a nominative. (Indo-Europeanists have often reconstructed a nominative **uont* or **uent* for these adjectives. Compare the same tendency in Greek in *hekón*, and *odón* for *odóus*). If a new long vowel nominative was formed to these *vant-* forms, one would

expect **-vānt*. If this form ever existed, it would be understandable why it was replaced by a less adequate form (like **-vās* or **-vāns*). This, then, is probably not what happened. That the *vant*-forms took over **-vās* (from the participle) as nominative is hard to understand. Therefore I suggest that it was the nominative **-vāt* which they adopted. This form has a greater similarity to the suffix *-vant-* and the 'expected' nominative **-vānt* than **-vās*. Note also that m. **-vāt* : n. **-vat* is parallel to **-yās* : *-yas* and *apās* : *apas*. Also **-vāt* was isolated in its own paradigm: the oblique cases were *s*-stems. So the nom. **-vāt* could easily be reinterpreted as the nominative of *vant*-forms. Later in both languages, so perhaps already in PII, **-vāt* was replaced by **-vās* in the participle, and this form then spread also to the *vant*-forms. In Avestan this situation remained unchanged, but in Sanskrit **-vās* in the *vant*-forms was adapted to the oblique cases by the introduction of *-n-*. The development down to Sanskrit now becomes very clear: **-vāt* was nominative of the *vant*-forms (it had a long vowel and no ending *-s*); but when **-vāt* was changed into **vās*, this form was less adequate for the *vant*-forms, and this was remedied by the introduction of an *-n-*.

F. Kortlandt tells me he thinks the developments can be explained much easier as follows. The development in Avestan was independent from that in Sanskrit. In Avestan **vāt* was replaced by **-vās* and this was introduced into the *nt*-stems, because of the semantic similarity and because **-vās* could be analysed as *-vā+s*, where *-vā* looks like the nom. sg. of an *n*-stem. In Sanskrit **-vants* was replaced by **-vānts*, and then the regular **-vāt* was replaced by this **-vānts*, because of the semantic similarity and because it was more frequent, after which **-vānts* became **-vāns*. In this view **-vāt* is necessary only to understand the development in Sanskrit.

18. There is one form that proves that **(v)āt* was replaced by **(v)ās*, and that at a late date. This form is Av *napā*, OP *napa* < **napās*. This form was **nepōt* in PIE. We have seen that the word had no *-s* in the nominative (§ 14). Of course an *-s* could have been added at some date in PII, but there is no indication for it.

It has been supposed (Bartholomae KZ 29, 572; Grdr. p. 115) that **napāts* would have given **napās* in sandhi before a consonant. Apart from the wrong starting point, this explanation is improbable. First, for Sanskrit at least, there is no evi-

dence that ever the last consonant but one disappeared (AiGr I 305). Then, in forms like **harvatāt-s* the *-t-* was preserved (or restored), **-ats* giving *-ās* (not *-ā* from early **-ās*). So either the development did not exist, or the regular shape was restored. The explanation must be rejected.

That **napāt(s)* was reshaped after *vīδvā* is quite improbable: there is no motivation nor a model (there is no formal agreement at all, nor is there any semantic similarity).

I would suppose that *-āt* of **napāt* was replaced by *-ās* when *-āt* of the perfect participle was replaced by *-ās*. This gives a chronological problem. As **napās* is Ir. only, it seems to have originated in PIr. If this is correct, it shows that *-(v)āt* was replaced by *-(v)ās* in PIr., and independently in PIA. But it is possible that the change to **napās* was PII, and that *napāt* was restored in Sanskrit.

19. My conclusion would be that the IIr. facts can only be understood if the nominative of the perfect participle had **-vāt*. It is true that the *t*-forms we find in Sanskrit are not themselves old, but they point to a *t*-form in the paradigm through which the contamination with the *vant*-forms originated. It is clear that this form was the nominative. It has been assumed (AiGr III 299) that the two paradigms coincided in *-vat*, from **-uñt* and **-uot*. But, the forms with *-vat* are not influential enough, and secondly **-uot-* can be best explained by assuming a parallel nominative masc. **-uōt*. Av. *napā* presupposes the ending *-vāt*. Here again it is only the nominative that gives difficulties. The developments in Baltic too can be better understood if the nominative was divergent. The Greek *-t-* cannot be explained easily and may well be old. There is a good chance that the Celtic forms go back to an old *t*-stem. But the Gothic evidence and the parallel of the word for 'moon' are sufficient for reconstructing the paradigm as was done above. They too show that it was the nominative that was divergent, as was seen first by Pedersen.

REFERENCES

- Beekes, R.S.P.
 1972 The Nominative of the Hysterdynamic Noun-Inflection. KZ 86, 30-63.
 1979 GAv. *uzirəidyāi* and *rārəša-*. MSS 38, 9-20.
- Fraenkel, E.
 1962 Litauisches etym.Wörterbuch. I Heidelberg.
- Kortlandt, F.H.H.
 1975 Slavic Accentuation. Lisse.
- Oettinger, N.
 1980 Die *n*-Stämme des Hethitischen und ihre indogemanischen Ausgangspunkte. KZ 94, 44-63.
- Pedersen, H.
 1933 Etudes lituaniennes. Kopenhagen.
- Pokorny, J.
 1959 Indogermanisches etym. Wörterbuch. Bern.
- Ruijgh, C.J.
 1967 Etudes sur la grammaire et le vocabulaire du grec mycénien. Amsterdam.
- Scherer, A.
 1953 Gestirnnamen bei den indogermanischen Völkern. Heidelberg.
- Schmidt, J.
 1883 Das suffix des participium perfecti activi. KZ 26, 329-400.
- Schwyzler, E.
 1938 Griechische Grammatik. München.
- Specht, F.
 1944 Die Ursprung der indogerm. Deklination. Göttingen.
- Stang, C.S.
 1966 Vergleichende Grammatik der Baltischen Sprachan. Oslo.
- Szemerényi, O.
 1967 The perfect participle active in Mycenaean and Indo-European. SMEA 2, 7-26.
- Vaillant, A.
 1958 Grammaire comparée des langues slaves. Paris.