

Verba et Litteræ:  
Explorations in Germanic Languages  
and German Literature

Essays in Honor of Albert L. Lloyd

EDITED BY  
ALFRED WEDEL  
and  
HANS-JÖRG BUSCH

Linguatext, Ltd.  
Newark, Delaware

The nom. sg. of Germanic *n*-stems

JAY H. JASANOFF

Much ink has been spilled, including a modest contribution by the present author,<sup>1</sup> on the oddly discordant forms of the nom. sg. of *n*-stems in the early Germanic languages. The relevant facts can be summarized as follows:

**masculine** nouns and weak adjectives have an ending reconstructible as *\*-ō*, *\*-ōn*, *\*-ē* or *\*-ēn* in Gothic (*guma* 'man'), *\*-ō* or *\*-ōn* in West Germanic (OHG *gomo*, OS *gumo*, OE *guma*),<sup>2</sup> and *\*-ē*, *\*-ēn*, *\*-ē̄* or *\*-ē̄n* in North Germanic (Old Norse *gumi*, Runic Norse *gudija* 'priest');

**feminine** nouns and weak adjectives have an ending reconstructible as *\*-ō*, *ō* or *\*-ōn* in Gothic (*tuggo* 'tongue'), *\*-ōn* in West Germanic (OHG *zunga*, OS *tunga*, OE *tunge*),<sup>3</sup> and *\*-ōn*, *\*-ō̄* or *\*-ō̄n* in North Germanic (Old Norse *tunga*);

<sup>1</sup> The reference is to Jasanoff 1980, which depends crucially on an analysis of the weak adjectives that I no longer consider tenable. A good overview of the problems connected with Germanic *n*-stems is given by Bammesberger 1990:163 ff.

<sup>2</sup> Here and below, the circumflexed macron (*\*ō̄*, *ē̄* etc.) denotes a trimoric or hyperlong vowel; bimoric or ordinary long vowels are written with a simple macron (*\*ō*, *\*ē*, etc.). Although unanimity on this point is probably unattainable (cf., e.g., Boutkan 1995), the evidence for the bimoric : trimoric distinction in Proto-Germanic final syllables seems to me incontrovertible.

<sup>3</sup> The possibility of an *ē*-colored ending (*\*-ē̄*, *\*-ē̄n*, etc.) in West Germanic, both here and in the neuters discussed below, is morphologically too implausible to require explicit consideration.

neuter nouns fall into two types. In type I, an ending reconstructible as *\*-ō* or *\*-ōn* appears in both Gothic (*namo* 'name') and West Germanic (OHG *namo*, OS *namo*, OE *nama*); the identity of this *\*-ō(n)* with the ending of pre-WGmc. *\*gumō(n)*, etc. eventually led to the outright transfer of words like *\*namō(n)* to the masculine gender in West Germanic.<sup>4</sup> In type II, which includes all other neuter nouns and all neuter weak adjectives, the ending is the same as in the corresponding feminines, i.e., *\*-ō* or *\*-ōn* in Gothic (*augo* 'eye'), *\*-ōn* in West Germanic (OHG *ouga*, OS *ōga*, OE *ēage*), and *\*-ōn*, *\*-ō* or *\*-ōn* in North Germanic (Old Norse *auga*).

The questions which any theory of the *n*-stem nom. sg. must address are 1) the original distribution of the *ō*-colored variants *\*-ōn*, *\*-ō*, etc. vis-à-vis the *ē*-colored forms *\*-ēn*, *\*-ē*, etc.; 2) the status of the final *\*-n*, which is securely reconstructible only for the feminines and type II neuters of West Germanic; and 3) the historical relationship of bimoric *\*-ō(n)*, *\*-ē(n)* to trimoric *\*-ō̄(n)*, *\*-ē̄(n)*.

The contrast between the *ō*- and *ē*-colored varieties of the nom. sg. ending, both in Germanic and elsewhere in the IE family, goes back to the PIE contrast between amphikinetic (also called holokinetic) and hysterokinetic nominal stems.<sup>5</sup> Amphikinetic stems were characterized by an *o*-grade suffix (*\*(C)on-*; also *\*(C)os-*, *\*(C)or-*, etc.) in the "strong" cases (nom. sg., acc. sg., nom. pl., etc.) and a zero-grade suffix (*\*(C)n-*; also *\*(C)s-*, *\*(C)r-*, etc.) in the "weak" cases (gen. sg., dat. sg., gen. pl., etc.); the loc. sg. exceptionally had *e*-grade. Hysterokinetic stems had (originally accented) *\*-e-* in the strong cases, but otherwise coincided with the amphikinetic type, with zero grade in the weak cases and *e*-grade in the loc. sg. *n*-stems of both types are safely reconstructible for the parent language, the difference being seen, e.g., in the contrast between Ved. acc. sg. *ásmān-am* 'sky' < *\*-on-m̄* (cf. Gk. acc. sg. *ἄκμων-α* 'anvil') and *vīśan-am* 'bull' < *\*-en-m̄* (= Gk. *ἄρσεν-α* 'male'). Both types survived in Germanic. The numerically preponderant amphikinetic stems were responsible, *inter alia*, for the *o*-grade of the suffix in the regular masculine *n*-stem paradigm (Go. nom. pl. *gumans*, OE *guman*, Old Norse *guma[r]* < *\*dhǵhm-on-es*; cf. Osc. *humuns* 'men'). Positive evidence for a hysterokinetic *n*-stem appears in Go. *\*auhsa*, OE *oxa*, Old Norse *oxi* 'ox' (= Ved. *ukṣā* 'ox,' acc. sg. *ukṣān-am* < *\*-en-m̄*),

which retains clear traces of a paradigm with *\*-en-* in the strong cases (cf. nom. pl. OE *yxen*, Old Norse *yxn* < *\*-enes*).

Non-neuter (i.e., masculine)<sup>6</sup> *n*-stems of the amphikinetic and hysterokinetic types originally ended in *\*-on-s* and *\*-en-s*, respectively, in the nom. sg. Already within the parent language, however, these sequences were converted, via the well-known rule discussed by Szemerényi (1996:115 f.), to *\*-ōn* and *\*-ēn*, with loss of the *\*-s* and compensatory lengthening of the preceding vowel.<sup>7</sup> The resulting long *\*-ō-* or *\*-ē-*, with or without retention of the *\*-n*, is preserved in the nom. sg. of *n*-stems throughout the family; cf., e.g., Ved. *ásmā* (≅ Gk. *ἄκμων*, Lith. *akmuō* 'stone'), *vīśā* (= Gk. *ἄρσεν* Lat. *uerrē[s]* 'boar'), and further Lat. *homō* 'man,' Old Irish *Ériu* (< *\*[p]t̪ueriō*) 'Ireland,' etc. Details aside, it is clear that the *ō*-colored ending of OHG *gomo*, OS *gumo*, and OE *guma* ultimately reflects the earlier *\*-ōn* (< *\*-on-s*) of amphikinetic stems, and that the *ē*-colored ending of Old Norse *oxi* goes back to the *\*-ēn* (< *\*-en-s*) of hysterokinetic stems. In West Germanic the amphikinetic ending was generalized to all masculine *n*-stems (cf. OE *oxa*, OHG *ohso*, etc., with the ending of OE *guma*, OHG *gomo*), while in Old Norse the hysterokinetic ending was extended to amphikinetic stems (*gumi* for theoretically expected *\*guma*).

PIE also had amphikinetic and hysterokinetic neuters. These were functionally collectives, formed by "internal derivation" from underlying non-collective neuters (cf., e.g., PIE *\*uód-r-*, gen. *\*uéd-ŋ-s* 'water' (acrostic) → *\*uéd-or-/ \*ud-n-* 'water (collective)' (amphikinetic)).<sup>8</sup> Such collectives originally had *\*-on-h<sub>2</sub>* (amphikinetic) and *\*-en-h<sub>2</sub>* (hysterokinetic) in the nom.-acc., with the PIE collective ending *\*-h<sub>2</sub>*. Here too, however, a regular sound change—the "laryngeal" corollary to Szemerényi's rule (cf. Nussbaum 1986:129 f.)—converted these sequences to *\*-ōn*, *\*-ēn* within the parent language. Extra-Germanic evidence for the long vowel can be seen in forms like Ved. nom.-acc. pl. *nāmā*, *nāmāni* 'names' (with secondarily re-added *-i* < *\*-h<sub>2</sub>*); note also GAv. *aiiṣn* 'days', Lith. nom. sg. *vāñduo* 'water,' and OCS nom.-acc. sg. *imę* 'name,' *sęmę* 'seed,' etc. In Germanic the *\*-ō* or *\*-ōn* of Go.

<sup>6</sup> There seem not to have been any feminine *n*-stems in PIE; cf. below.

<sup>7</sup> So too *\*ph<sub>2</sub>t̪ér* 'father' < *\*tér-s*; the doubts expressed by Bammesberger (1966) are not conclusive. Independent evidence for the rule is provided by the 3 pl. perfect in *\*ēr* < *\*ers* beside zero grade *\*-is*; cf. Jasanoff 1997:120.

<sup>8</sup> See especially Schindler 1975b:1-5. Schindler's conception of internal derivation is illustrated by Watkins 1982:261 f. and, at greater length, Nussbaum 1986:102 ff.

<sup>4</sup> As seen, e.g., by Bammesberger (1967).

<sup>5</sup> Here and throughout, I follow the model of PIE noun inflection set forth in Schindler 1975a, 1975b, and Rix 1976:121-124.

*namo* (: OHG *namo*) and Go. *augo* (: OHG *ouga*) clearly reflects the PIE long vowel that arose via compensatory lengthening from *\*-on-h<sub>2</sub>*. There is no trace in Germanic of the inherited hysterokinetic collective type in *\*-ēn* < *\*-en-h<sub>2</sub>*.

All this is essentially known, a modernized version of the *communis opinio*. When we try to account for the Germanic endings in detail, however, major gaps in our knowledge appear. Thus, e.g., it is well known that the "ideal" PIE endings *\*-ōn* and *\*-ēn* tended to lose their *\*-n* very early in the IE daughter languages, but the extent to which this was a PIE process, and the extent to which the loss of *\*-n* had consequences for the prosodic character of the preceding long vowel, are notoriously disputed. One of our aims in the discussion that follows will be to show that the comparative evidence bearing on *n*-loss and the related "bimoric vs. trimoric" problem is in fact a good deal clearer than is often believed. Recent advances in our understanding of IE phonology and morphology make it possible both to reconstruct the Proto-Germanic endings with considerable confidence and to piece together a detailed account of their history from PIE to the individual Germanic languages.

The evidence that *\*-ōn*—both from earlier *\*-on-s* and from *\*-on-h<sub>2</sub>*—was reduced to *\*-ō* within the parent language is overwhelming. Specifically, *\*-ō* takes the place of theoretically expected *\*-ōn* in Indo-Iranian (Ved. *ás mā, nāmā, ś(u)vā* 'dog,' GAv. *uruuā* 'soul,' *spā* 'dog'), Italic (Lat. *homō*), Celtic (OIr. *Ériu. cú* (leniting) 'dog'), Baltic (Lith. *Akmuō, vañduo*), Slavic (OCS *kamy* 'stone'),<sup>9</sup> and even Hittite (*haraš* (= *\*hara + -š*), gen. *haranaš* 'eagle'; cf. OHG *aro*, NHG *Aar*). The only non-Germanic languages to preserve the nasal are Greek (*ἄκμων*) and Armenian (e.g., *mi-anjn*, pl. *mi-anjunk* (< *\*-on-es*) 'monk')—neighboring branches in which the secondary replacement of *\*-ō* by *\*-ōn* could easily have been a shared analogical development. Interestingly, however, the facts are quite different in the case of the putative reduction of *\*-ēn* to *\*-ē*. Here no fewer than four of the six branches that take *\*-ōn* to *\*-ō* retain the *\*-n* in *\*-ēn*; cf. Lat. *lien*, gen. *liēnis* 'spleen'; OIr. *menmae* (< *\*-mēn-s*) 'mind'; OCS *imę* (nt.), *kore* (masc.) (< *\*-ēn*) 'root'; Hitt. *šumanza* (< *\*-men-s*) 'cord' (= Gk. *μῆν* 'membrane'). The most dramatic illustration of the difference in treatment between *\*-ōn* and *\*-ēn* comes from the irregular Old Irish words for 'dog' (*cú* < *\*k(u)uō* < *\*k(u)uōn* < pre-PIE *\*k(u)uon-s*), which predictably lenites, and 'woman' (*bé* < *\*g<sup>h</sup>en* < *\*g<sup>h</sup>ēn* < pre-PIE *\*g<sup>h</sup>en-h<sub>2</sub>*),

<sup>9</sup> With *-y* from *\*-ō*; cf. below.

which induces the nasalization mutation. The only possible inference, as I have argued elsewhere (Jasanoff 1989), is that the PIE sound change governing *n*-loss must be stated in the specific form

$$*-\bar{o}n > *-\bar{o} / \_ \#.$$

The more general proposed formulation, according to which final *\*-n* was lost after any long vowel, is untenable.<sup>10</sup>

Of the two late PIE endings—*\*-ēn* and *\*-ō*—that thus figure in the history of *n*-stems in Germanic, *\*-ēn* can unproblematically be taken as the source of OIcel. *-i* and its Runic Norse predecessor *-a*. But what was the fate of PIE *\*-ō*? The *ō*-colored endings in the Germanic dialects present a muddled picture, with both bimoric and trimoric reflexes appearing side by side in the masculine (Go. *-a* < *\*-ō(n)* (see below) vs. WGmc. *\*-ō̄(n)*), feminine (Go. *-o* < *\*-ō̄(n)* vs. WGmc. *\*-ōn*), and neuter II (Go. *-o* < *\*-ō̄(n)* vs. WGmc. *\*-ōn*). It is only in the neuters of type I, the tiny class consisting of the word for 'name' (Go., OHG *namo*) and two others (OHG *sāmo* 'seed' (: Lat. *sēmen* 'id.'), *ancho* 'butter' (: Lat. *unguen* 'ointment'), both secondarily masculine), that the Proto-Germanic form of the ending can be established by direct comparison.<sup>11</sup> Here the starting point was clearly trimoric *\*-ō̄*, with or without analogically re-added *\*-n*. At least in *\*namō̄(n)* and its congeners, then, PIE *\*-ō* appears quite simply to have yielded PGmc. *\*-ō̄*.

The crucial task in the extended *Problematik* of the *n*-stems is to explain how an apparently ordinary PIE long vowel like the *\*-ō* that developed from pre-PIE *\*-ōn* could have produced a trimoric vowel in Germanic. In general, the source of Germanic trimoric vowels is fairly clear. Apart from the special case of the nom. sg. of *n*-stems, such vowels go back to PIE sequences of the type *\*-VHV(C)̄*#, where the contraction that followed the loss of the laryngeal produced a hyperlong segment that differed by a mora from the kind of long vowel that arose from sequences of the type *\*-VH(C)̄*#. Exactly the same contrast arose under comparable circumstances in Balto-Slavic.<sup>12</sup> It is thus no acci-

<sup>10</sup> So incorrectly Schindler 1974:5, taken up by Mayrhofer 1986:159.

<sup>11</sup> Strictly speaking, only "name" is diagnostic, since the other two words are confined to West Germanic. For *ancho*, which is purely Old High German, see Lloyd-Springer 1988 s.v.

<sup>12</sup> In Balto-Slavic, as I will argue elsewhere, there was a reversal of markedness: the hyperlong : long contrast was reinterpreted as a contrast between normal long and "checked" long nuclei, the latter of which became the "acute"

dent that we find three-way correspondences like the following, where the underlying laryngeal hiatus is directly preserved in the oldest Indo-Iranian:

PIE	Germanic	Lithuanian	Indo-Iranian
* <i>-o-h<sub>2</sub>ad</i> ( <i>o</i> -stem abl. sg.);	* <i>-ō</i> (Go. <i>galeiko</i> , OHG <i>gilihho</i> , etc.);	<i>-ō</i> (gen. sg.);	GAv. <i>-aał</i>
* <i>-oHom</i> (gen. pl.)	* <i>-ōn</i> (OHG <i>-o</i> , OE <i>-a</i> , Olcel. <i>-a</i> ) <sup>13</sup>	<i>-ī</i>	Ved., GAv. <i>-aam</i>
* <i>-uh<sub>2</sub>-es</i> (" <i>ū</i> -stem" nom. pl.):	* <i>-ōz</i> (Go. <i>-os</i> , OHG <i>-ā</i> , OE <i>-a</i> ) <sup>14</sup>	<i>-ōs</i>	Ved. <i>-aas</i> <sup>15</sup>

The pattern is confirmed by other, less dramatic examples. But there is no way to extend this analysis to the final syllable of *\*namō(n)*. Although the Balto-Slavic counterpart of Gmc. *\*-ō(n)* is trimoric (> "circumflex") as well (Lith. *akmuō*, *vañduo* < Proto-Baltic *\*-ō*; OCS *kamy* < *\*-ū* < *\*-ō*),<sup>16</sup> the special properties of the nom. sg. of *n*-stems are obviously not attributable to the former presence of a *\*-VHV-* sequence.<sup>17</sup>

long vowels and diphthongs of traditional Balto-Slavic discourse. In final syllables the acute : circumflex contrast can best be seen in Lithuanian, where old acutes (< normal longs) are typically shortened and old circumflexes (< hyperlongs) remain long. Under the ictus (= stress), long vowels in final syllables receive rising intonation, denoted by the circumflex accent (ˆ).

<sup>13</sup> To which may be added the Gothic feminine pronominal ending *-o* (cf. *þizo* 'illarum' = OHG *thero*); for the most part, however, Go. *-o* has been replaced by *-e*, of obscure origin.

<sup>14</sup> OE *-a* is the older West Saxon ending, contrasting with *-e* (< *\*-ōz*) in the acc. pl. (cf. Bammesberger 104-105). The contrast between trimoric *\*-ās* (< *\*-ah<sub>2</sub>-es*) in the nom. pl. and bimoric *\*-ās* (< *\*-ah<sub>2</sub>(m)s*) in the acc. pl. recurs in Lith. *iōs* 'illae' vs. *iās* 'illas.' Note that both endings yielded *-os* in Gothic (nom.-acc. pl. *þos*).

<sup>15</sup> The disyllabic treatment is suppressed in derived *ā*-stems, but well preserved in "radical" *ā*-stems of the type *go-pā* lit. 'cow-protecting,' *giri-štā* 'standing on mountains,' etc.

<sup>16</sup> The raising of *\*-ō* to pre-Slav. *\*-ū* has an exact parallel in the raising of *\*-ē* to *\*-ī* in OCS *dъstī* 'daughter' (: Lith. *duktė*); given Lith. *-uō*, this analysis is preferable to the usual derivation of *-y* from *\*-ons*. The rule is discussed in Jasanoff 1983.

<sup>17</sup> This is not to deny the possibility that both Germanic and Balto-Slavic may have inherited individual stems in *\*-o-H(o)n-*, with the possessive suffix *\*-H(o)n-* identified by Karl Hoffmann (1955). But *pace* Jasanoff 1980, such stems could never have been conspicuous in Germanic; possessive *\*-H(o)n-*

Consistent with this is the fact that the corresponding Indo-Iranian ending (Ved. *ásmā*, *nāmā*, etc.) is never scanned disyllabically.

Since the trimoric *n*-stem endings of Germanic and Balto-Slavic cannot be explained by contraction, the typical solution—still favored, e.g., by Bammesberger 1990:167—has been to suppose that at the time when pre-PIE *\*-ōn* lost its final nasal, the resulting *\*-ō* acquired a suprasegmental feature that was later realized as an extra mora of length (*vel sim.*) in the two northern branches of the family. This, however, seems extremely unlikely. There is no other evidence for a contrast between two kinds of long vowels in PIE, and no evidence for a trimoric vowel in the nom. sg. of *n*-stems outside Germanic and Balto-Slavic. To project the bimoric : trimoric distinction back to PIE for the sole purpose of accounting for a single ending in two relatively late and neighboring IE dialects, only to lose the distinction again in Indo-Iranian (hence *ásmā*, rather than *\*ásmā* or the like) and then to reintroduce it in Indo-Iranian via a completely different mechanism (gen. pl. *-aam* < *\*-oHom*), is not an explanation at all. There is, however, another possibility. Let us assume that at an early stage in the dialectal differentiation of PIE—a stage prior to the loss of laryngeals—the "North IE" dialect area ancestral to Germanic and Balto-Slavic introduced a purely phonetic rule that redundantly prolonged long vowels in absolute final position. The effect of this rule would have been to convert forms like *\*dhǵhmō* 'man' to [dhǵhmō:], with non-contrastive hyperlong *\*-ō* ("*\*-ō:*");<sup>18</sup> other structurally "long" endings, such as the gen. pl. (*\*-oHom*), the nom. sg. of "*ā*-stems" (*\*-ah<sub>2</sub>*), and the nom. pl. of *o*-stems (*\*-ōs* [-ōs]) would not have been affected. Later, the phonological status of phonetic hyperlength would have been transformed by the loss of laryngeals. The disappearance of laryngeals brought a host of new long-vowel endings into the language, some of them bimoric (e.g., *\*-ā* < *\*-ah<sub>2</sub>*) and some trimoric (e.g., the *\*-ō-* of gen. pl. *\*-ōm* < *\*-oHom*). Under the circumstances, pre-existing long vowels, such as the [-ō:] of the nom. pl. ending *\*-ōs* and the [-ō:] of *\*dhǵhmō*, would inevitably have had to "choose sides," aligning themselves with the one prosodic type or the other. Given their phonetic character, it was inevitable that the non-prolonged *\*-ō-* would pattern with the bimoric, and the prolonged *\*-ō:* with the trimoric category. Schematically,

was quite distinct from the individualizing suffix (*\*-(o)n-*) that underlies the formation of Germanic weak adjectives.

<sup>18</sup> We will use the notation *\*-Ū:* to stand for a hyperlong final vowel.

pre-PIE	late PIE	"North IE"	pre-Gmc.-BS	Germanic	Balto-Slavic
* <i>-ōn</i>	* <i>-ō</i>	* <i>-ō:</i>	* <i>-ō:</i>	* <i>-ō̄</i> ("trimoric")	* <i>-ō̄</i> ("circumflex")
* <i>-oHom</i>	* <i>-oHom</i>	* <i>-oHom</i>	* <i>-ō:m</i>	* <i>-ō̄n</i> ("trimoric")	* <i>-ō̄n</i> ("circumflex")
* <i>-ah<sub>2</sub></i>	* <i>-ah<sub>2</sub></i>	* <i>-ah<sub>2</sub></i>	* <i>-ā</i>	* <i>-ō</i> ("bimoric")	* <i>-ā̄</i> ("acute")
* <i>-ōs</i>	* <i>-ōs</i>	* <i>-ōs</i>	* <i>-ōs</i>	* <i>-ōz</i> ("bimoric")	[* <i>-ō̄s̄</i> ] ("acute") <sup>19</sup>

The final vowel of the *n*-stem ending would thus have fallen together prosodically with the kind of trimoric vowel that resulted from the contraction of \*-*VHV*- sequences.

The great merit of the final prolongation rule assumed above is that it permits us to detach the lengthening that we observe in Germanic and Balto-Slavic, and only in these branches, from the pan-IE process by which \*-*ōn* became \*-*ō*. In contrast to the traditional account, under which pre-PIE \*-*ōn* yielded PIE \*-*ō* directly, the scenario just described eliminates the need to explain the absence of trimoricity in the nom. sg. of *n*-stems in the other IE languages.<sup>20</sup>

Let us now consider the Germanic facts in detail. Proto-Germanic, as we have seen, inherited two *n*-stem endings: \*-*ēn* in hysterokinetic masculines and \*-*ō̄* (< PIE \*-*ō*) in amphikinetic masculines and neuters.<sup>21</sup> Beside these, there was also an innovated bimoric ending \*-*ōn*, which appears 1) in feminines and type II neuters in West Germanic (OHG *zunga*, *ouga*), and 2) according to the standard and probably correct view, in masculines in Gothic (*guma*). To be sure, Go. *guma* could also go back to \**gumēn*, with \*-*ēn* generalized from words of the "ox" type as in Old Norse. The special factors that favored the analogical spread of \*-*ēn* in pre-North Germanic, however, would not have been operative in the prehistory of Gothic. In North Germanic the \*-*a*- of the strong cases in "normal" *n*-stems was generalized to the gen. sg. and dat. sg. (cf. Olcel. gen., dat. sg. *guma* < \*-*an*), where Proto-

<sup>19</sup> Not attested in Baltic; the Lithuanian reflex would have been \*-*ūs*.

<sup>20</sup> It may be objected, of course, that the assumption of a pre- "North IE" lengthening of \**V̄#* to \**V̄: #* is entirely ad hoc, since its only support comes from the forms it was invented to explain — the nom. sg. of *n*-stems and forms analogically based on the nom. sg. of *n*-stems (e.g., Lith. *duktė*, *motė* 'wife' (*r*-stems), *mėnuo* 'month' (*s*-stem)). This is perfectly correct, but irrelevant: the alternative view that \**V̄n#* gave \**V̄: #* within PIE itself is equally ad hoc, and far less satisfactory in other respects.

<sup>21</sup> Since \*-*ō̄* is thus easily accounted for, and since no Germanic language distinguishes between the reflexes of \*-*ō̄* and \*-*ōn*, we will no longer employ the formulas \**gumō̄(n)*, \**namō̄(n)* for simpler \**gumō̄*, \**namō̄*.

Germanic had \*-*i*- < \*-*e*- (cf. Go. *gumins*, *gumīn*). This would have produced a wholly *a*-colored paradigm in which the hysterokinetic ending \*-*ēn*, which became \*-*ān* (i.e., [-*ā̄n*]) by regular sound change in North and West Germanic, would naturally have had a competitive advantage over \*-*ō̄* or \*-*ōn*.<sup>22</sup> In Gothic, where there was no such extension of *a*-vocalism to the gen. dat. sg., and no general sound change of \**ē* to \**ā*, there would have been no motivation for the comparatively rare nom. sg. in \*-*ēn* to replace the *o*-colored ending. It may be taken as a safe working hypothesis, therefore, that *guma* goes back to \**gumōn*.

The replacement of \**gumō* by \**gumōn* in Gothic immediately raises a chronological question. Typologically speaking, the creation of the ending \*-*ōn* in Germanic must have been comparable to the creation of -*ων* in Greek (ἄκμων) and \*-*ōn* in pre-Armenian (*mi-anjn*). In all three cases the mechanism would have been the same: the pattern of hysterokinetic stems, where the \*-*en*- of the strong cases was lengthened to \*-*ēn*, with retained \*-*n*, in the nom. sg. (cf. Gk. ἄρσην, -ενες; Arm. *anjn* < \*-*ēn* 'person,' pl. *anjnk'* < \*-*en-es*), was extended to the amphikinetic type, where the strong cases in \*-*on*- (cf. Gk. ἄκμωνες, Arm. *mi-anjunk'*) were fitted out with an analogical nom. sg. in \*-*ōn*. In Germanic the substitution of \**gumōn* for \**gumō* would have to have been an extremely early development, since hysterokinetic *n*-stems in \*-*ēn* are too feebly attested, even in Gothic, to have been a suitable model for the introduction of \*-*ōn* after the individual Germanic languages had begun to diverge.<sup>23</sup> But this recognition leads to a paradox: if \**gumōn*, the source of Go. *guma*, was already a Proto-Germanic form, why do the corresponding West Germanic forms (OHG *gomo*, OS *gumo*, OE *guma*) go back to \**gumō̄*, with retained non-analogical \*-*ō̄*?

The answer, I suggest, is that the replacement of \*-*ō̄* by \*-*ōn* was incomplete: Gothic, with \*-*ōn*, and West Germanic, with \*-*ō̄*, disagree

<sup>22</sup> The connection between the Old Norse generalization of \*-*an* in the gen. dat. sg. and the generalization of \*-*ān* < \*-*ēn* in the nom. sg. was first pointed out to me many years ago by Richard Sacks.

<sup>23</sup> Apart from the "ox" word, the only masculine *n*-stem in Gothic which preserves distinctive hysterokinetic features is *aba* '(married) man,' gen. pl. *abne*, dat. pl. *abnam*. Note also that if the new ending \*-*ōn* had been created within Gothic, the replacement of \*-*ō̄* by \*-*ōn* in masculine *n*-stems would probably have affected feminine *n*-stems as well, where virtually every case form outside the nom. sg. contained the sequence \*-*ōn*- (gen. sg. *tuggons*, dat. acc. sg. *tuggon*, nom. pl. *tuggons*, etc.).

because the ending *\*-ō* was eliminated in masculine *n*-stem nouns in Proto-Germanic, but was retained in masculine weak adjectives. The weak declension of adjectives, as is well known, originated in "individualizations" of the type seen in Lat. *Carō*, gen. *-ōnis*, lit. 'smart person, Smarty' < *\*kato-on-* (cf. *catus* 'smart'), or Gk. *Στραβόν*, gen. *-ὠνος*, lit. 'squint-eyed person, Squint-eyes' < *\*stīg'o-on-* (cf. *στραβός* 'squint-eyed'). In formal terms, weak adjectives go back to *o*-stem adjectives extended by the amphikinetic suffix *\*(o)n-*; they originally had a distinctive paradigm, with *\*-o-on-* (> Gmc. *\*-ōn-*) in the strong cases and *\*-o-n-* (> Gmc. *\*-an-*) in the weak cases.<sup>24</sup> No trace of this difference in declensional type survives in the attested forms of Germanic, probably because the homophony of *n*-stem nouns and adjectives in the nom. sg.—*\*-ō* and *\*-o-ō* both gave PGmc. *\*-ō*—led to their complete merger everywhere. At a linguistic stage just prior to the substitution of *\*-ōn* for *\*-ō* in the nom. sg., therefore, the Proto-Germanic phrase meaning 'the blind man' would have been *\*sa blindō gumō*, with gen. sg. *\*pesa blindiniz guminiz*, dat. sg. *\*pezmō blindini gumini* (*vel sim.*), and a full range of other declensional forms in which the endings of the noun and adjective were identical.

The symmetry and simplicity of this picture were now disturbed by the introduction of the ending *\*-ōn*, modeled on the *\*-ēn* of nouns like *\*uhsēn* 'ox' and hence originally proper to nouns only. From remade nouns like *\*gumōn*, of course, *\*-ōn* could subsequently have spread to adjectives by analogy. But—and this point is important—forms of the type *\*gumōn* would have been the only vehicle for the introduction of *\*-ōn* into the adjectival declension; there were no weak adjectives in *\*-ēn* from which a nom. sg. of the type *\*blindōn* (replacing *\*blindō*) could have been created independently of *\*gumōn*. It is thus both legitimate and necessary to posit a linguistic stage when 'the blind man' was *\*sa blindō gumōn*, with the innovated *\*-ōn* entrenched as the ending of the noun but the older *\*-ō* persisting as the ending of the adjective. This stage, I would like to suggest, was the stage we know as late Proto-Germanic. Each of the three main divisions of the family inherited a small number of nouns like *\*uhsēn*, a much larger number of nouns like *\*gumōn*, and an open-ended class of weak adjectives in *\*-ō*. In Gothic the pattern of the nouns prevailed: *\*sa blindō gumōn* (*uhsēn*) became *\*sa blindōn gumōn* (*uhsēn*), whence the attested *sa blinda guma* (*\*auhsa*). In West Germanic the adjectival ending was generalized: *\*sa blindō gumōn* (*uhsēn*) was replaced by *\*sa blindō gumō*

<sup>24</sup> See especially Nussbaum 1986:254 f., with note 25.

(*uhsō*) (> OHG *ther blinto gomo* (*ohso*), OS *the blindo gumo* (*ohso*), OE *se blinda guma* (*oxa*)). North Germanic, for reasons already described, extended *\*-ēn* at the expense of the other two endings, giving Old Icelandic *sá blindi gumí*.

The history of the corresponding feminine and neuter nom. sg. endings was less convoluted. There were no feminine *n*-stems in PIE. The earliest feminine *n*-stems in Germanic were the feminine weak adjectives, created in analogical response to the need for a feminine counterpart to the weak adjectives of the other two genders. The founding proportion for the feminine was

masc/nt. strong *\*blinda-* : weak *\*blinda-n-* : fem. strong *\*blindō-* : weak *X*,

where *X* was solved as *\*blindōn-*. The nom. sg. corresponding to the new stem *\*blindōn-* was presumably *\*blindō*, since *\*-ō* was the only available *o*-colored *n*-stem ending prior to the introduction of the late and purely masculine nom. sg. type *\*gumōn*. The earliest feminine *n*-stem nouns were probably individualizations of the type *\*frawjō* 'lady' (< *\*'lordly one (female)'*) and *\*niþjō* 'female cousin' (< *\*'related one (female)'*); these in turn provided the model for the transfer to the *n*-declension of former *ō*-stems like *\*kvenō* 'woman' and *\*tungō* 'tongue'.<sup>25</sup> At no time does there seem to have been a formal distinction between feminine *n*-stem nouns and weak adjectives, both of which retained their *\*-ō*—ultimately the PIE amphikinetic ending—in the nom. sg. The PGmc. phrase *\*sō blindō kwenō* 'the blind woman' was preserved in Gothic as *so blindo qino*, and perhaps in Old Icelandic as *sú blinda kona*. WGmc. *\*sō blindōn qinōn* (= OHG *thiu blinta quena*, etc.), with substitution of *\*-ōn* for *\*-ō*, will be discussed momentarily in conjunction with the parallel replacement of *\*-ō* by *\*-ōn* in the neuter.

As we have seen, the neuters of types I (Go. *namo*) and II (Go. *augo*) both go back to PIE amphikinetic collectives in *\*-ō* (> Gmc. *\*-ō*).

<sup>25</sup> Compare the quite similar accounts by Bammesberger (171) and Meid (1967:91). Paralleling the history of the *ōn*-stems, old "devī-type" feminine adjectives in *\*-ih<sub>2</sub>-/ieh<sub>2</sub>-* (> Ved. *-ī-/yā-*) were provided with weak counterparts in *\*-ī-n-*, which served as the point of departure for the creation of the small class of feminine *īn*-stems. The nom. sg. of these forms (e.g., Go. *bairandei* 'carrying (fem.),' *diupei* 'depth' < *\*-ī-*, OHG *tiuifi* 'depth' probably < *\*-īn*) closely follows the pattern of the *ōn*-stems and requires no separate treatment.

The only organic difference between the two types lies in the way they formed their plurals. While PGmc. *\*namō* was treated as a singular from the outset and equipped with a secondary plural *\*namnō* (> Go. *namna*, Olcel. *nafn* (whence back-formed sg. *nafn*)), the treatment of *\*augō* involved an extra step. In the earliest pre-Germanic, the inherited collective *\*augō* probably retained the sense 'pair of eyes, two eyes,' patterning in effect as a neuter plural (or dual). Inevitably, however, the collective *\*augō*, lacking a segmentable plural morpheme, would have come to appear ambiguous and undercharacterized, just as in Vedic Sanskrit the old collective/nt. pl. *nāmā* came to appear undercharacterized and was remade to *nāmāni* (cf. above). The parallel between Germanic and Vedic was in fact very close: the Germanic equivalent of the replacement of *nāmā* by *nāmāni* was the replacement of *\*augō* 'eyes' by the overtly *n*-stem plural form *\*augōnō*, which became the source of Go. *augona*, OHG *ougun*, and Olcel. *augu*. The establishment of *\*augōnō* in the plural left the unrenewed form *\*augō* free to encroach on, and ultimately to take over, the function of the old non-collective singular. The same thing happened with the other type II neuters. Almost all the inherited members of this class refer to paired objects—'eye,' 'ear' (Go. *auso*, OHG *ōra*, Olcel. *eyra*), 'cheek' (OHG *wanga*), 'married couple' (OHG pl. *hīwun*, Olcel. *hji*), and, by analogy to the other body parts, 'heart' (Go. *hairto*, OHG *herza*, Olcel. *hjata*). At the level of Proto-Germanic, the essential difference between types I and II was that type I had a wholly new plural in *\*(m)nō* (*\*namō*, *\*mnō*), while type II had a recharacterized plural in *\*-ōnō* (*\*augō*, *\*-ōnō*). This is still the synchronic situation in Gothic.

We can now understand the selective replacement of *\*-ō* by *\*-ōn* in West Germanic—a development, it will be recalled, that affected type II neuters (PGmc. *\*augō* > WGmc. *\*augōn*) and feminines (PGmc. *\*tungō* > WGmc. *\*tungōn*), but not type I neuters (PGmc. *\*namō* > WGmc. *\*namō* (masc.)) or masculines (PGmc. *\*blindō* (weak adj.) > WGmc. *\*blindō*). The difference in treatment between the two neuter types could only have been due to the fact that the plural of *\*augō* was *\*augōnō*, while that of *\*namō* was *\*namnō*. In "eye," to put it briefly, the stem *\*augōn-* was extracted from the nom.-acc. pl. *\*augōnō* and substituted for the endingless "stem" of the nom.-acc. sg. *\*augō-Ø*; in "name," where there was no synchronic stem *\*namōn-* anywhere in the paradigm, the nom. sg. in *\*-ō* remained unchanged. The same replacement, *mutatis mutandis*, took place in the feminine *n*-stems, where the sequence *\*-ōn-* occurred in every case form outside the nom. sg. The rule was simple: West Germanic substituted *\*-ōn* for *\*-ō* in just those *n*-stems—the types represented by PGmc. *\*augō* and

*\*tungō*—where *\*-ōn-* was already present in the paradigm, and where the replacement of *\*-ō* by *\*-ōn* in the nom. sg. resulted in a reduction of inner-paradigmatic allomorphy.<sup>26</sup>

We can now summarize. PIE had both masculine and neuter *n*-stems. Four varieties were relevant for Germanic: hysterokinetic masculines in nom. sg. *\*-ēn* (< pre-PIE *\*-en-s*); amphikinetic masculines in *\*-ō* (< *\*-ōn* < *\*-on-s*); "individualized" amphikinetic masculines in *\*-ō* (< *\*-o-ō* < *\*-o-on-s*); and neuter collectives in *\*-ō* (*\*-ōn* < *\*-on-h<sub>2</sub>*). By the end of the Proto-Germanic period, the inherited situation had been affected by the following developments:

**"Prolongation."** As in pre-Balto-Slavic, long vowels in absolute final syllables were lengthened by a mora, causing the nom. sg. in *\*-ō* to be phonologized as PGmc. *\*-ō̄* (*\*gumō̄*).

**Differentiation of two neuter subtypes.** The types *\*namō* and *\*augō* acquired separate paradigms, the former with plural *\*namnō*, the latter with plural *\*augōnō*.

**Creation of weak adjectives.** The use of individualizing *n*-stems was widened to approximate the use of weak adjectives in the attested languages. Masculines and neuters merged formally with the types *\*gumō̄* and *\*augō̄*, and a new feminine type was created in *\*-ōn-* (< *\*-ā-n-*), with nom. sg. *\*-ō̄*.

**Introduction of *\*-ōn*.** Under the influence of the nom. sg. in *\*-ēn*, the nom. sg. in *\*-ō̄* was replaced by *\*-ōn* in masculine nouns; weak adjectives were not affected.

The result was the Proto-Germanic system:

masculine	feminine	neuter I	neuter II
1) <i>*-ēn</i> ( <i>*ihsēn</i> )	<i>*-ō̄</i> ( <i>*tungō̄</i> )	<i>*-ō̄</i> ( <i>*namō̄</i> , pl. <i>*namnō̄</i> )	<i>*-ō̄</i> ( <i>*augō̄</i> , pl. <i>*augōnō̄</i> )
2) <i>*-ōn</i> ( <i>*gumōn</i> )			
3) <i>*-ō̄</i> ( <i>*blindō̄</i> )			

<sup>26</sup> It goes without saying that the substitution of *\*-ōn* for *\*-ō̄* in feminines and type II neuters would have been favored by the fact that *\*-ōn* was already present in the language as ending of forms of the type *\*gumōn*. We may therefore tentatively date the change of *\*tungō̄*, *\*augō̄* to *\*tungōn*, *\*augōn* to a period earlier than the West Germanic replacement of *\*gumōn* by *\*gumō̄*.

Although no Germanic language preserved this array in its entirety, Gothic was extremely conservative. Here the only certain innovation was the leveling of the distinction between masculine nouns and weak adjectives in favor of the noun ending *\*-ōn* (*\*sa blindō gumōn* → *\*sa blindōn gumōn*). *\*-ōn* and *\*-ēn* both yielded Go. *-a*; *\*-ō* gave Go. *-o*.

Developments in West Germanic, some of which may in principle have taken place at the Northwest Germanic stage, were more elaborate. Feminines and neuters of type II replaced *\*-ō* by *\*-ōn* (*\*tungō*, *\*augō* → *\*tungōn*, *\*augōn*); on the other hand, *\*-ōn* was entirely eliminated from the masculine *n*-stems, where the *\*-ō* proper to weak adjectives was generalized to all subtypes (*\*sa blindō gumōn*, *uhsēn* → *\*sa blindō gumō*, *uhsō*). The few type I neuters, likewise ending in *\*-ō*, were converted to masculines. The West Germanic system was accordingly

masculine	feminine	nt. I (→ masc.)	neuter II
<i>*-ō</i> ( <i>*uhsō</i> , <i>*gumō</i> , <i>*blindō</i> )	<i>*-ōn</i> ( <i>*tungōn</i> )	<i>*-ō</i> ( <i>*namō</i> )	<i>*-ōn</i> ( <i>*augōn</i> )

In North Germanic, where *\*-ōn* and *\*-ō* fell together as *-a*, it is conceivable, though unprovable, that *\*tungō* and *\*augō* underwent the same prehistoric conversion to *\*tungōn* and *\*augōn* as in West Germanic. Definite Norse innovations were the back-formation of a virtual *a*-stem *\*namna-* (Old Icelandic *nafn*) from the plural *\*namnō*, and the generalization, for reasons already explained, of *\*-ēn* at the expense of *\*-ōn* and *\*-ō* in the masculine. The result was

masculine	feminine	nt. I (→ <i>a</i> -stem)	neuter II
<i>*-ēn</i> ( <i>oxi</i> , <i>gumi</i> , <i>blindi</i> )	<i>*-ō / -ōn</i> ( <i>tungā</i> )	( <i>nafn</i> )	<i>*-ō / -ōn</i> ( <i>auga</i> )

The picture of the *n*-stem endings that emerges from all this is, of course, only a theory, to be weighed and tested against other theories. Traditional attempts to deal with the problems discussed in the preceding pages have not been wanting in ingenuity. What they have lacked, in this author's opinion, is a proper understanding of the Indo-European background—the synchronic situation in late PIE from which the attested Germanic facts must be explained via the familiar processes of sound change and analogy. The analysis presented above depends heavily on two chronologically "deep" discoveries: 1) the separability of the inner-PIE change of *\*-ōn* to *\*-ō* from the much later change of *\*-ō* to trimoric *\*-ō̅*; and 2) the crucially different treatment of pre-PIE *\*-ēn*, which, unlike pre-PIE *\*-ōn*, retained its *\*-n* in late PIE and early Germanic. Thanks to the first finding, we can account for the trimoric

endings of Gothic and West Germanic without having to project the bimoric : trimoric contrast back to the parent language. Thanks to the second, we can explain the sole remaining Germanic *n*-stem ending—the quasi-attested *\*-ōn* of Go. *guma* and OHG *zunga*, *ouga*—as a hybrid of phonologically regular *\*-ō̅* and *\*-ēn*.

## REFERENCES

- Bammesberger, Alfred. 1990. *Die Morphologie des urgermanischen Nomens*. Heidelberg: Winter.
- Boutkan, Dirk. 1995. *The Germanic "Auslautgesetz"* [Leiden Studies in Indo-European 4]. Amsterdam/Atlanta: Rodopi.
- Hoffmann, Karl. 1955. Ein grundsprachliches Possessivsuffix. *Münchener Studien zur Sprachwissenschaft* 6.35-40.
- Jasanoff, Jay H. 1980. The nominative singular of *n*-stems in Germanic. *American Indian and Indo-European Studies: Papers in Honor of Madison S. Beeler*, ed. K. Klar, M. Langdon, and S. Silver [Trends in Linguistics: Studies and Monographs 16], 375-382. The Hague/New York: Mouton.
- . 1983. A rule of final syllables in Slavic. *Journal of Indo-European Studies* 11.139-49.
- . 1989. Old Irish *bé* 'woman.' *Ériu* 40.135-141.
- . 1997. Gothic Avestan *cikōitərəš*. *Sound Law and Analogy. Papers in Honor of Robert S. P. Beekes on the Occasion of his 60th Birthday*, ed. A. Lubotsky [Leiden Studies in Indo-European 9], 119-130. Amsterdam/Atlanta: Rodopi.
- Lloyd, Albert and Otto Springer. 1988. *Etymologisches Wörterbuch des Althochdeutschen. Bd. I. A - be-zisto*. Göttingen: Vandenhoeck & Ruprecht.
- Mayrhofer, Manfred. 1986. *Lautehre (Segmentale Phonologie des Indogermanischen). Indogermanische Grammatik Band II/2*. Heidelberg: Winter.
- Meid, Wolfgang. 1967. *Germanische Sprachwissenschaft. 3. Wortbildungslehre*. Berlin: de Gruyter.
- Nussbaum, Alan. 1986. *Head and Horn in Indo-European* [Untersuchungen zur indogermanischen Sprach- und Kulturwissenschaft 2]. Berlin/New York: de Gruyter.
- Rix, Helmut. 1976. *Historische Grammatik des Griechischen. Laut- und Formenlehre*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schindler, Jochem. 1974. Fragen zum paradigmatischen Ausgleich. *Die Sprache* 20.1-9.

- . 1975a. Zum Ablaut der neutralen *s*-Stämme des Indogermanischen. *Flexion und Wortbildung. Akten der V. Fachtagung der Indogermanischen Gesellschaft*, ed. Helmut Rix, 259-267. Wiesbaden: Reichert.
- . 1975b. L'apophonie des thèmes indo-européens en *-r/n*. *BSL* 70.1-10.
- Szemerényi, Oswald. 1996. *Introduction to Indo-European linguistics*. Oxford/New York: Clarendon Press/Oxford University Press.
- Watkins, Calvert. 1982. Notes on the plural formations of the Hittite neuters. *Investigationes philologicae et comparativae: Gedenkschrift für Heinz Kronasser*, ed. E. Neu, 250-262. Wiesbaden: Harrassowitz.