

Chapter 7: Nouns

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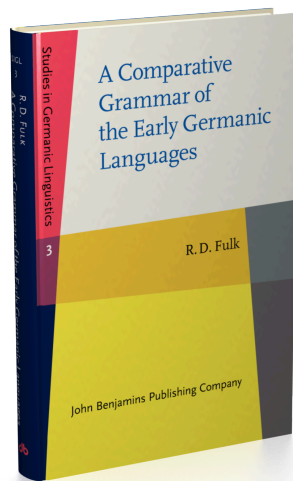
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Nouns

7.1 Noun formation in Proto-Indo-European and Germanic

In the IE protolanguage, nouns were inflected for (probably) eight cases (nominative, vocative, accusative, genitive, ablative, dative, locative, instrumental; perhaps also allative) and three numbers (singular, dual, plural), as in Sanskrit. Each nominal form was composed of stem plus inflection, e.g. stem **pod-* plus case inflection **-m* = **pod-m* > Gk. acc. sg. *πόδα* 'foot'. The stem might be a simple root, as in the example given, or the stem might be a root plus one or more suffixes, e.g. **ġenh₁-es-* in Lat. gen. sg. *generis* 'family' (cf., with different suffixes, Lat. gen. sg. *gen-ti-s* 'nation', *co-gnā-t-us* 'related by birth') and **ġenh₁-e-tōr-* in Lat. gen. sg. *genitōris* 'progenitor'. The commonest class of nouns comprised masc. and neut. stems ending in a vocalic suffix of the form **-e-* or (more commonly) **-o-* (which might or might not be attached to a consonantal suffixal onset), a suffix called the 'theme vowel' or 'thematic vowel' (a conveniently abstract term, given the alternation *e/o*), and hence the category is referred to as 'thematic stems'.¹ Examples are nom. sg. masc. **u₁lk^w-o-s* > Skt. *vṛ'kah*, Gk. *λύκος*, Lat. *lupus* 'wolf' and neut. **iug-o-m* > Hittite *yukan*, Skt. *yugám*, Gk. *ζυγόν*, Lat. *jugum* 'yoke'. Stems without the theme vowel are all said to belong to athematic classes, except that *ā*-stems are an ill fit with either category.² The different PIE stem classes will be examined below in connection with the Germanic classes descended from them.

By the time of late PIE some of the transparency of the distinction between stem and inflection had been lost (see, e.g., Kastovsky 1995: 228). In part this is because inflections, though similar, were not identical across stem classes: e.g., the nom. sg. masc. and fem. inflection **-s* was not used in the *r-*, *ā-*, and *ī-*stems, and the nom./acc. sg. neut. inflection **-m* was used in *o*-stems but not *s*-stems. More significant, in many stem classes the juncture between stem and inflection had become obscured: e.g., the dat. sg. ending **-e_i* had in the thematic stems melded with the theme vowel **-o-* to give the unitary inflection **-ō_i*, with the result that, at least in the dative, the stem could no longer be said to end in the theme vowel. By the time of the earliest attested Germanic languages this fusing of inflections and stem endings has proceeded so far that the original points of juncture are no longer plainly recognizable: for example, among the *n*-stems in Gothic the inflection has attracted to itself what was originally the *-en-/on-* suffix attached to the stem, so that acc. sg. masc. **mēn-on-_n* has become Go. *mēn-an* 'moon', in which the original inflection has been lost altogether, and what was originally a stem-forming suffix has become an inflection. The result was a declensional system in which inflections differed a great deal from one noun class to another. Such changes ought to have terminological consequences for the analysis of Germanic: if *-an* in *mēnan* is an inflection, the category is no longer literally the class of *n*-stems, since most such stems do not end in *-n-* (nom. *ah-a* 'mind', *att-a* 'father', etc.). However, some stem classes in Germanic retain their PIE characteristics: *r*-stems, for instance, do

still have stems ending in *-r-*. Noun classes in Germanic are thus not wholly classifiable, synchronically, on the basis of either stem formation or the suffixes attached to the stems. Accordingly, it is both convenient and conventional to retain the stem-categories of PIE in reference to Germanic (*r*-stems, *s*-stems, etc.), making only such adjustments as are required by Gmc. phonology (e.g., *a*-stems rather than *o*-stems, due to the change of PIE **o* to Gmc. *a*, and *ō*-stems rather than *ā*-stems, since PIE **ā* > Gmc. *ō*).

1. There is much confusion, especially in the earlier literature, about what the term ‘thematic stems’ means. In current IE linguistics it refers only to *o*-stems, though in some works it is used to refer also to *ā*-stems, in others also to all vocalic stems (i.e., stems ending in a vowel in PIE, hence including *i*- and *u*-stems, and sometimes, again, *ā*-stems, supposing early loss of laryngeals), in still others to all but root-stems (since all but root-stems bore a ‘theme’, i.e. a suffix, in PIE).

2. The PIE *ā*-stems are in origin athematic, inasmuch as they originally added athematic inflections to a stem ending in *h₂*. Yet, like *o*-stems, they have a fixed accent throughout the paradigm. Current handbooks, unlike many earlier ones, explicitly limit thematic inflection to the *o*-stems (so, e.g., Szemerényi 1996: §7.1.4.6, Fortson 2010: 84), yet they do not expressly classify *ā*-stems with athematic stems.

7.2 The inflections of Proto-Indo-European root-stems

Although, as noted above, inflections were not uniform across noun classes in PIE, general patterns of declension are observable. To clarify the origins of the Gmc. endings, it will be useful beforehand to illustrate the inflections borne by PIE root-stem nouns, i.e. nouns in which the stem was an unsuffixed root, since these inflections were generally the basis for the inflections found in other stem classes, by the combination of the root-stem endings with suffixal elements in other classes. In the oldest inflectional classes, masc. and fem. nouns are declined identically, i.e. as uters (as opposed to neuters); only later in PIE did separate inflections for some feminine nouns arise. The dual endings are insufficiently relevant to Germanic to be treated here. The following is a typical reconstruction of the uter root-stem inflections:

	singular	plural
nominative	-s	-es
vocative	Ø	-es
accusative	-m	-ns
genitive	-és/-ós	-(oH)óm (?)
ablative	-és/-ós	-bh(i)ós, -mós
dative	-éj	-bh(i)ós, -mós
locative	-í	-sú
instrumental	-éh ₁ /-óh ₁	-bhís, -mís

The endings *-m*, *-ns*, *-i* become syllabic (*-m̥*, *-ns̥*, *-i*) when they follow a consonant. The neuter inflections are slightly different: in most classes the bare stem is used in the nom., voc., and acc. sg., whereas the same cases in the plural add **-ā* < **-eh₂*, which appears originally to have been a collective ending related to the nom. sg. inflection of *ā*-stems: see Clackson 2007: 100–4. Uter nom. sg. *-s* is lost in some consonant-stem nouns, with compensatory lengthening of the root vowel, as in Gk. *πατήρ* < PIE **ph₂tēr* < **ph₂ter-s* (Szemerényi’s law: §1.6 n. 1). This pattern was then extended analogically to many other consonant-stems, i.e. ones without a stem-final sonorant consonant. The alternative endings containing **-m-* in the abl., dat., and instr. pl. are reflected in the Germanic and Balto-Slavic languages, and there is no generally accepted explanation for the substitution of **-m-* for **-bh-*: for discussion, see K.H. Schmidt 1963; also, for

references, Szemerényi 1996: §7.1.4.3 n. 5 and §7.2.1, with n. 7.¹ The shape of the gen. pl. is much contested: some (e.g. Prokosch 1939: 232, 239, Szemerényi 1996: §7.2.1) assume that the original ending was **-om*, and this was replaced in Skt., Gk. and some others by the *o*-stem ending **-ōm* < **-o-om* or (more likely) the *ā*-stem ending **-eh₂-om*, in large part because the Slavic ending points to **-om* (see further Kortlandt 1978); others (e.g. Jasanoff 1983, 2002: 36) suppose that the ending was **-o-om* or **-oHom*, as suggested by, among other things, the accentuation of Gk. *-ōv* and the disyllabic scansion of Vedic Skt. *-ām* in roughly a third of instances.²

The origins of some aspects of these inflections can be determined with some probability. The **s* found in most cases of the plural is likely to be a plural marker abstracted from the nom. plural. In that event, acc. pl. **-ns* is probably from **-m-s*, i.e. as a pluralization of the sg. **-m*. The loc. sg. is based on the *hic et nunc* particle **i*, and the plural cases in **bh* derive from the postposition **bhi*, reflected in PDE as *by*.

1. Schmid (1986: 165) offers analogy to the pronominal inflection as an explanation; Beekes (2011: 30–1) asserts that the dat. pl. ending was **-mus*, the instr. **-bhi*.

2. **-oHom* would have to be a late development, given the peculiar ablaut; the sometimes heated debate over this ending is thus to a great extent simply over whether the required analogical change took place in late PIE or afterward.

7.3 The inflectional categories of Germanic nouns

Dual number is not retained as an inflectional category among nouns in any Germanic language, though it is preserved in pronouns and verbs (the latter in Gothic only, where the 3 dual is lost), and perhaps in ‘2’ and ‘both’.¹ More significant is that the eight cases of PIE are reduced to six in PGmc.: nominative, vocative, accusative, genitive, dative, and instrumental. The dative combines the functions of the PIE dative, ablative, and locative, and all three types of case endings appear to have contributed to the morphology of the dative of Gmc. nouns, although the locative is the chief source of dat. sg. endings in Germanic.² No Gmc. language preserves all six of these PGmc. cases: in the inflection of nouns, only Gothic and (probably) early Runic preserve the vocative,³ and Gothic, Old Norse, and Anglo-Frisian substitute the dative for the instrumental, only the singular of the instrumental being preserved as a distinct case form elsewhere. In addition, however, a few relic forms of these cases survive in the singular, chiefly in West Germanic: see §7.8 under **dat. sg.** The nom. acc. neuter plural is in origin a collective form in **-eh₂* with rightward-shifted accent. Such collectives came to be regarded as plurals in the individual IE languages, though their collective origin is indicated by, e.g., the Latin and Greek rule that neuter plural subjects take a singular verb. In Gmc. the accent shift sometimes resulted in consonant alternations under Verner’s law (examples in §6.6).

1. The Gmc. syntactic rule that an adj. referring to two persons of different sexes is inflected neuter is often said to be a reflex of the homophony of the masc. nom./acc. dual and the neut. nom./acc. pl. as **-ō* in PGmc.: so, e.g., Hirt 1931–4: II, 12.

2. But see especially the discussion of the *a*-stem dat. sg., §7.8.

3. The Go. vocative (sg. only) does not in fact retain discrete inflections: in Gothic *a*-, *i*-, *u*-, and *nd*-stems (including *ja*- and *wa*-stems), the vocative singular is identical to the accusative, e.g. *skalk* ‘servant’, *gast*

‘guest’, *sunu* ‘son’, *frijōnd* ‘friend’, respectively (the nom. adds -s). Otherwise it is identical to the nominative. For the Runic forms, see Krause 1971: 116, 118.

7.4 Accent and ablaut in nouns

In thematic stems, the PIE accent fell on the same syllable throughout the paradigm. This could be the first syllable (the so-called **acrostatic** pattern) or it could be the theme vowel (**mesostatic**). In athematic nouns, on the other hand, the accent was usually mobile. For example, the suffix could appear with accented full-grade vowel **e/o* in the nom. voc. acc. sg. dual and pl. and, in some categories, the loc. sg (the so-called strong or direct cases),¹ though commonly the vowel was lengthened in the nom. sg. of uer nouns; in the remaining, weak or oblique cases there was weak grade of the suffix and accent on the inflection. Hence, e.g., there may be reconstructed PIE *r*-stem nom. sg. **ph₂t-ér* < **ph₂t-ér-s* ‘father’, acc. **ph₂t-ér-ŋ*, gen. **ph₂t-r-ós*. This is the so-called **hysterokinetic** (or hystero-dynamic) pattern of accentuation. There are also to be found athematic stems following the **amphikinetic** pattern (or simply **kinetic** in root-stems), with accented root in the strong cases and accented inflection in the weak, as with nom. sg. **pónt-oh₂-s* > Skt. *panthāh* ‘path’ (with *-th-* < **-th₂-* extended from the weak cases), gen. sg. **pnt-h₂-és* > *patháh*. In the **proterokinetic** type, the root is accented in the strong cases and the suffix in the weak, as with PIE nom. sg. **g^wén-h₂* ‘woman’ > OIr. *ben*, PIE gen. **g^wn-éh₂-s* > *mná*. In athematic nouns there do occur acrostatic types, with the characteristic that although the accent is fixed, there is ablaut alternation between the strong and weak stems. An example of this is heteroclitic PIE strong stem **iēk^w-r-* ‘liver’, reflected in Gk. *ἥπαρ*, weak stem **iēk^w-n-* reflected in Skt. gen. *yáknah*. See further Clackson 2007: 79–111 on the PIE patterns, and on Germanic, Schaffner 2001, Mottausch 2011. Most ablaut alternations in nominal stems were eliminated in PGmc., though ablaut persisted in inflections.

1. Some regard the acc. pl. as weak: e.g., to Clackson 2007: 79 cf. Fortson 2010: 114–15, and cf. the *an*-stem acc. pl. Skt. *rājñah* (§7.31).

7.5 Vocalic stems

IE noun stems are conventionally classed as vocalic or consonantal, depending on whether the stem ended in a vowel or a consonant. The vocalic stems in Gmc. are the *a*-stems (including the *ja*- and *wa*-stems), the *ō*-stems (including the *jō*- and *wō*-stems), the *i*-stems, and the *u*-stems.

7.6 *a*-stem nouns

The *a*-stems, or thematic stems, reflecting the PIE *o*-stems, are all masculine and neuter, with minor differences of inflection between the two. This is a highly productive class: when masc. and neut. nouns defect from other stem classes, it is usually to this class. The class includes simple *a*-stems, in which *a* (PIE thematic *o*) was added to the stem, as well as *ja*-stems and *wa*-stems, in which the theme vowel was preceded by a glide,

which was usually suffixal. The PIE accent is on the same syllable throughout the paradigm, usually on the root, though the theme vowel could instead be accented, as with **h₂eĝós* > Skt. *ajāh* ‘drover’, Gk. *ἀγός* ‘leader’.

7.7 The simple *a*-stems

This class includes only masculine and neuter nouns. Masculine paradigms of *a*-stems in the major early Gmc. languages may be illustrated by Go. *wulfs* ‘wolf’ and its cognates:

	Go.	Oldcel.	OE	OS	OHG
sg. nom.	wulfs	úlfr	wulf	wulf	wolf
acc.	wulf	úlf	wulf	wulf	wolf
gen.	wulfis	úlfs	wulfes	wulfes	wolfes
dat.	wulfa	úlfi	wulfe	wulfe	wolfe
instr.				wulfu	wolfu
voc.	wulf				
pl. nom.	wulfōs	úlfar	wulfas	wulfos	wolfā
acc.	wulfans	úlfa	wulfas	wulfos	wolfā
gen.	wulfē	úlfa	wulfa	wulfo	wolfo
dat.	wulfam	úlfum	wulfum	wulfum	wolfum

Neuter nouns are declined similarly, the exceptions being in the nom. and acc. of both sg. and pl., as illustrated by forms of the word for ‘word’ (a heavy stem; on the light stems, see below):

	Go.	Oldcel.	OE	OS	OHG
sg. nom./acc.	waúrd	orð	word	word	wort
pl. nom./acc.	waúrda	orð	word	word	wort

Inflectional variants:

Gothic. Final *-s* in the nom. sg. masc. is lost if the stem ends in /r, s/, as with nom. *wair* ‘man’, *freihals* ‘freedom’.

Old Icelandic. Final *-r* in the nom. sg. is assimilated to a preceding /n, s, l/, as in *himinn* ‘heaven’, *íss* ‘ice’, *jökull* ‘glacier’; if such assimilation produces a postconsonantal geminate, the geminate is simplified, as with *hrafn* ‘raven’, *jarl* ‘earl’; so also *aldr* ‘age’ < **aldr-r*.

West Germanic. Light-stemmed neuters take the ending *-u* (*-o*) in the nom. acc. pl. in OE and OS, e.g. OE *scipu* ‘ships’ (cf. *word*), OS *grabu* ‘graves’. In OE and OFris. there occur some rare instr. singulars in *-um*, which Bammesberger (2001) identifies as dual in origin. Beside OS nom. acc. pl. *-os* there occurs *-a, -e*, borrowed from pronouns. The quantity of final ⟨a⟩ in the OHG nom./acc. pl. masc. is disputed, though most regard the long variant as a dialectal development.¹ The spelling of vowels in inflections is far from uniform, especially in OS and OHG.

1. See Braune 2004a: §193 Anm. 4 for references; but cf. under **nom. pl.** in §7.8. Note that Braune regards *-ā* as the correct reflex of **-ōz*. See further Shields 2006, regarding *-ā* as analogical to the *ō*-stem inflection.

7.8 Origin and development of *a*-stem inflections

The following issues may be noted:

Nom. sg. The masculine nouns reflect PGmc. **-az* < PIE **-o-s*; cf. Skt. *ásvaḥ*, Gk. *ἵππος*, Lat. *equus* < **ékyos* ‘horse’. It is generally assumed that the variant **-az* due to the voicing of **/s/* under Verner’s law (§6.6) analogically replaced **-as* in the type with accent on the theme vowel, which is particularly common in PIE *o*-stem adjectives (e.g. PIE **mh₂krós* in Gk. *μακρός* ‘long’, OHG *magar* ‘thin’), though it has also been proposed that every postvocalic final **-s* was voiced to **-z* in PGmc., regardless of the accent (so, e.g., Bammesberger 1990: 40, Boutkan 1995b: 43–51; cf. §6.16 *supra*). The vowel is lost independently in Go. and ON (cf. Runic *þewar* ‘servant’, ca. 400, with loss already in EGmc. *awings*, Vimose sheathplate, Fyn, 3rd cent.), and in ON, **-z* (*r* in Runic, distinct from *r*) undergoes rhotacism (§6.6), whereas in Gothic it is devoiced (§6.12). The ending is lost altogether in WGmc. As for the neuter nouns, they reflect PGmc. **-aⁿ* < **-an* < PIE **-o-m*: cf. thematic Skt. *-am*, Gk. *-ov*, Lat. *-um*.

Acc. sg. PGmc. **-aⁿ* < **-an* < PIE **-o-m*. The stage *-an* is attested by the acc. sg. masc. pronoun Go. *þan-a*, OE *þon-e*, from PGmc. **þan* < PIE **to-m* (Skt. *tám*, Gk. *τόν*) plus **-ōⁿ* (probably: see §8.10).

Gen. sg. OE and Runic forms point to PGmc. **-as*,¹ which is usually explained as reflecting PIE **-ó-so*, where the place of the accent prevents voicing of **/s/* under Verner’s law, though certainly then analogy must be invoked, since it is hardly plausible that thematic genitives were always so accented. PIE **-o-so* is supported by Old Prussian *deiwas* < **deiyu-o-so* ‘of a god’, but the IE languages more usually reflect **-o-sjo* (probably originally pronominal), as in Skt. *aśvasya*, Homeric Gk. *ἵπποιο* < PIE **éky-o-sjo* ‘horse’.² But OHG and OS *-es* point rather to PIE **-e-so* (the ending *-as* is less common in OS, and OHG *-as* is a late, chiefly Bavarian development: see Braune 2004a: §193 Anm. 1), as does Go. *-is*. This **-e-so* could reflect a PIE ablaut variant in nouns, as is often assumed, though the evidence for such an alternant outside of Gmc. is exiguous. Accordingly, Beekes (1988, with refs.) argues that the pronominal ending was PIE **-e-so* in the pronoun *k^w-é-so* ‘whose?’, and this supplanted the ending on *a*-stem nouns in PGmc.³ This would explain why **/s/* was never voiced: in pronouns like **x^w-és* (< **k^w-éso*) there was no opportunity for Verner’s law to apply. On this view, in NGmc. and OE, where **-as* is reflected, the vocalism is an analogical innovation post-dating PGmc.: cf. OE demonstrative *þæs* < PIE **toso*. Beekes’ analysis would also explain why the Gmc. ending reflects **-eso* rather than **-esjo*: cf. OCS *česo* ‘of which?’. Alternatively, Ringe (2006b: 175–6, *idem* 2017: 226) argues that the **-as* found outside of Gothic and OHG reflects the PGmc. ending, derived not from the PIE *o*-stem inflection but from pronominal gen. PIE **tósjo*, thus explaining why Verner’s law does not produce **-z* in the genitive. OS OHG *-es* is then to be explained as analogical to the gen. pronouns **es* and **x^wes*. Another fact to be accounted for is that OS and OHG *-es* do not cause umlaut (e.g. OHG *tages* ‘day’). Yet this observation would not be decisive in favor of Ringe’s position even if it were universally agreed that PIE *e* yields PGmc. *i* in unstressed syllables except before *r*.⁴ Although it does not appear to be possible to prove whether it is **-as* or **-es* that was the PGmc. inflection, the historically dominant position that there was no PGmc. *e* in unstressed syllables except before *r* does, all things considered, favor the assumption of original **-as*, though, to be sure, the fate of unstressed *e* aside, Ringe’s does appear to be the more

complicated account.⁵ Mottausch (2011: 167) explains **-as* as having acquired the vowel found elsewhere in the paradigm. See further Bjorvand 1991.

Dat. sg. Go. dat. sg. *-a* in the *a*-stems perhaps derives from PIE instr. **-ē* (i.e., **-e-h₁*), given comparison to the relic instr. *pē* (as in *ni pē haldis* ‘none the more’, *bi-pē* ‘while’, *jap-pē* ‘and if’, *pē-ei* ‘that, because’; also Go. dat. *huammēh* ‘every’ < PIE **-eh₁-k^{we}* vs. *huamma* ‘who’ < PIE **-e-h₁*),⁶ with development of unstressed *-ē* to *-a*, though it would also be possible to derive Go. *-a* from a posited reduced form of the PIE dat. **-ō* (beside usual **-ōi* < **-o-ei*; see Krahe & Meid 1969: II, §4; cf. Bammesberger 1990: 42).⁷ The same ending **-ē* perhaps underlies endingless locatives in WGmc., e.g. OE OS OHG *hūs*: see Dahl 1938: 51–5, Hogg & Fulk 2011: §2.18, but cf. Boutkan 1995b: 382–3. The WGmc. dat. sg., however, most likely derives from PGmc. dat. **-ai* < **-ōi*.⁸ The idea of Prokosch (1939: §79e) that this is an unnecessarily complicated derivation, since datives in other Gmc. classes derive from locatives, faces the difficulty of explaining forms like early OE *fācni* that are instrumental in function but, apparently, locative in form, with *-i* from thematic PIE **-ei* (cf. early OE dat. sg. *hrōfæ* ‘roof’ with *-æ*, probably from PGmc. dat. **-ai* < PIE **-ōi* < **-o-ei*), though such forms usually lack umlaut.⁹ There is thus some reason to doubt the idea of Hollifield (1980: 160) that *ē* in Go. *huammēh* reflects PGmc. *ai*, further reduced to *a* in *huamma*; this also leaves Go. *pē* (etc.) unexplained: cf. *pái* ‘they’ (masc.) < PIE **toj₁*. It is nonetheless very commonly assumed that the Gmc. dat. reflects the PIE loc. **-oi*: see Euler 2013: 69, with references. Runic *-ē* (**woduride**, **walhakurne**) can reflect either **-ē* or **-ai*;¹⁰ note that although *ē_i* developed to *ā* in stressed syllables early in NGmc. (§4.6), this was not so in unstressed syllables: cf., e.g., **swestēr* > PNorse **swestær* > Olcel. *syster*, later *systir* ‘sister’ (§5.6 & n. 4). See further Kotin 2012: 142–4. Pervasive uncertainties remain.

Instr. sg. In early texts in OHG and in OS there appear forms reflecting instrumental singular endings, e.g. OHG *wortu* ‘word’ and OS *hobu* ‘court’, with *-u* < PIE **-ō* (i.e., **-o-h₁*).¹¹ There must be assumed analogical restoration of the inflection after heavy stems (Gallée 1993: 197).

Voc. sg. In masc. nouns the ending in PIE was **-e* (i.e. the bare theme vowel); cf. Gk. *ἵππε*, Lat. *equē* ‘horse’. In neuter nouns, however, the vocative was probably identical to the nominative, as in Greek. This ending **-e* is lost everywhere in Germanic, and this resulted in the loss of any distinction between vocative and nominative in WGmc. A distinction was preserved in Gothic, however (where the nom. ended in *-s*),¹² and in early Runic, as attested by the vocatives **alawid** and **alugod** (personal names, the latter from ca. 200; cf. nom. in **-(a)R**, as above).

Nom. pl. In masc. nouns the PIE ending was **-ōs* < **-o-es* (cf. athematic PIE **-es*, §7.2). This **-o-es* perhaps results directly in PGmc. **-ōz*, which may be reflected in Olcel. *-ar*, OHG *-ā*, and Go. *-ōs*.¹³ However, OE OS *-as* (cf. OFris. *-ar*, *-er*, *-a*, *-an*) require a different explanation, as **-z* should have been lost in WGmc. Possibly PGmc. **-ōz* and **-ōs* were variants under Verner’s law (§6.6), with generalization of one or the other in the different Gmc. languages (unless final **-s* was always voiced to **-z*: see under **nom. sg.** above). Alternatively, comparison has been drawn to Indo-Iranian *-āsas* (see Beekes 1989 for refs.), implying PIE **-ōses* (i.e. normal **-o-es* with re-addition of the athematic ending **-es*), which could account for all the Gmc. endings (including *-ar* in Frisian—so van Helten 1889: 282—though this could be a borrowing from ON: see Markey 1981: 14, but cf. Boutkan 1995b: 188–91, H.F. Nielsen 2000: 253–4) except OHG: see Bammesberger 1990: 43–4. The OHG variant *-a* with short vowel is likely to

be analogical to the acc. pl. (so Krahe & Meid 1969: II, §4; see also Hollifield 1980: 43–4), as the nom. and acc. pl. influence each other throughout WGmc. declension.¹⁴ But Prokosch (1939: §49n note) offers the very different idea that acc. pl. **-ans* developed to **-āns* in NSGmc. (see §4.11), resulting ultimately in OE OS *-as*, to which the nom. pl. inflection is analogical. Stiles (1988: 139 n. 18), elaborating an idea of Bjorvand (1987: 186–7), argues that **-z* was devoiced by analogy to the gen. sg. for the purpose of contrast with the fem. ending. Ringe proposes that after the loss of final **-z*, the *s*-particle that spread through the paradigm of the proximal demonstrative pronoun (§8.12) was added to the remaining **-ō* (Ringe & Taylor 2014: 162–3). For discussion and references, see Boutkan 1995b: 187–93, favoring the assumption of PGmc. **-ōsez*. As for the neut., the PIE ending was **-ā* (see §7.2); this develops to PGmc. **-ō*, which gives, in normal fashion, *-a* in Gothic and *-u* elsewhere. This final *-u* is always lost in NGmc., though not without causing *u*-umlaut or fracture, e.g. in OIcel. nom. pl. *börn* ‘children’, *fjöll* ‘mountains’. In WGmc. this *-u* was preserved only after light syllables, e.g. OE *scipu* ‘ships’, OS *grabu* ‘graves’, but in OHG the endless variant was generalized, the ending *-u* being preserved only in some Alemannic diminutives, e.g. *chindilii* ‘little children’, and in *ja*-stems (see §7.11).

Acc. pl. PIE masc. **-o-n̥s* gives PGmc. **-anz*, which develops regularly in Go. and OHG. In ON there must be assumed a development **-anz* > **-ann* > **-an* > *-a* (not attested earlier than ca. 600 in Runic); cf. *n*-stem gen. sg. **kepan** (name; Belland stone, ca. 500) < **-anz*; cf. Antonsen 1975: 19. The ending OE *-as*, OS *-os* is by analogy to the nom. pl. (cf. above under **nom. pl.** for the converse development in OHG). OS has also occasionally *-a*, *-e*, which Holthausen (1921: §265.4) is probably right to regard as analogical to pronominal declension, though Boutkan (1995b: 192) prefers to see it as a “special development” of the acc. pl. The neut. inflection was identical to the nom. pl. neuter.

Gen. pl. PIE **-o-Hom* should have developed to PGmc. **-ōn̥*. This accounts well for all the Gmc. forms except Go. *-ē*, which has been the topic of a great deal of controversy: see Ringe 2006b: 170–8 for an extensive survey of approaches. Some purely phonological explanations involve the supposition of qualitative ablaut in PIE (see, e.g., Möller 1880: 489, Loewe 1933: 2.9, and the references in Morgenroth 1965), though Gothic is the only IE language thought to show the variant with the front vowel, so that this account is difficult to credit. Others posit sound changes in Gmc. that are possible but not widely accepted.¹⁵ Morphological solutions seem likelier, the most widely credited of which is the idea of van Helten (1893: 570–3, 1909: 273–5) that the *e*-quality of the Gothic ending arose by analogy to the *e*-quality of the gen. sg. **-es* (in consonant-stems) and **-eso* (in *a*-stems). This (as pointed out by Prokosch 1939: §791) would explain why *-ē* is not the ending in the Gothic *ō*-stems (as well as the *ōn̥*-stems and *īn̥*-stems), where the gen. sg. ending is *-ōs*. Another morphological solution is that of Brugmann (1914: 272–4), positing origin in the PIE neuter nom. sg. ending **-ēiō-m* of some adjectives (unfortunately unattested in Gmc.). The hypotheses of Morgenroth (1965: 333–6), Lehmann (1967: 109–11), and Kuryłowicz (Kuryłowicz *et al.* 1968–2015: 2.87 Anm. 8; see also Fullerton 1983: 119–27) show some similarity to that of van Helten, somewhat more abstractly assuming that *-ē* arose in Gothic as part of a pattern of frontness/backness oppositions between the vocalism of feminine and non-feminine inflections. Some other morphological solutions assume that *-ē* is based on a different case ending, e.g. a supposed instr./abl. sg. (Sehrt 1930: 98–100) or abl. sg. (Eska 1988; see also Wood 1923: 107–8),¹⁶ whereas Kortlandt (2007) sees the Go.

ending as originating in the *i*-stems, with **-ei-om* developing to *-e* rather than the *-ei* or *-i* that Ringe (2006b: 173) says should be expected. See further Kotin 2012: 140–2.

Dat. pl. To PIE athematic instr. pl. **-bhis* corresponds the desinence **-mis* reflected in Gmc. and Balto-Slavic: see the references in §7.2. Thematic **-o-mis*¹⁷ develops to *-um* everywhere in Gmc. except in Gothic, where it gives *-am*: see §5.5.

1. OS *-as* also occurs on occasion. The vowel is still preserved in Runic **hnabdas** (Bø stone, ca. 500).
2. Ringe (2017: 141), conveying the opinion of W. Cowgill, explains PGmc. **-as* as reflecting PIE **-osjo* on the assumption that a postconsonantal sonorant consonant rendered final by the loss of a final vowel was lost in PGmc.
3. To the suggestion that PGmc. **-esa* could have developed from PIE **-esjo*, Roberge (1988: 143–4, with references) raises telling objections; cf. Szemerényi 1996: §7.6.2. Cf. also Hollifield 1980: 34.
4. The point would not be decisive because there remains the possibility that umlaut was analogically removed from the genitive forms, and because OHG *-es* is not actually an impediment to Beekes' position even if it is assumed that PGmc. unstressed *e* became *i*: if **-es* is by analogy to **x^wes* (with *e* retained under stress), it may have arisen after the change of *e* to *i* ceased to apply, and at all events the analogical influence of the pronoun need not be assumed to have ceased after the initial change. Boutkan (1995b: 72–89, 178) is one who supposes that the raising of unstressed *e* occurred on a limited basis and would not have occurred in PGmc. **-es(a)*.
5. Ringe does not actually posit direct analogy to the reflexes of PGmc. **es* and **x^wes*, rather the spread of **-es* from these to pronominal **bes*, followed by extension of **-es* to adjectives, followed by extension to nouns, the last two steps (apparently) occurring independently in Gothic and OHG.
6. Cf. also Gk. (Thera) *τη-δε* 'in this way', with $\eta < *eh_1$; so Sihler 1995: 257–8; instr. **-ē* is rejected by Ringe (2017: 225 n. 49).
7. That there was a development of PIE dat. **-ōi* to PGmc. **-ō* was first proposed by Wiedemann (1892). The issue has been much disputed: see A.W. Jones 1979: 118–23 for discussion and references.
8. The more usual reconstruction is **-ōi* (cf. the inflection on Gk. dat. sg. *θεῶ* 'god'), but see §5.4. Derivation from the PIE loc. **-oi* is also possible.
9. Gothic preserves an old locative in the conjunction *pei* 'that' (cf. Doric Gk. *τεῖ-δε* 'here'). Beekes (1985: 127) suggests that **-ei* is pronominal in origin.
10. Runic instances of *-ai* instead of *-e* are uncertain: see Krause 1971: 116.
11. Traces of the instrumental case are found also in the singular of some pronouns and adjectives in WGmc.: see §§8.10, 9.2 *infra*.
12. The only attested Go. *a*-stem vocatives are *skalk* 'servant' and *þiudan* 'king'.
13. On the earlier reconstruction PGmc. **-ōz* < PIE **-o-es*, see §5.4. There are, of course, other possible explanations for PGmc. **-ōz* (if indeed the vowel was trimoric, as is usually assumed, and if **-o-es* contracted to **-ōs*, with a bimoric vowel, already in PIE, as Jasanoff (2004) contends), e.g. that *-z* in PGmc. **-ō-z* was replaced by the athematic ending **-ez*, giving PGmc. **-ō-ez* > **-ōz*.
14. So also H.F. Nielsen 2000: 253. To the contrary, Braune (2004a: §193 Anm. 4, in agreement with Wagner 1986b), identifies *-a* as the reflex of **-ōz*, and *-ā* as an Alemannic innovation.
15. See, e.g., Osthoff 1878: 240–1, 289–90, Mahlow 1888: 105–10, Wiedemann 1892: 483–4, Pisani 1930: 67, Must 1952, Bech 1969: 56, 62–4, Kortlandt 1978: 291, Boutkan 1995b: 109, 249–50.
16. Shields (1979, 1997) also offers morphological solutions, though on the basis of some unconventional reconstructions of PIE morphology. See further Kuryłowicz *et al.* 1968–2015: 2.87 Anm. 8.
17. The thematic ending was PIE **-ōis*, giving Skt. *-ais*, shortened in Gk. *-ois*, but the Gmc. thematic ending is formed by adding athematic PIE **-mis* (pronominal in origin? see §§7.2, 8.9) to the theme vowel. Loewe (1918) instead regards **-mis* as the proper PIE instr. pl. inflection. Some would reconstruct a PIE dat. pl. **-omus* and derive the Gmc. ending from this: so, e.g., van Helten 1890: 21, Loewe (*op. cit.*), Boutkan 1995b: 197, Beekes 2011: 212.

7.9 The *ja*-stems

These were formed in PIE by the addition of the theme vowel to both verb and noun stems in **-i-* (or the ablaut alternant **-ei-*, chiefly in denominal adjectives, as in Lat. *aureus* ‘golden’), which was usually suffixal. The PIE nouns with **-i-o-* and **-ei-o-* ultimately fell together in Germanic as *ja*-stems, but the development of the Gmc. suffix was different according to whether the preceding syllable was heavy or light,¹ giving PGmc. **-ija-* and **-ja-*, respectively, under Sievers’ law (§5.8).

1. According to the usual formulation, polysyllabic stems behave like heavy stems in regard to Sievers’ law in Gmc., but see §2.5 on the challenge to this view offered by Dahl (1938) and others.

7.10 The *ja*-stems in Gothic

The difference between heavy and light stems is most pronounced in Gothic, where the heavy masc. stems may be typified by *hairdeis* ‘herdsman’ and the light by *harjis* ‘army’:

sg. nom.	hairdeis	harjis
acc.	hairdi	hari
gen.	hairdeis	harjis
dat.	hairdja	harja
voc.	hairdi	hari
pl. nom.	hairdjōs	harjōs
acc.	hairdjans	harjans
gen.	hairdjē	harjē
dat.	hairdjam	harjam

The endings are thus identical to those for Go. *dags*, but with preceding *-j-* throughout the plural, in the dat. sg., and in the gen. sg. of the light stems; more remarkable divergences from the simple *a*-stem paradigm are to be found in the sg. in the nom., acc., voc., and, among the heavy stems, the genitive.

There is some controversy over how to account for the nom. and gen. singular. Heavy-stemmed nom. *-eis* is usually explained as deriving from PGmc. **-ijaz* > **-ijz* > **-iiz* > *-īs*. Such a development is plausible enough, but it demands the assumption that light-stemmed nom. *-jis* have been formed by analogy to gen. *-jis* (since nom. and gen. are identical in the heavy-stemmed nouns, both bearing the inflection *-eis*), and Barrack (1998: 102–4) objects that the nom. should not be expected to have been reformed by analogy to the genitive, since the genitive is more marked and far less frequent than the nominative. He supports the view of Sievers (1877–8: 129) that instead there was raising of **a* in **-ijaz* > **-ijez* > **-ijiz* > **-iiz*, noting that although **a* is not elsewhere raised after **j*, the combined effect of **j* and following **z* could have caused raising. But considering that stem-final *-j-* heavily predominates in the paradigm of *harjis*, as Barrack concedes, the gen. need not be considered the only analogical influence upon the nominative.¹ It is quite possible that original **haris* acquired the stem *harj-* by analogy to the rest of the paradigm. In fact, if PGmc. **-ji-* was always reduced to **-i-*, even after a consonant (see §12.38), then the gen. sg. must also be analogical. The development of the remaining cases is straightforward:

Acc. sg. PGmc. heavy **-ijaⁿ* probably did not lose intervocalic **j* (so Krahe & Meid 1969: II, §6; cf. §6.11 *supra*, *ad fin.*); **-aⁿ* was lost, as in the simple *a*-stems, and the remaining final **-j* on light stems was syllabified.

Gen. sg. PGmc. heavy **-ijis* loses intervocalic **j*, giving **-iis* > *-īs*; light **-jis* either remains or, as suggested above, is reduced to **-is*, with subsequent analogical restoration of *j*, as in the nom.

Dat. sg. PGmc. heavy **-ijē* or **-ijai* changes to **-jē* or **-jai*, just as in heavy-stemmed verbs of weak class 1 (§12.38); it thus falls together with light **-jē* or **-jai*, which develops normally to *-ja*.

Voc. sg. PGmc. heavy **-ije* loses final **-e*, then **-ij* develops to **-ii* > **-ī* and is shortened; yet Wright (1954: §154) cites the imp. sg. of heavy-stemmed verbs of the first weak class as evidence that there was no shortening of **-ī* in Gothic (but see §12.38 n. 8 for an alternative explanation). Light **-je* loses final **-e* and then **-j* is syllabified. For a different explanation of the voc. endings, see Ringe 2017: 142.

Pl. Developments are comparable to those in the dat. singular.

In Gothic neuters the heavy and light *ja*-stems are declined identically. Only the nom. sg. and the nom. and acc. plural should be expected to have borne endings different from the corresponding masc. endings in PGmc., giving Go. nom. sg. *-i* and nom. and acc. pl. *-ja*. The only irregularity is that the heavy- and light-stemmed gen. sg. ending should be expected to have been differentiated, as in the masc. nouns, whereas *-jis* (instead of *-eis*) is used for both types in the neuters. The simplest explanation is that the light-stemmed inflection has been extended to the heavy stems, a plausible change because it has the effect of eliminating alternations under Sievers' law in the neuters, creating a uniform paradigm.²

1. Prokosch (1939: 306, n. 1 to §80) provides references to some alternative views. See also Barber 2013: 13–14.

2. For a different explanation, based on the argument that Gothic eliminated most stems ending in a short vowel, see Kiparsky 2000; but see also §9.4 n. 1.

7.11 The *ja*-stems in Northwest Germanic

There are differences between heavy- and light-stemmed *ja*-stems in NWGmc., though they are not as transparently conditioned by Sievers' law as in Gothic. The heavy masc. stems may be exemplified by OIcel. *hirðir* 'herdsman' and its cognates:

	OIcel.	OE	OS	OHG
sg. nom.	hirðir	hierde	hirdi	hirti
acc.	hirðis	hierde	hirdi	hirti
gen.	hirði	hierdes	hirdies	hirtes
dat.	hirði	hierde	hirdie	hirtie
instr.			hirdiu	hirtiu
pl. nom.	hirðar	hierdas	hirdios	hirte
acc.	hirða	hierdas	hirdios	hirte
gen.	hirða	hierda	hirdio	hirteo
dat.	hirðum	hierdum	hirdium	hirtum

In OIcel., *-j-* appears before a back vowel at the end even of heavy stems if the preceding consonant is velar: to gen. pl. *hirða* cf. *mækja* 'swords'. There is considerable

variety in the spelling of inflections in OS and OHG, e.g. dat. sg. OS *-ea*, *-ia*, OHG *-e*; dat. pl. OS *-ion*, *-eon*, OHG *-un*, *-on*, *-im*, *-in*.

Heavy-stemmed neuters are declined the same way, except in the nom. sg. and the nom./acc. plural, as exemplified by OIcel. *ríki* 'kingdom' and its cognates:

	OIcel.	OE	OS	OHG
sg. nom.	<i>ríki</i>	<i>rīce</i>	<i>rīki</i>	<i>rīchi</i>
pl. nom./acc.	<i>ríki</i>	<i>rīcu</i>	<i>rīki</i>	<i>rīchi</i>

The light masc. and neut. stems are declined the same way as the heavy in OS and OHG, except that in OS, the nom./acc. sg. of stems that do not end in /r/ may be inflectionless, e.g. neut. nom. *bed* beside *beddi* 'bed' (on which see further below).¹ The inflections in OIcel. and OE may be exemplified by masc. OIcel. *niðr* 'kinsman', OE *secg* 'man', *here* 'army', neut. OIcel. *kyn* 'kin', OE *cynn* 'kin':²

	masc.			neut.	
	OIcel.	OE	OE	OIcel.	OE
sg. nom.	<i>niðr</i>	<i>secg</i>	<i>here</i>	<i>kyn</i>	<i>cynn</i>
acc.	<i>nið</i>	<i>secg</i>	<i>here</i>	<i>kyn</i>	<i>cynn</i>
gen.	<i>niðs</i>	<i>secges</i>	<i>herges</i>	<i>kyns</i>	<i>cynnes</i>
dat.	<i>nið</i>	<i>secge</i>	<i>herge</i>	<i>kyni</i>	<i>cynne</i>
pl. nom.	<i>niðjar</i>	<i>secgas</i>	<i>hergas</i>	<i>kyn</i>	<i>cynn</i>
acc.	<i>niðja</i>	<i>secgas</i>	<i>hergas</i>	<i>kyn</i>	<i>cynn</i>
gen.	<i>niðja</i>	<i>secga</i>	<i>herga</i>	<i>kynja</i>	<i>cynna</i>
dat.	<i>niðjum</i>	<i>secgum</i>	<i>hergum</i>	<i>kynjum</i>	<i>cynnum</i>

OE *-cg-* in *secg* represents the West Germanic gemination of *ʒ before *j, the latter of which was then lost after the heavy syllable thus created. Since *r* was not geminated (§6.15), *j* remains in the paradigm of *here*, where it is often spelt ⟨g⟩ before a vowel, whereas word-finally it is vocalized to *i* > *e*.³

Thus, in OIcel., the vocalized *-ij- in the heavy stems is reflected as *-i(-)* in the singular, where it stands either before a consonant or in finality,⁴ but it is lost in the plural, where it stood before a vowel (and is assumed to have become non-syllabic, though it is still syllabic after heavy syllables in early Runic, e.g. gen. sg. **holtijaz**); in the light stems, to the contrary, the non-vocalic variant *-j- is lost in the singular but preserved in the plural.

In OE, nom. sg. *-e* in the heavy stems reflects early *-i* < *-ī < *-ij(az), with shortening having occurred too late for the vowel to be apocopated. Light-stemmed nom. sg. *secg* is for expected *sege < *sazi < *sazjaz.⁵ The geminate of the other cases was extended at an early date to the nom., though perhaps not as early in OHG as elsewhere in WGmc.: for details see Dal (1934), who assumes that the acc. sg. is also analogically reformed, though Dahl (1938; so also Hogg 1979: 68–73) supposes that WGmc. acc. *sazjjaⁿ would have developed before the loss of the final vowel.

In Old Saxon, poetry has forms like nom. sg. *segg* 'man' and acc. *bed* 'bed', whereas later texts have *seggi*, *beddi*, with analogical extension of the ending of heavy stems, e.g. nom. acc. *hirdi*. OHG generally has the latter type (*(h)rucki* 'back', *tilli* 'dill'), though a few alternative forms are attested, e.g. *hewi* beside *houwi* 'hay', *beti* beside *beti* 'bed', seemingly attesting to forms like the original *sege posited for OE (above).

1. The nom./acc. forms in *-i* are later creations by analogy to the heavy stems. OS stems ending in /t/ (only neut. *heri* 'army', *swiri* 'cousin') retain *-i/-e* in the nom./acc., as in OE, as do stems of more than one syllable. Masc. *segg* 'man' has gone over to the *i*-stems.
2. OE *secg* of course is not technically a light stem, but the stem **seǵ-* (assuming that *-j-* had been re-analyzed as belonging to the inflection) was light before the onset of WGmc. gemination (§6.15).
3. Cf. the spelling *-heri* in early glossaries. The claim of Prokosch (1939: §80b, followed by Krahe & Meid 1969: II, 15–16) that *j* is preserved and spelt ⟨e⟩ or ⟨i⟩ in early light-stemmed plurals is unreliable: in spellings like gen. pl. ⟨segea⟩, the ⟨e⟩ is a diacritic indicating the palatal nature of the preceding sound: see Hogg 1992: §2.68.
4. The only exception is the rare neut. dat. sg. *kyn*, beside usual *kyni*. The endingless form must be older, since all strong neuter nouns in Olcel. have *-i* in the dat. sg., whereas *-i* fails also in masc. *i*-stems and *r*-stems.
5. The assumption of original **sege* is supported by OE *mene* 'necklace', a neut. *ja*-stem transferred to the *i*-stems; probably also *dili* 'dill' (cf. OS *dilli*) in the Corpus Glossary, acc. sg. *dile* in EWS, as well as a few OHG forms like *beti* beside *beti* 'bed' noted below (Dal 1934, Braune 2004a: §201 Anm. 4). It is also implied by the appearance of geminates in some *i*-stems, e.g. OE gen. sg. *hysses* to nom. *hyse* 'warrior', best explained on the assumption that the nom. of *ja*-stems resembled that of *i*-stems (Dahl 1938: 84–6). Boutkan (1995b: 209–13) offers an alternative analysis whereby there was the development **mannja* > **menn* > **men*, with analogical addition of the final vowel. His analysis of the *ja*-stems (assuming a development comparable to nom. sg. *jō*-stem **synnju* > **synnu* > **synn* 'sin') requires the assumption that the apocope of *-a(z)* and of *-i* represent the same phonological development, though they are usually regarded as widely separated in time: Luick (1914–40: §350), e.g., dates the former to the 2nd or 3rd cent., the latter to the beginning of the 7th in OE, i.e. less than a century before the appearance of the earliest OE manuscripts. The dating of the latter is controversial (see Fulk 1992: §§402–4), but since the umlaut in OE caused by unapocoped **-i* postdates the period of Anglo-Frisian unity (Fulk 1998a: 153), Luick's position seems likely.

7.12 The *wa*-stems

These nouns, with stems ending in PIE **u* before the theme vowel, were originally formed like the *ja*-stems but with **-w-* where the *ja*-stems had *-j-*. This *w* remains before vowels, but in finality it is often vocalized to *u* and may undergo further developments, as summarized below. Typical are the paradigms of Go. *þius* 'servant', Olcel. *horr* 'flax', OE *bearu* 'grove', OS *skado* 'shadow', OHG *horo* 'dirt', all masc. except the last, which is neuter:

	Go.	Olcel.	OE	OS	OHG
sg. nom.	þius	horr	bearu	skado	horo
acc.	þiu	hqr	bearu	skado	horo
gen.	þiwis	hqrs	bearwes	skadowes	horwes
dat.	þiwa	hqrvi	bearwe	skadowe	horwe
pl. nom.	þiwōs	hqrvar	bearwas		horo
acc.	þiwans	hqrva	bearwas		horo
gen.	þiwē	hqrva	bearwa		horwo
dat.	þiwam	hqrum	bearwum		horwum

The following details are relevant:

Gothic. Few of these forms are actually attested, though the paradigm is reconstructible on the basis of comparison to other *wa*-stems nouns in Gothic. The vocalization of *w* seen in the nom./acc. sg. does not occur in heavy stems, e.g. *snāiws* 'snow'. The light-stemmed neuters are like nom./acc. sg. *kniu* 'knee', nom./acc. pl. *kniwa*, the heavy like nom./acc. sg. *gaidw* 'lack', pl. *gaidwa*.

Old Icelandic. Final **-w* (from **-waⁿ*) is vocalized and then lost (after mutating the root vowel), as in the acc. sg.; so also in the nom./acc. sg. and pl. of neuter nouns, e.g. *hogg* ‘blow’, *bpl* ‘misfortune’. Medially, **w* is lost before *-um* in dat. pl. *hprum*.

West Germanic. There are no light-stemmed masc. nouns of the type in OHG to be compared with the OE and OS forms. Just a few OS plurals are attested: acc. *knio*, *cnio* ‘knee’, *bū* ‘farm’, gen. *beuwo* ‘harvest’, dat. *kneohon* ‘knee’. Before *u*, WGmc. *w* should have been lost, as in OIcel.; hence, OE dat. pl. *bearwum* is analogical, as are OE nom./acc. pl. neut. *searu* ‘devices’ (replacing **saru* < **sarwu* < **sarwō*). Since this loss preceded OE breaking, the diphthong in such forms, and in forms such as nom. sg. *bearu*, must be due not to breaking but to analogy to the cases retaining *w* (see Hogg & Fulker 2011: §§2.28a, 2.31.1). Stems with an original long vowel or diphthong before **-w-* should have lost the **-u* to which this was vocalized when final, but there is almost always analogical restoration of *-w/-u/-o* in such forms, e.g. OE *snāw* ‘snow’ beside rare *snā* < **snāu* < **snaīwaz*, OHG *hleō* ‘shelter’ beside *lē*, gen. sg. *hlēwes*. Short non-back vowels formed a diphthong with final **-u* < **-w*, e.g. OS *treo* ‘tree’ beside gen. *-treuues*. In OE, the diphthong so formed was usually extended to the inflected forms, and the *-w-* of the inflected forms to the uninflected, so that gen. **pewes* ‘servant’ was re-formed as *pēowes*, and nom. *pēo* as *pēow*: for details, see Fulker 1992: 146–52.

7.13 The *ō*-stems

This class in Gmc. reflects the so-called PIE *ā*-stems (since PIE *ā* gives Gmc. *ō*), which are all feminine. The same class is reflected in the Latin first declension, e.g. *lingua* ‘tongue’ (earlier **-ā*), and in Greek feminines of the first declension, e.g. *χώρα* ‘land’, *τιμή* ‘honor’ (with *η* from *ā*, as preserved in Doric). The IE vowel *-ā-* that characterizes stems of this class must derive from earlier *-eh₂-*, to which, originally, the case endings of athematic nouns were added directly, though there is no ending **-s* in the nom. sg., perhaps because it was assimilated to the preceding laryngeal. Parallel to the situation in the *a*-stems, this category includes two major subclasses, *jō*-stems and *wō*-stems.

7.14 The simple *ō*-stems

There is no distinction in any language between nom. and voc. in this class, nor between dat. and instr. The light-stemmed type may be typified by the paradigm of Go. *giba* ‘gift’ and its cognates:

	Go.	OIcel.	OE	OS	OHG
sg. nom.	<i>giba</i>	<i>gjǫf</i>	<i>giefu</i>	<i>geba</i>	<i>geba</i>
acc.	<i>giba</i>	<i>gjǫf</i>	<i>giefe</i>	<i>geba</i>	<i>geba</i>
gen.	<i>gibōs</i>	<i>gjafar</i>	<i>giefe</i>	<i>geba</i>	<i>gebā</i>
dat.	<i>gibái</i>	<i>gjǫf</i>	<i>giefe</i>	<i>gebu</i>	<i>gebu</i>
pl. nom.	<i>gibōs</i>	<i>gjafar</i>	<i>giefu</i>	<i>geba</i>	<i>gebā</i>
acc.	<i>gibōs</i>	<i>gjafar</i>	<i>giefu</i>	<i>geba</i>	<i>gebā</i>
gen.	<i>gibō</i>	<i>gjafa</i>	<i>giefu</i>	<i>gebono</i>	<i>gebōno</i>
dat.	<i>gibōm</i>	<i>gjǫfum</i>	<i>giefum</i>	<i>gebum</i>	<i>gebōm</i>

Inflectional variants:

Old Icelandic. Nouns like *gjǫf* < **gebu* show *u*-fracture in the nom., acc., and dat. sg. and in the dat. pl. (in all which cases nouns like *gjǫf* ‘pit’ show *u*-mutation) and

a-fracture in the rest of the paradigm (see §4.8). Nouns in *-ing* (e.g. *kerling* ‘old woman’, dat. *-ingu*) and a few others bore the inflection *-u* in the dat. sg. before apocope, as did many personal names, e.g. *Ingibjörg* < **-berzu*, which additionally bore the same inflection in the acc. singular.¹ A number of *ō*-stem nouns in OIcel. are declined also (somewhat later) as *i*-stems.

West Germanic. Nom. sg. **-ō* > *-u* was lost after heavy and resolved stems (§5.6), giving, e.g., OE *lār* ‘instruction’ beside light *giefu*. However, in OS and OHG the acc. sg. ending **-ōn* > *-a* was extended to the nominative, e.g. OS OHG *lēra* ‘instruction’ (compare how the *a*-stem nom. and acc. are formally identical), though there are a few early exceptions, e.g. OS *tharf* ‘need’, OHG *scouwunc* ‘inspection’ and, retaining *-u* and even extending it to the accusative, some OHG nouns in *-ung-* and *-id-*, such as *ladungu* ‘invitation’ and *grātidu* ‘diligence’. As with the *a*-stems, there is considerable variability in the form of the inflections in OS and OHG, e.g. gen. sg. *-u*, *-o*, dat. pl. *-on*, *-un*. In OE, the etymological endings should be nom. pl. *-a*, acc. pl. *-e* (see Hollifield 1980: 42–3); WS has generalized the former to the latter case (though *-e* is still found occasionally in EWS), the Anglian dialects the reverse. In WGmc., the gen. pl. inflection of the *n*-stems replaces the original ending *-a* in OS and OHG, whereas in WS *-ena* is found chiefly in poetry, and usually only after light stems, so that the usual inflection *-a*, though identical to the original inflection, is probably an analogical re-introduction, given the linguistic conservatism of verse. Compare Skt. gen. pl. *aśvānām* ‘mares’. EWS *gief-* shows diphthongization by initial palatal consonant (§4.13), corresponding to LWS *gyf-*, *gif-*, Anglian *gef-*, *geof-*.

1. Boutkan (1995b: 228) explains this *-u* as adopted from the *n*-stems, Myrvoll (2015) as reflecting PNorse **-ūn*, bearing the ending PIE **-mi* found also in Balto-Slavic instrumentals.

7.15 Origin and development of *ō*-stem inflections

The following inflections require comment:

Nom. sg. PIE **-ā* (from earlier **-ah₂*, perhaps from **-eh₂h₂* < **-eh₂-s*) > PGmc. **-ō*, yielding NWGmc. **-u*, as in Runic *laþu* ‘invitation’, OIcel. *lǫð*.

Acc. sg. PIE **-ām* (earlier **-eh₂-m*) produces PGmc. **-ōn*, which develops regularly to *-a* in Go. and to OE *-e*, OS *-a/e*, OHG *-a*. It is usually assumed that in NGmc. the nom. inflection was extended to the accusative, causing *u*-mutation in the appropriate stems before its loss, though Kortlandt (2005: 2) argues that the original ending, reflected as Runic *-o*, caused *u*-umlaut and was subsequently lost. This assumption demands an unusual analysis of the corresponding adj. ending *-a* (§9.2).

Gen. sg. PIE **-ās* (more precisely **-ah₂-es*) yields PGmc. **-ōz*; the length of the vowel of OHG *-ā* is thus to be deduced, as there is no direct evidence (Braune 2004a: §207 Anm. 3, *contra* Krahe & Meid 1969: II, §10). OE gen. sg. *-e* (for etymological *-a*, as in *ermða* ‘misery’, Vespasian Psalter) is by analogy, perhaps to the original acc. pl. inflection (so Fladiseck 1930: 60; cf. Boutkan 1995b: 227, Kortlandt 2005: 3), since the two inflections are identical in the other chief class of fem. nouns, the fem. *n*-stems (§7.14). It has been asserted instead that the PGmc. inflection was **-ōz*, with a bimoric vowel, and OE *-e* is thus etymological (Ringe & Taylor 2014: 59).

Dat. sg. PIE **-āi* (more precisely **-eh₂-ei*) gives PGmc. **-ōi*, which develops regularly in Gothic and in OE. The other languages reflect **-u* < **-ō*, which may be

either a shorter form of the PIE dative inflection (§7.8) or, more probably, an original instrumental, in either event from PIE **-ā*.

Nom. pl. PIE **-ās* (more precisely **-ah₂-es*) yields PGmc. **-ōz*, which develops the same way as the gen. sg. inflection.

Acc. pl. PIE **-ās* < **-āns* (cf. Skt. acc. pl. *aśvāḥ* ‘mares’) is usually assumed to have developed the same way as the nom. pl. inflection. However, early OE and Anglian *-e* is best derived from PGmc. **-ōz*, with a bimoric rather than trimoric vowel. See Stiles 1988: 131, Bammesberger 1990: 105. To what extent the identity of nom. and acc. forms in the other languages is the product of analogy is difficult to determine: see Syrett 1994: 123–32 for discussion and references, and Schrijver 2004: 207–9 for an alternative analysis (to which cf. Kortlandt 2005: 3–4).

Gen. pl. PGmc. **-ōn* develops to *-ō* in Gothic, *-a* elsewhere. Note the Gothic opposition between *-ē* in the *a*-stems and *-ō* in the *ō*-stems.

Dat. pl. PIE **-ā-mis* yields PGmc. **-ōm* (with trimoric vowel perhaps by analogy to the gen. pl.), which develops regularly in all languages.

7.16 The *jō*-stems

In Gmc. these bear the same relation to the *ō*-stems that the *ja*-stems do to the *a*-stems. The light-stemmed nouns of this type are inflected the same way as the simple *ō*-stems in all the Gmc. languages. (As a consequence, some grammars distinguish between light and heavy stems as *jō*- and *iō*-stems, respectively.) Only in the nom. sg. of heavy stems in Gothic and N-Gmc. does the inflection differ from that of the *ō*-stems. The pattern may be illustrated by Go. *bandi* ‘band’, OIcel. *heiðr* ‘heath’, and the WGmc. words for ‘rod’:

	Go.	OIcel.	OE	OS	OHG
sg. nom.	bandi	heiðr	gierd	gerdia	gerta
acc.	bandja	heiði	gierde	gerdia	gerta
gen.	bandjōs	heiðar	gierde	gerdia	gertā
dat.	bandjái	heiði	gierde	gerdiu	gertu
pl. nom.	bandjōs	heiðar	gierda	gerdia	gertā
acc.	bandjōs	heiðar	gierda	gerdia	gertā
gen.	bandjō	heiða	gierda	gerdeono	gertōno
dat.	bandjōm	heiðum	gierdum	gerdium	gertōm

The light-stemmed type, however, is inflected the same way as the *ō*-stems, e.g. Go. nom. acc. *wrakja* ‘persecution’, OIcel. nom. acc. sg. *ben* ‘wound’, OE nom. *synn* ‘sin’, acc. *synne*. Go. *mawi* ‘girl’, inflected like a heavy stem, is heavy in origin (**maʒw-*), as is probably *þiwi* (see Lehmann 1986, s.v.). Inflectional variants:

Old Icelandic. After a light root, stem-final /j/ is preserved before back vowels, e.g. gen. sg. *benjar* ‘wound’, dat. pl. *eggjum* ‘edges’ (the latter root light before gemination): nom. sg. *ben*, *egg*. Also in the light stems, the dat. sg. inflection may be either *-u* or null, e.g. dat. sg. *ben*, *dregg* ‘yeast’, *eggju*, *helju* ‘death’. In the heavy stems, *j* is preserved before back vowels only after a velar consonant.

West Germanic. In OHG, nouns in WGmc. **-innjō* in the nom. (and sometimes acc.) sg. may be inflectionless, as with *kuningin* ‘queen’, as may dithematic names and the noun *thiu* ‘maid’ (cf. Go. *þiwi*, gen. *þiujōs*), and this is the original situation for the light-stemmed nouns. The reflex of **-j-* in OS may be spelt either ⟨i⟩ or ⟨e⟩. This ele-

ment may also be preserved before all endings in OHG in texts of the eighth century, and similarly spelt, e.g. nom. sg. *suntea*, *suntia* ‘sin’. In such early texts there are also forms in simple *-e*, e.g. nom. acc. gen. sg., nom. acc. pl. *sunte*, where *-e* reflects **-ja*, formed by analogy to the *ō*-stems. Otherwise, only the presence of umlaut (and gemination) distinguishes these from *ō*-stems in WGmc.

7.17 Origin and development of *jō*-stem inflections

Although stems in nom. **-iā* < **-ieh₂* do occur in the IE languages (e.g. Skt. *vidyā* ‘knowledge’, Gk. (Ionic) *ἀλήθειᾱ* ‘truth’ < **-esjā*), these are all secondary formations. For expected **-iā* < **-ieh₂*, PIE had instead the reduced grade nom. **-ī* < **-ih₂* (cf. Skt. *pāliknī* ‘cow for the first time with calf’), perhaps with the variant **-ih₂*: cf. Gk. *τράπεζα* ‘table’ < **((te)trapedia)*.¹ This was the chief means of forming feminine alternants to athematic stems, e.g. Skt. *dēvī* ‘goddess’ (cf. masc. *dyauh*), including fem. forms of pres. parts., e.g. Skt. *bhārantī* ‘bearing’ (like Go. fem. *frijōndi* ‘friend’ (i.e., ‘loving (one)’), with *-i* for normal *-ei* because the word was no longer recognized as a participle).² The lack of an inflectional *-s* in the nom. indicates the connection between such forms and the PIE *ā*-stems. Another type bore consonant-stem inflections on an accented suffix **-ih₂-*, e.g. **ulkwih₂-s* ‘she-wolf’ in Skt. *vykīh* and PGmc. **wulgīz* > OIcel. *ylgr*, inflected like *heiðr* (but with *j* after the stem-final velar consonant when a back vowel follows).

Nom. sg. PIE **-ī* < **-ih₂* (or perhaps PGmc. **-i* < PIE **-ih₂*, with PGmc. loss of the final syllabic laryngeal (§5.5 *ad fin.*) and vocalization of *ī*) is reflected in Gothic as *-i*, and the ending undergoes regular loss in OE after a heavy syllable, whereas in OS and OHG the ending of the pure *ō*-stems replaces it. In OIcel. it was replaced by the nom. sg. inflection of the fem. *i*-stems of the *nauðr* type (§7.22), except in names in *-dis* or *-unn*. In OE, the nom. sg. of light stems is properly inflectionless, by loss of **-j-* after the heavy syllable created by WGmc. gemination in, e.g., **bannjō* > **bennju* > **bennu*, producing OE *ben(n)* ‘wound’ by loss of **-u* after the heavy syllable (§5.6).

Acc. sg. Again there occur reduced-grade variants, PIE **-īm* (cf. Skt. *dēvīm*) and **-ih₂m* (cf. Skt. *vykyām* ‘she-wolf’, Gk. *τράπεζαν*), but the Gmc. forms reflect the full-grade ending of the simple *ō*-stems added to stem-final **-j-*.

The rest of the *jō*-stem inflections surviving in Germanic were in full-grade form in PIE, and so it is unsurprising that they resemble the inflections of pure *ō*-stems.

1. Full-grade **-iā-* occurred in the oblique cases of the sg., e.g. Skt. gen. *dēvyāḥ*: see, e.g., Szemerényi 1996: §7.7.3.

2. The original ending **-ī* is nonetheless fossilized in the Go. fem. inflections on pres. parts., which have been reformed as *īn*-stems. For this reason the idea of Boutkan (1995b: 231–5) that the normal PGmc. ending reflected PIE **-ih₂* rather than **-ih₂* seems unlikely (though he also assumes a development **-ja* > **-ia* > **-ī*).

7.18 The *wō*-stems

These are inflected the same way as the simple *ō*-stems, and so all that need be remarked is the treatment of the stem-final *w*. This is retained in Gothic in all cases, e.g. nom. sg. *bandwa* ‘sign’, gen. sg. *bandwōs*, etc. In NGmc. and WGmc., *w* is lost before *u* (which may be from *ō*, §5.3), and this results in paradigms like OIcel. nom. sg. *or* ‘ar-

row' < PGmc. **arwō*, gen. sg. *orvar*. In OE, *w* in final position is vocalized, whereupon, like *u* from other sources, it is apocopated after a heavy syllable, hence *lās* 'pasture' < **lēswō* : *sinu* 'sinew' < **sinwō*. Where it was lost before *u* it is commonly restored by analogy, hence OE dat. pl. *lāswum* (beside earlier *lāsum*), *sinwum*, though especially in early texts, in many forms *w* is lost even when it does not stand before *u*, e.g. acc. sg. *mæde* 'meadow'. In OS and OHG, postconsonantal *w* is lost everywhere, so that *w* is preserved only in forms like OS dat. pl. *brāwon* 'brows' (beside *brāhon*), OHG nom. sg. *drawa*, *drowa*, *drouwa*, *drō* 'menace'.¹ In OS gen. pl. *frato(h)o* 'trappings' may be seen anaptyxis before *w* (cf. OE *frætwa*), which was subsequently lost.

1. These are comparable to OE *prēa* 'menace' < **brau* < WGmc. **prawu* (§6.16 *ad fin.*) beside OE *clawu* 'claw', with the stem *claw-* re-introduced from, e.g., gen. sg. *clawe*.

7.19 The *i*-stems

In PIE these were of all genders, inflected alike, whereas in PGmc. there were originally few *i*-stems of neuter gender (of which PGmc. **mari* (or **mariz*?) 'sea' is a secure example), most of the attested examples in WGmc. having been transferred to this class from others, especially the *s*-stems. In Germanic there arose inflectional differences between the masc. and fem. nouns, since in all the Gmc. languages there is a tendency toward analogical reformation under the influence of the *a*- and *ō*-stems. On a phonological basis, in WGmc. there arose differences between the inflection of heavy and light stems, due to the loss of high vowels after heavy syllables (§5.6). In PIE these exhibited proterokinetic accentuation, i.e. accent on the root in the strong cases, otherwise on the suffix.

7.20 The masculine and neuter *i*-stems

The inflection of the heavy-stemmed type may be illustrated by the paradigms of Go. *gasts* 'guest' and its cognates:¹

	Go.	Oldcel.	OE	OS	OHG
sg. nom.	<i>gasts</i>	<i>gestr</i>	<i>giest</i>	<i>gast</i>	<i>gast</i>
voc.	<i>gast</i>				
acc.	<i>gast</i>	<i>gest</i>	<i>giest</i>	<i>gast</i>	<i>gast</i>
gen.	<i>gastis</i>	<i>gests</i>	<i>giestes</i>	<i>gastes</i>	<i>gastes</i>
dat.	<i>gasta</i>	<i>gest</i>	<i>gieste</i>	<i>gaste</i>	<i>gaste</i>
instr.				<i>gastiu</i>	<i>gastiu</i>
sg. nom.	<i>gasteis</i>	<i>gestir</i>	<i>giestas</i>	<i>gesti</i>	<i>gesti</i>
acc.	<i>gastins</i>	<i>gesti</i>	<i>giestas</i>	<i>gesti</i>	<i>gesti</i>
gen.	<i>gastē</i>	<i>gesta</i>	<i>giesta</i>	<i>gestio</i>	<i>gesteo</i>
dat.	<i>gastim</i>	<i>gestum</i>	<i>giestum</i>	<i>gestium</i>	<i>gestim</i>

Inflectional variants:

Old Icelandic. Stems ending in a velar consonant retain *j* before inflectional back vowels, e.g. gen. pl. *bekkja*, dat. pl. *bekkjum* beside nom. sg. *bekkr* 'bench'. Such may also have gen. sg. in *-ar*, hence *bekkjar* beside *bekks*; the *-s* form is borrowed from the *a*-stems, as is the *-i* in dat. sg. *gesti* beside *gest*.

West Germanic. There is, as in other classes, considerable variability in the spelling of the inflections in OS and OHG, e.g. OS dat. pl. *gestium*, *gestion*, *gesteon*,

OHG *gestin, gestalten*. Also in OS and OHG, umlaut fails in the nom. acc. sg. because of the loss of *-i* after heavy syllables (§5.6), whence the unmutated vowel may have spread to the other cases of the singular (if these indeed originally underwent umlaut: see below), since this serves to heighten the contrast between singular and plural. In OE, *i*-umlaut was earlier (§5.6), so that it preceded loss of *-i* after heavy syllables.

In Gothic there is no distinction in the inflection of light and heavy *i*-stems. The inflection of the light stems in the other languages may be illustrated by paradigms of OIcel. *vinr* ‘friend’ and its cognates:

	OIcel.	OE	OS	OHG
sg. nom.	<i>vinr</i>	wine	wini	wini
acc.	<i>vin</i>	wine	wini	wini
gen.	<i>vinar</i>	wines	win(i)es	wines
dat.	<i>vin</i>	wine	wini, win(i)e	wine
instr.		wine	wini(u)	
sg. nom.	<i>vinir</i>	wine, winas	wini, winios	wini
acc.	<i>vini</i>	wine, winas	wini, winios	wini
gen.	<i>vina</i>	wina, winiga	winio	winio, wino
dat.	<i>vinum</i>	winum	winium	winim

Nom. pl. OE *wine* and OS *wini* are the original forms; OE *-e* is found only in early or poetic texts and on ethnic names, e.g. *Dene* ‘Danes’, with analogical extension to heavy stems, e.g. *Seaxe* ‘Saxons’ (without umlaut). OE *winas* and OS *winios* have been re-formed under the influence of the *a*-stems. Likewise, OE *wina* and OHG *wino* show substitution of the *a*-stem inflection; the earlier forms are OE *winiga* (very rare, and paralleled only by *Deniga* ‘Danes’) and OHG *winio*: see Fulk 1992: 243–5. Unlike *wini*, most OHG light *i*-stems in have been altered analogically to inflect like heavy stems, with removal of umlaut in the sg., e.g. nom. sg. *slag* ‘stroke’: see Boutkan 1995b: 242–3 for lists of forms with and without *-i* and/or umlaut and a conspectus of explanations.

Neuter *i*-stems, which remain distinct only when light-stemmed, are preserved only in OE and OS, where they are declined like the masculines, but with *-u* in the nom. and acc. pl., e.g. OE *speru* ‘spears’, OS *urlagu* ‘wars’. A possible neuter *i*-stem in OHG is indicated by dat. sg. *meri* ‘sea’ (Sievers 1877–8: 107, Krahe & Meid 1969: II, §14), though this is indistinguishable from the fem. dative. Go. *marei* ‘sea’ shows reformation of an original neuter as a fem. *īn*-stem.

1. Not all these forms are actually attested, though all the given inflections themselves are.

7.21 Origin and development of masculine and neuter *i*-stem inflections

In PIE, stem-final weak-grade **-i-* appeared in the nom. acc. sg. and throughout the plural except for the nom. voc.; elsewhere this stem formative took the full-grade form **-ei-*, and in the loc. sg. the lengthened grade **-ēi-*. To these stem-forms were added the usual athematic inflections (§7.2).

Nom. sg. PIE masc. **-i-s* (cf. Gk. *πόλις* ‘city’, Lat. *ignis* ‘fire’) develops to PGmc. **-iz*, which is reflected as **-ir** in Runic, e.g. in names in **-gastir**. This develops regularly in all dialects. PIE neut. **-i-m* develops the same way as the acc. (below).

Voc. sg. The PIE vocative ending was probably **-ei* (i.e. an endingless form with full grade of the *i*-suffix), as reflected in Skt. *agnē* ‘fire’: cf. the parallel in the *u*-stems (e.g. Go. *sunau* ‘son’, §§7.24–5), and see Szemerényi 1996: §7.5.1. As in Greek (cf.

πόλι), this must have been replaced in Germanic by **-i*, by analogy to the *a*-stems, where the voc. is identical to the bare stem of the nom. and accusative. This **-i* is then lost by regular phonological development in Gothic (§5.2). Another possibility is that PGmc. **-ī* was replaced by the *a*-stem voc. inflection **-e* (without change to **-i*: so Boutkan 1995b: 244). Only Gothic maintains a distinction between nom. and voc.

Acc. sg. PIE masc. and neut. **-i-m* develops to **-īⁿ* and is lost altogether after heavy syllables in the Gmc. languages, leaving its trace only in the *i*-umlaut of the root vowel in OIcel. and OE. After light syllables it is preserved in WGmc. (becoming *-e* in OE) but lost phonologically in NGmc. (§5.6). In Gothic it is lost on a morphological basis, since the inflection on light stems was replaced analogically by that on the heavy.

Gen. sg. In PIE the stem-final *ī* was preceded by a full-grade vowel; hence, the stem ended in **-eī-* or **-oī-* (see, e.g., Szemerényi 1996: §7.5.1, Fortson 2010: 120), to which the zero-grade form **-s* of the gen. inflection was added. If it was the former that was inherited, this should have developed to **-īs* or **-īz* in PGmc. (see §§3.4, 6.6), but in that event the Gothic and OHG inflections tell against the supposition of a long vowel, so that it is safest to assume replacement by the corresponding *a*-stem inflection. (Otherwise Ringe 2017: 311.) If this was at an early date (and otherwise it must have happened at different times in the Gmc. branches), the *i*-umlaut of the root vowel in OIcel. and OE must be analogical. If it was PIE **-oīs* that was inherited, this would explain the Go. fem. ending (see below, §7.22), and possibly the North and West Gmc. light-stem masc. endings. On the merits of the competing explanations of ON *-ar* on the light stems either as reflecting etymological **-air* or as analogical, see Syrett 1994: 93–104, favoring the latter; Stiles (1984: 10–12) and Boutkan (1995b: 244–6) conclude otherwise. See further Grønvik 1981: 63–5, 205–6. OS *wīnies* cannot directly reflect the so-called open-inflected variant of the PIE *i*-stem gen. sg. **-ī-os* (as in Skt. *ávyah* ‘sheep’: see Szemerényi 1996: §§7.5.2–3), as this should have produced gemination of the preceding consonant (though such could have been leveled out); more likely OS has simply generalized *wīni-* as the stem, as in the case of the dat. pl. (see below).

Dat. sg. The PIE suffix plus inflection was probably **-eī-ei*, as in Skt. *agnayē*, parallel to the *u*-stem inflection **-eu-ei* (see §7.23), as this may plausibly be assumed to produce, by haplology, the **-eī* that underlies Lat. *ignī*, OCS *gosti* ‘guest’ and others. This **-eī*, if assumed for Gmc. as well, would produce PGmc. **-ī*, and this would explain the endless dative of OIcel., as well as early OE spellings in *-i* (beside *-æ*, the latter borrowed from the *a*-stems: see A. Campbell 1977: §601). It could also explain OS *wīni* (so Krahe & Meid 1969: II, §13, though deriving the ending from PIE loc. **-ēi* or instr. **-ī*), though this could also be the result of generalization of the stem *wīni-* (as with the gen. sg. above), with analogical addition to this in some instances of the *a*-stem inflection in its variant spellings.¹ All the remaining Gmc. forms can be explained as reformed by analogy to the *a*-stems. Yet the Gmc. dat. sg. usually reflects the PIE locative, and so Antonsen (1972: 138) proposes the derivations PIE **-eī-i* > PGmc. **-i(j)i* > NWGmc. **-ī* and PIE **-oī-i* > PGmc. **-a(j)i* > Go. *-ai* (though the Go. inflection is actually *-a*, which may result from PGmc. **-ai* but probably not **-āi*: see §5.4).

Instr. sg. Krahe & Meid (1969: §13) see the PIE instr. **-ī* underlying OE *-e*, OS *-i*. But the OE instr. is never distinguished from the dat. in nouns, so that analogy to the dat. must not be ruled out. OS OHG *-iu* shows analogical addition of the *a*-stem inflection to the stem in *-i-*.

Nom. pl. The masc. inflection is PIE **-eī-es* (cf. Skt. *agnayah*) > PGmc. **-i(j)iz*, which is usually assumed to have developed to **-īz*. This accounts for the Go. and

OIcel. inflections, but WGmc. presents some difficulties, since OHG *-i* is certainly short (Braune 2004a: §215 Anm. 4), and the meter of *Beowulf* tells against deriving *-e* from a trimoric vowel unless trimoric high vowels were shortened earlier than trimoric non-high vowels (on which see Fulk 1992: 421–2). The likeliest explanation is that the nom. inflection is analogical to the accusative (Prokosch 1939: 246), yet even so, *i* ought to have been lost after a heavy syllable (§5.6), so that the OS and OHG endings in the heavy stems are probably best explained as analogical to the ending in light stems.² An alternative solution is to assume that WGmc. **-i* represents a generalization of the reflex of the PIE so-called open-inflected type of *i*-stem nom. pl. **-i-es*, though the evidence for the survival of the open-inflected type in Gmc. is sparse: see Szemerényi 1996: §§7.5.2–3, especially regarding Go. *kinnus* ‘cheek’ and *manna* ‘man’. The ending *-u* on OE and OS neuters must be regarded as analogical to the *a*-stem ending.

Acc. pl. PIE masc. **-i-ns* develops regularly in Germanic (cf. §7.8), except that OE *winas* beside earlier *wine* and OS *winios* beside earlier *wini* are analogical to the nom.

Gen. pl. The PIE inflection was perhaps **-i-(oH)om*. The development of this in Gothic is subject to some of the same uncertainties that attend the development of the *a*-stem inflection (§7.8). If the PIE ending was indeed **-i-oHom*, this could reasonably be supposed to have resulted in forms like OIcel. *bekkja*, OE *winiga* ‘friends’, and OS *winio*; if it was instead **-i-om*, the reflex of PIE **-i-* may have remained part of the stem, with replacement of the inflection by the *a*-stem inflection.

Dat. pl. PIE instr. **-i-mis* develops regularly as the dat. inflection in Go. and OHG, whereas the other languages show the analogical influence of the *a*-stems. On the supposition that this change is attested already on the seventh-century Stentoften stone, see §4.7 n. 4.

1. In *Abrogans* there occur a few light-stemmed OHG datives in *-i*, which Boutkan (1995b: 248) considers original, though such forms are more usually regarded as analogical to the nom. acc. sg. (so, e.g., Braune 2004a: §217 Anm. 4).

2. Such analogical restoration on the basis of light stems is encountered in some other grammatical categories in OS and OHG, e.g. imp. sg. OS *sōki*, OHG *suochi* ‘seek’ (cf. OE *sēc*). This analysis is perhaps reinforced by the observation that whereas the *i*-stems were a moribund class in OE, this was not the case in regard to German.

7.22 The feminine *i*-stems

The Gmc. inflections of the heavy-stemmed fem. *i*-stems may be illustrated by the paradigms of Go. *ansts* ‘favor’ and its cognates:

	Go.	OIcel.	OE	OS	OHG
sg. nom.	ansts	ást	ēst	anst	anst
voc.	anst				
acc.	anst	ást	ēst(e)	anst	anst
gen.	anstáis	ástar	ēste	ensti	ensti
dat.	anstái	ást	ēste	ensti	ensti
pl. nom.	ansteis	ástir	ēsta	ensti	ensti
acc.	anstins	ástir	ēsta, -c	ensti	ensti
gen.	anstē	ásta	ēsta	enstio	enstio
dat.	anstim	ástum	ēstum	enstium	enstim

Inflectional variants:

Old Icelandic. The alternant *ǫst* (cf. also dat. pl. *ǫstum*) shows *u*-umlaut by analogy to the *ō*-stems. Some nouns, e.g. *nauð* ‘necessity’, have also a nom. sg. in *-r* (*nauðr*), which is the older form, those without *-r* being subject to the influence of the *ō*-stems. Quite a few Olcel. *i*-stems were originally *ō*-stems and may therefore have dat. sg. in *-u*, e.g. *rostu* ‘mile’. Note that there is no umlaut anywhere in the paradigm, indicating early replacement of *i*-stem endings by *ō*-stem ones in most case-forms and generalization of the stem without umlaut in the remainder.

West Germanic. OE still frequently has an uninflected acc. sg.; forms with acc. sg. *-e* have it by analogy to the *ō*-stems. OE attests an early gen. sg. *uyrdi* (*Leiden Riddle*) beside analogical forms in *-æ*. In OS and OHG there are the expected variants, e.g. OS gen. sg. *enste*, dat. *enstiu*. One would expect instrumentals (in locative use) like OHG *steteo* ‘place’ to be late creations, but they are confined to early texts (Braune 2004a: §218 Anm. 3). On OS endless datives and their analogical sources, see van Helten 1910: 468.

In Go. there is no distinction in the inflection of light and heavy fem. *i*-stems; likewise in Olcel. and OE, where the light stems have changed gender or declension. In OS, the oldest light-stemmed fem. *i*-stems have *-i* throughout the singular and in the nom. acc. plural. In OHG only *kuri* ‘choice’ and *turi* ‘door’ have *-i* in the nom. acc. sg.; otherwise, such nouns are inflected the same way as the heavy fem. *i*-stems.

7.23 Origin and development of feminine *i*-stem inflections

The PIE fem. inflections were identical to the masc.; differentiation of the two genders in Germanic is due to the analogical influence of the *a*- and *ō*-stem inflections. As noted above (§7.22), in North Germanic, the shift of so many fem. *i*-stems to the *ō*-declension was early enough to result in *u*-mutation, e.g. in *dǫð* ‘deed’ for expected **dæð* (cf. Go. *dēps*); correspondingly, the lack of *i*-umlaut in forms like nom. pl. *dáðir* is notable.

Gen. sg. The inflection must reflect the PIE *o*-grade variant **-oi-s*, which develops regularly in Go. and Olcel. Euler (2013: 75) thinks an alternant PIE **-ei-s* possibly explains the WGmc. forms (he compares the double formation in the gen. sg. of *a*-stems, but see §7.8); Krahe & Meid (1969: II, §15) compare Oscan *-eis*. Boutkan (1995b: 34–5, 244–6) argues rather that OE *uyrdi* ‘fate’ (*Leiden Riddle*) proves the development **-aiz* > WGmc. *-i* (as opposed to **-ai* > OE *-e*), improbable as that may seem, and this in turn constitutes one of three pieces of evidence for the derivation of Ingvaemonic directly from PGmc. rather than from NWGmc. But so much weight must not be accorded such an isolated form, given the possibility of scribal error. See further Hogg & Fulker 2011: §2.68. H.F. Nielsen (2000: 244; cf. Grønvik 1998b: 124) admits the possibility that WGmc. **-iz* has its vowel by analogy to the dat. sg.

Dat. sg. Go. *-ai* is commonly identified with the ending on Homeric Gk. *πόληι* (though the Homeric final is syllabic) and derived from a PIE loc. **-ēi* (cf. *u*-stem loc. **-ēu*). The Go. ending could instead be analogical to the corresponding *ā*-stem inflection. This would render natural the derivation of the WGmc. ending, PIE **-ēi* > PGmc. **-ei* > **-ī* > WGmc. *-i*; but the different development of the corresponding back diphthongs *eu* and *ēu* is undeniable (§5.3 *ad fin.*). No matter the explanation, the inflectionless Olcel. form cannot be a regular phonological development. It is most likely analogical to the *ō*-stem form.

Acc. pl. Olcel. *-ir* is borrowed from the nom.

7.24 The *u*-stems

In PIE these were formed the same way as the *i*-stems, but with stem-final **u/ū* rather than **i/ī*, with the same variety of ablaut grades in the same cases, and all three genders were inflected alike, aside from the neut. nom. sg. and pl., which were, as always, identical to the acc. The masc. and fem. *u*-stems maintain identical inflections in Gmc., but almost no neuters remain, the securest examples being Go. *faihu* ‘cattle, property’, OE *līþ* ‘strong drink’, and cognates; OIcel. *mjóðr* ‘mead’ and Gmc. cognates are masc., but they have neuter IE cognates. Due to the loss of high vowels after heavy syllables (§5.6), in WGmc. there arose an inflectional distinction between light and heavy stems. The *u*-stems were never very numerous in Gmc., and the class is moribund in WGmc.¹ The declension may be illustrated by the paradigms of Go. *sunus* ‘son’ and cognates:

	Go.	OIcel.	OE	OS	OHG
sg. nom.	sunus	sunr	sunu	sunu	sunu
voc.	sunu, -áu				
acc.	sunu	sun	sunu	sunu	sunu
gen.	sunáus	sonar	suna	sunies	sunes
dat.	sunáu	syni	suna	suno	sune
instr.					suniu, sunu
sg. nom.	sunjus	synir	suna	suni	suni
acc.	sununs	sunu	suna	suni	suni
gen.	suniwē	sona	suna	sunio	suneo, suno
dat.	sunum	sunum	sunum	sunum	sunim

Inflectional variants:

Gothic. In the singular, *-u-* and *-áu-* in endings are occasionally confused, e.g. nom. *sunáus*, dat. *sunu*.² A few neuters remain as such in Go., though no plurals to them are attested; they have *-u* in the nom./acc. sg., as with *faihu* ‘cattle’.

Old Icelandic. Only masc. nouns remain in this class, the feminines having assimilated to the *ō*-stems, though relic forms like gen. sg. neut. *fiár* ‘property’ (*a*-stem, to nom. *fē*) and dat. sg. fem. *hendi* ‘hand’ (consonant-stem, to *hond*) point to original affiliation with the *u*-stems. In the dat. sg. there are alternative, somewhat later forms that are most commonly endingless, showing *u*-mutation or *u*-fracture where possible, e.g. *vond* beside *vendi* ‘rod’, and *hjort* beside *hirti* ‘heart’, and these are most likely based on the accusative. The alternation of *u* and *o* in *sunr* is due to *a*-umlaut of *u* (§4.8); the alternation resulted in analogical extension of both stems, resulting in forms like nom. sg. *sonr*, nom. pl. *sonir*, gen. pl. *suna*.

West Germanic. The inflection of the heavy *u*-stems differs from that of the light only in that the nom. and acc. sg. are endingless, due to loss of **-u* after a heavy syllable (§5.6). However, from an early date there is a tendency toward reformation in accordance with the *a*- and *i*-stems for masculines, the *ō*-stems for feminines. Likewise, in OE the endings *-a* and *-u* are confused from an early date. OS has no light-stemmed feminines, OHG no heavy-stemmed masculines. The gen. sg. in OS and OHG is plainly reformed analogically; there are just a few, early traces of the original ending in OHG, e.g. *fridō* ‘peace’. OS *fehu* and OHG *fihu*, *feho* ‘property’ remain neuters, which may take the endings of *a*-stems in the gen. dat. sg.

1. On the Gothic *u*-stems in particular, see Neri 2003.

2. The cooccurrence of such alternatives in the sg. only has suggested to some that Go. preserves a subsidiary apiphkinetic *u*-stem type, i.e. with accent on the root in the strong cases and on the inflection in the weak. See Braune 2004b: §104 Anm. 2, with references.

7.25 Origin and development of *u*-stem inflections

The original endings closely parallel those of the *i*-stems, but with **u/ū* where the *i*-stems have **i/ī*.

Nom. sg. PIE uter **-u-s* develops regularly in Germanic. Neuter **-u-m* develops like the acc. sg. (below).

Voc. sg. PIE **-ou* would regularly produce PGmc. **-au* > Go. *-áu* (8×); the alternative ending *-u* (9× in native words) thus probably developed parallel to the *i*-stem ending (§7.21), i.e. as a bare stem. But Ringe (2017: 150–1, after Bazell 1937: 4 and Rasmussen 1983: 207–8 n. 10, 214–15) argues plausibly that PIE **ey* yields PGmc. **au* in final, unstressed syllables, and thus it is unnecessary to reconstruct a PIE ablaut variant *o* rather than *e* to explain the Gmc. *u*-stem inflections.

Acc. sg. PIE **-u-m* is regularly lost in Olcel., though the vowel is still to be found in **magu** ‘son’ on the fifth-century Kjølevik stone.

Gen. sg. The ending in PIE perhaps varied between **-ey-s* and **-ou-s* (so Szemerényi 1996: §7.5.1, but cf. the voc. sg. above). If so, the latter adequately explains the attested inflections, excluding the analogical endings of OS and OHG. Instead, Bammesberger (1990: 152) supposes that the diphthong **au* spread from the dat. The reconstruction PIE **-oues* of Antonsen (1975: 20) is contradicted by Skt. *sūnóḥ*. Runic *-OR* (i.e., *-ōR*) shows monophthongization in PGmc. **-auz*.

Dat. sg. The PIE endingless locative **-ēy* regularly gives Go. *-áu*, Olcel. *-i* (Runic *-iu* in **kunimu[n]diu**, Turkjö bracteate, Sweden, ca. 500), and OHG (instr.) *-iu*.¹ If there was an ablaut alternant PIE **-ōy*, this could account for OE *sunā*, OS *sunō*, and the Go. ending could also derive from this. Bammesberger (1990: 153) suggests that PIE **-ēy* might regularly produce the OE and OS endings, though the Runic form illustrates the hazards of this.² It has also been argued that **-au-* spread from the gen. sg. (the opposite of Bammesberger’s position, under **gen. sg.** above) to the dat. sg. and nom. pl. (Ringe & Taylor 2014: 57–8).

Nom. pl. PIE **-ey-es* (parallel to *i*-stem **-ei-es*), as in Skt. *-avaḥ*, Gk. *-εις*, yields PGmc. **-iwiz* for uter nouns. This develops regularly in Gmc., e.g. to **-iwz* > Go. *-jus*, NWGmc. **-iuz* > *-iz*. This accounts for the inflections listed except OE *-a* (cf. OFris. *-a* beside *-ar*, *-an*, *-en*), which is difficult to explain. It is often said to derive from a PIE ablaut variant **-ou-es* (so, e.g., Krahe & Meid 1969: II, §17; A. Campbell 1977: §612; Hollifield 1980: 36), but there is no evidence for such an alternant outside of Anglo-Frisian.³ OHG nom. acc. pl. *feho* in Notker is probably by analogy to the *a*-stems; cf. Gk. neuter nom. acc. pl. *ἄσται* < *ἄσται* ‘cities’. OE neut. *wintru* appears beside *winter*; the former is probably analogical (to the light stems?), as the reflex of PIE **-uh₂* should have been lost.

Acc. pl. PIE **-uns* gives PGmc. **-unz*, which develops regularly in East and North Germanic. The WGmc. inflections are analogical to the nom. pl.; that the OS and OHG endings should have been drawn from the *i*-stems, as the gen. (and dat. in OHG) was (Krahe & Meid 1969: II, §17), is also possible. In the view of Dahl (1938: 182), the three examples of acc. pl. *-u* in the OE Orosius are doubtful, and yet, even though the

ending is otherwise always *-a* before the tenth century, he regards *-u* as directly reflecting PGmc. **-unz*; similarly Boutkan (1995b: 257).

Gen. pl. In PIE **-u-(oH)om*, zero-grade **-u-* could be replaced by full-grade **-eu-*, as in Gk. *πῆχυν* ‘cubits’ < **bhāgheuōm*, and on this basis Gothic *-iwe* is to be expected. OE *-a* is by analogy to the *a*-stem ending, whereas the other languages have their inflections from the *i*-stems, since the nom. pl. was identical to that of the *i*-stems, by regular phonological rule.⁴ An exception is that OHG *suno* is influenced not by the *i*-stems but the *a*-stems.

Dat. pl. PIE instr. pl. **-umis* gives PGmc. **-umiz*, which develops regularly except in OHG, where the ending is analogical to that of the *i*-stems, as are the alternative OS endings *-iun*, *-ion*.

1. That **hakubo** (Noleby stone, Sweden, ca. 450) is dat. sg. of a *u*-stem (Antonsen 1975: 55–6, Boutkan 1995b: 256) may be doubted: cf. Krause 1971: 157.

2. Antonsen (1989: 287–8) argues instead that we should assume “alternate derivation from the ablauting variants PIE **-ew-i/-ow-i/*. Since every Germanic dative form can be derived from the Proto-Indo-European dative/locative ending **-i/* (see Antonsen 1969–70: 75), we can discard the highly improbable development posited in the standard handbooks (e.g., Krahe & Meid 1969[1: §129], whereby a PIE ‘long diphthong’ **-eu/* becomes Go. *-au*, but Run. *-iu*, OHG *-iu* (cf. the completely analogous alternative derivation of the Gmc. gen. sg. Run. *-oz*, Go. *-aus*, ON *-ar*, etc. from PIE **-ow-es/*).”

3. Prokosch (1939: §83) invokes analogy to gen. dat. sg., gen. plural. Dahl (1938: 182; similarly Bammesberger 1985) posits an original dual in PIE **-ōy-*. High-frequency *u*-stem ‘hand’ would have been used frequently in the dual; so also ‘door’ (e.g. OE *duru*), if this was originally a *u*-stem, though the comparative evidence suggests otherwise.

4. Euler (2013: 77) supposes rather that *w* was assimilated to the preceding *i*, so that the OHG ending is derived phonologically from WGmc. **-ijō*.

7.26 The consonantal stems

The consonant-stem nouns in Gmc. are the root-stems (including apparently vocalic root-stems like Olcel. *kýr* ‘cow’ and *sýr* ‘sow’, on which see §7.28 n. 2), the *n*-stems, the *r*-stems, the *s*-stems, the *nd*-stems, and the dental stems. All except the first were formed in PIE of stems bearing a suffix ending in a consonant. The accent was usually mobile, most commonly on the root or suffix in the strong cases, on the inflection in the weak (§7.4).

7.27 The root-stems

These, also called root-nouns, are masc. and fem. nouns which in PIE attached athematic inflections (§7.2) directly to the root, without any intervening suffix. In PIE these mostly showed amphikinetic accent, i.e. accent on the root in the strong cases, on the inflection in the weak. A few, however, followed the acrostatic pattern, with accent on the root throughout, but different ablaut grades of the root vowel in the strong and the weak cases, e.g. strong **pod-* in Gk. nom. pl. *πόδες* ‘feet’ but weak **péd-* extended to a strong case in Lat. *pedes* (Clackson 2007: 81, but cf. Ringe 2017: 57, 59). Griepentrog (1995) identifies 23 root-stems in the early Gmc. languages as original. Masc. and fem. were originally inflected alike, though the two have diverged in Gmc. A great many root-stems have defected to other classes; those that retain root-stem inflections are usually

nouns of high frequency. In ON, however, the class attracted many nouns of different origin to it. The inflections for masc. root-stems may be illustrated by the paradigm of Go. *reiks* ‘ruler’,¹ along with the paradigms of OIcel. *maðr* ‘person’ and its WGmc. cognates:

	Go.	OIcel.	OE	OS	OHG
sg. nom.	reiks	maðr	man(n)	man(n)	man(n)
acc.	reik	mann	man(n)	man(n)	man(n), mannan
gen.	reikis	manns	mannes	mannes, -as	man(n), mannes
dat.	reik	manni	men(n)	man(n), manne, -a	man(n), manne
sg. nom.	reiks	menn	men(n)	man(n), men(n)	man(n)
acc.	reiks	menn	men(n)	man(n), men(n)	man(n)
gen.	reikē	manna	manna	manno, -a	manno
dat.	reikam	mǫnnum	mannum	mannum, -un, -on	mannum, -un, -om, -on

The masc. nouns are particularly poorly preserved in Gothic, having mostly gone over to other stem classes. Cognate with OIcel. *maðr* is Go. *manna*, the paradigm of which combines root-stem (originally *u*-stem: Szemerényi 1996: §7.5.2) and *n*-stem forms (the latter in boldface in the following): nom. sg. ***manna***, acc. ***mannan***, gen. *mans* (with degemination before *s*), dat. *mann*, nom. and acc. pl. *mans* beside ***mannans***, gen. *mannē*, dat. ***mannam***. In OE there is a parallel *n*-stem paradigm, nom. sg. *manna*, etc., but forms other than acc. sg. *mannan* are infrequent. Weak forms also occur rarely in OIcel. The reason for the co-occurrence of root-stem and *n*-stem forms of this noun is contested, along with the word’s IE derivation.²

In OIcel., some masc. root-stems have gen. sg. in *-ar*, e.g. *fótar* ‘foot’. The inflection of the fem. root-stems may be illustrated by the paradigm of Go. *baúrgs* ‘city’, along with the paradigms of OIcel. *bók* and OE *bōc*, both ‘book’, and of OS *naht* and OHG *naht*, both ‘night’:

	Go.	OIcel.	OE	OS	OHG
sg. nom.	baúrgs	bók	bōc	naht	naht
acc.	baúrg	bók	bōc	naht	naht
gen.	baúrgs	bókar	bēc, bōce	nahtes	naht
dat.	baúrg	bók	bēc, bōc	naht, nahta	naht
pl. nom.	baúrgs	bækr	bēc	naht	naht
acc.	baúrgs	bækr	bēc	naht	naht
gen.	baúrgē	bóka	bōca	nahto	nahto
dat.	baúrgim	bókum	bōcum	nahtun, -on	nahtum, -un, -on

There are no neuters that can properly be called root-stems: on OE *scrūd* ‘garment’, see Hogg & Fulk 2011: §2.3 n. 3; on Go. *fōn*, see §7.42 *infra*.

1. The acc. sg. is not actually attested, though the form is not in doubt.

2. The word is usually derived either from an *n*-stem PIE **dhǵh-m-on-* (or similar, from which Go. *guma* ‘man’ is also derived), containing an ablaut variant of a root meaning ‘earth’ (so, e.g., Kroonen 2011: 29), or from a *u*-stem based on the root **men-*, as in Skt. *mānu-* ‘person’ (so, e.g., Euler 2013: 92): for discussion and references, see Bammesberger 2000, where both of these explanations are regarded as improbable. Bammesberger’s own hypothesis is that the word is in origin a root-stem, from which were derived both a thematic variant (as in, e.g., Go. *mana-sēhs* ‘humankind’) and an *n*-stem in the weak cases of which the geminate arose, e.g. gen. sg. **man-n-az*; similarly Mottausch 2011: 73.

7.28 Origin and development of the root-stems and their inflections

Originally, the inflections were the athematic ones listed in §7.2. The original distribution of endings is better preserved among fem. nouns than masc., and chiefly in Gothic, hence PGmc. nom. sg. **burz-s* > **burxs*, acc. **burz-uⁿ*, gen. **burz-iz* or **-az*, dat. (originally loc.) **burz-i*, nom. pl. **burz-iz*, acc. **burz-unz*, gen. **burz-ôⁿ*, dat. **burzum(i)z*. All these sg. forms develop regularly in Go. except for the acc. (cf. *u*-stem acc. *handu* ‘hand’), which may be explained as endingless by analogy to the *i*-stems. In the plural, as in many classes, the nom. inflection is extended to the acc. (as in all these languages), and Go. fem. *-im* in the dat. is again by analogy to the *i*-stems (and masc. *-am* to the *a*-stems), as may be gen. pl. *-ē*. The original dat. pl. ending appears in some other consonant-stems, e.g. *mēnōpum* ‘month’, but not among the root-stems (cf. Boutkan 1995b: 261–2). Among the masc. nouns in Go., certainly acc. sg. *reik* and gen. *reikis* are by analogy to either the *i*-stems or the *a*-stems.

In Olcel., most masc. case-forms are indistinguishable from *a*-stem or *u*-stem forms, the chief exception being the nom. and acc. pl. (the latter replaced analogically by the former), where **mann-iz* > **menn-R* > *menn* (cf. *fætr* ‘feet’ < **fōt-iz*) shows umlaut with a distinctive inflection. The dat. might be expected to show umlaut, as in OE; dat. *fæti*, however (with analogical ending), is the only Olcel. root-stem to show it.¹ Gen. sg. *-ar* is borrowed from the *u*-stems, *-s* from the *a*-stems (in slightly later by-names, e.g. gen. *uxafōts* ‘ox-foot’); the original ending **-iz* should give **-r* (cf. the fem. stems below). Nom. sg. *maðr* is usually regarded as a regular phonological development from **mannr*; cf. fem. pl. *teðr* ‘teeth’ beside analogical *tennr* (but see §6.14). As for the Olcel. fem. root-stems, most cases are reformed by analogy to the *ō*-stems, the exceptions being the nom. and acc. plural. In the nom. sg., the reflex of PIE **-s* was retained in a few fem. vocalic stems, where the vowel is subject to *R*-umlaut (§4.7): *kýr* ‘cow’, *sýr* ‘sow’, *æw* ‘ewe’. The original gen. sg. ending *-r* (with umlaut) < **-iz* < PIE **-es* is preserved only in gen. sg. *kýr* ‘cow’, *merkr* (to *mork* ‘mark (of silver)’), and a few others listed by Noreen (1970: §416.1).²

In WGmc., the original situation is best preserved in OE, where gen. and dat. sg. *bēc* are the earlier forms, *bōce* and *bōc* having been formed by analogy (the former to the *ō*-stems), as is OS dat. sg. *nahta* (cf. *ō*-stem dat. *geba* beside normal *gebu* ‘gift’). Rare OHG gen. sg. *man* (= Go. *mans*) is original, and dat. sg. OE *menn*, OS OHG *man* are also archaisms (from **manni*).

The nom. sg. of some uter root-stems (and other consonant-stems, those ending in a nasal, liquid, or dental consonant, including *s*) should have been subject to consonant loss and compensatory lengthening in PIE under Szemerényi’s law (§1.6 n. 1). For example, Lat. *pēs* ‘foot’ results from **pess* < **pets* < **ped-s*, whereas Skt. *pāt* results from analogical restoration of *d* to **pād-s*, probably from **pōs*.³ The variety of ablaut grades to be found in such words thus results in analogical changes in the IE languages to reduce paradigm allomorphy. Whereas Lat. and Gk. have a long vowel only in the nom. sg. of this word, Gmc. has generalized *ō* throughout the paradigm. In Gothic the word has acquired *u*-stem inflections (*fōtus*; likewise **tunpus* ‘tooth’), probably due to acc. sg. *fōtu*, pl. *fōtuns*. Thus, the stems of Gmc. root-stems may differ from those of IE cognates, or even within the Gmc. family itself (e.g. Go. *tunþ-* ‘tooth’ < **h₁dnt-*: OHG *zan(d)* < **h₁dont-*; cf. Lat. *dēns*, gen. *dentis*, derived from the zero grade of **h₁ed-* ‘eat’, with participial suffix, and see Lass 1986). However, ‘tooth’ is the only root-stem in which it is provable that ablaut alternations in the root persisted in Gmc.⁴

1. The PGmc. dat. (originally loc.) ending **-i* should have been lost after the heavy syllable (§5.6), but presumably it was restored by analogy to light-stemmed root-stems, and perhaps to *r*-stems (see §7.36).
2. It may seem odd to refer to vocalic consonant stems, but these would have ended in a consonant in PIE, usually a laryngeal. A possible alternative explanation for a nom. sg. like *mprk* is that it has its back mutation by analogy not to the *ō*-stems but to the acc. sg. (Prokosch 1939: §87a), or by the combined influence of the two. Note that analogical forms of the nom. sg. appear elsewhere among feminines of this class, e.g. *ṭonn* ‘tooth’ and *nótt* ‘night’ (beside *nátt*), the latter with the combined labial mutation proper to the acc. sg. and dat. pl. (§4.8).
3. On ‘Doric *πός*’ and its unexplained alteration to Gk. *πούς*, see Sihler 1995: 117–18. “The difference in vowel colouring between *πούς* and *pēs* is explained by alternation within the paradigm (e.g. nom. **pōs* : gen. **ped-ós*), or between simple[x] and compound (e.g. **pēs* : **su-pōs* ‘with good feet’), with subsequent generalizing of one or the other timbre” (Szemerényi 1996: §7.2.1).
4. A further, probable example is PGmc. **wrōt-* > ON *rót* ‘root’ : **wurt-* > Go. *waúrts*, ON *urt*, OE *wyrt*, OS *wurt*, OHG *wurz* ‘plant’.

7.29 The *n*-stems

These are commonly referred to as ‘weak’ nouns, just as with weak adjectives, which are also *n*-stems (see §9.7).¹ In PIE either there were no fem. *n*-stems or the only gender opposition in this class was between animate and neuter nouns; the category of fem. in Gmc. no doubt arose from substantivized weak fem. adjectives. Neuters in Gmc. are very few in number. To be distinguished are the three types of Gmc. *n*-stems: the *an*-stems, the *ōn*-stems, and the *īn*-stems.

1. The terms *stark* ‘strong’ and *schwach* ‘weak’ are used in reference to nouns, adjectives, and verbs already in Grimm’s *Deutsche Grammatik*: see, e.g., Grimm 1822–37: I, 597–8, where the terms are defined in reference to declension.

7.30 The *an*-stems

These comprise masc. and neuter nouns. The masculines are very commonly deverbal agentive nouns, e.g. Go. *hana* ‘cock’ (cf. Lat. *canō* ‘sing’), *blōma* ‘flower’ (cf. OE *blōwan* ‘bloom’). There also occur *jan*-stems, inflected the same way, e.g. Go. masc. *baúrgja* ‘citizen’ (cf. *baírgan* ‘protect’), neut. *sigljō* ‘seal’ (cf. *sigljan*, from Lat. *sigillāre*). The masc. inflections may be illustrated by the paradigms of Go. *guma* ‘man’ and its cognates:

	Go.	Oícel.	OE	OS	OHG
sg. nom.	<i>guma</i>	<i>gumi</i>	<i>guma</i>	<i>gumo</i> , -a	<i>gomo</i>
acc.	<i>guman</i>	<i>guma</i>	<i>guman</i>	<i>gumon</i> , -an	<i>gomon</i> , -un
gen.	<i>gumins</i>	<i>guma</i>	<i>guman</i>	<i>gumen</i> , -an, -on	<i>gomen</i> , -in
dat.	<i>gumin</i>	<i>guma</i>	<i>guman</i>	<i>gumen</i> , -an, -on	<i>gomen</i> , -in
pl. nom.	<i>gumans</i>	<i>gum(n)ar</i>	<i>guman</i>	<i>gumon</i> , -un, -an	<i>gomon</i> , -un
acc.	<i>gumans</i>	<i>gum(n)a</i>	<i>guman</i>	<i>gumon</i> , -un, -an	<i>gomon</i> , -un
gen.	<i>gumanē</i>	<i>gumna</i>	<i>gumena</i>	<i>gumono</i> , -uno, -onu	<i>gomōno</i>
dat.	<i>gumam</i>	<i>gum(n)um</i>	<i>gumum</i>	<i>gumon</i> , -un	<i>gomōm</i>

The plural of Oícel. *gumi* is actually atypical of the type, which usually lacks *-n-* in all cases of the plural, having adopted *a*-stem inflections. Rather, in poetry a few *n*-stems referring to persons preserve the original gen. pl. ending *-na*¹ and extend *-n-* thence to the other cases of the plural. Another masc. type, and a rare one, is represented by Go.

gen. pl. *áuhsnē* ‘oxen’, Olcel. nom. acc. pl. *yxn*, *øxn*, gen. *yxna*, *øxna*, dat. *yxnum*, *øxnum* (nom. sg. *uxi*, *oxi*), OE (chiefly Anglian) nom. acc. pl. *æxen*, *exin*, *exen*, gen. *oxna*, dat. *oxnum* (nom. sg. *oxa*). In these the PIE suffix took the form **-en-* in the strong cases, rather than **-on-*.² On Go. *manna*, see §7.27.

The neuters are declined similarly in the genitive and dative. The nominative and accusative inflections may be illustrated by forms of Go. *áugō* ‘eye’ and its cognates:

	Go.	Olcel.	OE	OS	OHG
nom. acc. sg.	áugō	auga	ēage	ōga, -e	ouga
nom. acc. pl.	áugōna	augu	ēagan	ōgun, -on, -an	ougun, -on

A different type of neuter is represented by Go. nom. acc. pl. *namna* ‘names’, i.e. with the ending *-na* rather than *-ōna*. Such neuters had PGmc. **-ō* or **-ōʰ* in the nom. sg.,³ just as the masc. nouns did, and so they were made masc. in WGmc. (Bammesberger 1990: 167; Jasanoff 2002: 35). Besides *namō*, only PGmc. **sēmō* (OHG *sāmo* ‘seed’) and **aŋkʷō* (OHG *ancho* ‘butter’) are of this latter type. On heteroclitic stems like Go. *watō*, dat. pl. *watnam*, see §7.42.

1. As in the *ōn*-stems, §7.32. It is otherwise usually replaced by *a*-stem *-a* (but cf. §7.31 n. 8); cf. Runic gen. pl. *arbijano* ‘heirs’ on the Tune stone, ca. 400.

2. This is the PIE ‘hysterokinetic’ or ‘hysterodynamic’ type (§7.4), in which the final syllable bore the accent: for discussion, see Kroonen 2011: 27–40. Similar is Go. gen. pl. *abnē*, dat. *abnam* ‘men’: see Sen 2002, Johnsen 2005; probably also Olcel. *bogna* ‘bows’. This is not the origin of OE genitives like *brōgna*, which occur in the conservative language of poetry, and which must be assumed to show syncope (for the reasons offered by Brunner 1965: §276 Anm. 4).

3. This ending is unexplained; the PIE ending was **-ŋ*, reflected in Skt. *nāma*, Lat. *nōmen*, OCS *imę*.

7.31 Origin and development of *an*-stem inflections

These nouns in PIE bore the suffix **-en-/on-*. The Gmc. *an*-stems mostly reflect the PIE amphikinetic type, with accent on the root in the strong cases (§7.4), the stem-formative suffix taking the form **-on-* (**-ōn* < **-on-s* in the nom. sg.), but the form **-en-* in the loc. sg. (and acc. sg.?), and elsewhere **-n-* or **-ŋ-*.¹ The weak grades of the suffix are all replaced by full grades in Gmc. Only Gothic retains significant traces of the original inflections; in the other languages it is mostly the *n*-suffix that has become the inflection. Reconstruction of the development of these nouns presents many difficulties (some of them remarked by Ringe 2017: 306–8); the nouns and the weak adjectives must have exerted considerable mutual analogical influence. But the agreement of Go. and OHG on key points leads to the conclusion that originally **-on-* (becoming **-an-* or **-un-*: see under **acc. sg.** below) appeared in the acc. sg. and all cases of the plural, whereas **-en-* appeared in the gen. dat. sg.

Nom. sg. PIE had the endings **-ōn* (< **-on-s*), **-ō* (< **-ōn*),² and **-ēn* (< **-en-s*), but probably not the oft-positied **-ē* (< **-ēn*; see Jasanoff 2002: 34–5). Any of these would account for Go. masc. *-a*. Olcel. *-i* is commonly derived from **-ēn* (or from analogically created **-ē*, **-ē̆*, or **-ēʰ*; see, e.g., Jasanoff 2002: 31, 44), but the older Runic ending, which is well attested, is *-a*, and so a morphological refashioning is perhaps to be assumed.³ Only **-ō* or **-ōʰ* will account for the WGmc. masc. forms (continental Runic *-o* is attested from the end of the 6th cent. in **boso** (name) and **leubo** ‘beloved man’: see Euler 2013: 80), and the origin of the trimoric vowel in these, as elsewhere among the *n*-stems, is perplexing.⁴ Likewise, **-ō* is required to explain Go. neuter *-ō*,

whereas the neuter endings in the other languages require $*-\bar{o}^n$; PIE neuter $*-\bar{o}n$, however, is to be derived from $*-on-h_2$, just as PIE $*ph_2tēr$ is to be derived from $*ph_2ter-s$ (§1.6 n. 1; see Jasanoff 2002: 33).⁵ Boutkan (1995b: 285–6) rather assumes analogical extension of $*-\bar{o}(n)$ from the neut. pl.

Acc. sg. The PIE animate ending was $*-en-m̃$ (see Szemerényi 1996: §7.3.1), but Gmc. requires $*-on-m̃ > *-on-um$, in which $*-on-$ should have yielded, in (N)WGmc., $*-un-$ before $*u$ in the next syllable, whereas $*-on-$ in EGmc. developed to $*-an-$ (§5.5). This accounts for the OS and OHG endings, but OE (and Olcel.? see §5.5) must have extended $*-an-$ from other cases to the acc.⁶ (The *an*-stem acc. unfortunately is not attested in early Runic.) Early Northumbrian *galgu < *zalgun < WGmc. *zalgunum* on the Ruthwell Cross suggests that OE originally had $*-un-$ in this case. The neuters bore the same inflection as in the nom.

Gen. sg. Only in Skt. is the original weak form of the *n*-suffix preserved, as in gen. sg. *rājñah* ‘king’. The other IE languages generally point to $*-en-es$ or $*-en-os$, giving PGmc. $*-iniz$, $*-inaz$.⁷ This accounts for Go. *-ins* and OS OHG *-en*. The Olcel. and OE endings must derive from forms with the PIE alternant $*-on-$, as in Gk. acc. sg. *δαίνοια* ‘divinity’ $< *-on-m̃$, or by analogical extension (ultimately from the nom. pl.?), as in the accusative. OHG *-in* here and in the dat. produces umlaut (e.g. *nemin* ‘name’), though the original root vowel is always restored outside of the earliest texts.

Dat. sg. PIE $*-n-eī$ is to be expected (cf. Skt. dat. *rājñē*), but the Gmc. ending is more likely to derive from loc. $*-en-i$ or $*-on-i$. The former will account for Go. *-in*, OS OHG *-en* (CG), *-in* (UG); the latter (cf. Gk. *ῥαυνοί* ‘thunderbolt’) for Olcel. *-a* and OE *-an*, assuming early loss of $*-i$ in third syllables (§5.2 n. 7).

Nom. pl. PIE $*-on-es$ gives PGmc. masc. $*-aniz$, which accounts for the Go. and OE endings. OS and OHG *-on*, *-un* are probably analogical to the acc. pl., whereas Olcel. *-ar* is modeled on the *a*-stem ending. As for the neuter, the cognates point to PIE $*-\bar{o}n-h_2$, as in Skt. *nāmāni* ‘names’, in which $*-\bar{o}n-$ may be a collective suffix (Jasanoff 1980: 376). This should have produced PGmc. $*-\bar{o}na$, but $*-a$ in this was replaced by $*-\bar{o}$, borrowed from the *a*-stems, with the NWGmc. development $*-\bar{o}n\bar{o} > *-\bar{o}nu > *-\bar{u}n$.

Acc. pl. Only Skt. preserves the original weak form of the suffix, as in *rājñah* ‘kings’. Gmc. reflects the suffix in *o*-grade, PIE $*-on-m̃s > masc. *-on-unz$, in which $*-on-$ should have developed to $*-an-$ in EGmc. and $*-un-$ in (N)WGmc. (see §5.5). This accounts for the OS and OHG endings, whereas the OE ending is analogical to the nom. plural. Olcel. shows the same development as in the acc. singular. Go. *-ans* may be due to the combined forces of haplogy (§12.33 n. 6) in $*-an-unz$ and analogical influence from the nom. plural. The neuter ending was the same as the nominative.

Gen. pl. PIE weak $*-n(oH)om$ finds expression in forms like Go. *aúhsnē* (see §7.30) and OE *oxna*. However, in Gmc. there should be expected the reflex of a full-grade form of the suffix, $*-on-$, and this accounts for Go. *-anē*. The Olcel. ending *-a*, like the nom. pl. ending, seems to be analogical to the *a*-stem ending,⁸ whereas the WGmc. endings reflect $*-\bar{o}n-\bar{o}^n$, which is perhaps borrowed from the $\bar{o}n$ -stems (§7.32), probably via the weak adjectives (§9.8).

Dat. pl. PGmc. $*-miz$ (cf. *a*-stems, §7.8) was attached directly to the suffix $*-on-$, giving $*-on-miz > *-ammiz$ in EGmc., $*-ummiz$ elsewhere (§5.5). This accounts for all the endings except OHG *-ōm*, which was influenced by the $\bar{o}n$ -stems, as in the gen. pl.

1. The precise distribution of accentual and ablaut variants is not wholly agreed upon: e.g., to Szemerényi 1996: §7.3.1 cf. Kroonen 2011: 28.

2. Loss of **-n* may be due to sandhi conditions (Prokosch 1939: §84c).
3. Stiles (1984: 16–17) argues plausibly that masc. Runic *-a* was extended to the nom. from the oblique cases for the purpose of re-differentiating the masc. and fem. forms (nom. masc. **-ô* and fem. **-ō* having fallen together as **-ō*), since, outside the nom. sg., the feminines had **-ōn-* throughout and the masculines **-an-*, the latter having been generalized by analogy to the feminines. Subsequently Runic *-a* was lost by regular phonological rule, not only in the regular *n*-stems but also in the subcategory of *ijan*-stems (i.e., *jan*-stems with a heavy root syllable), leaving the *n*-stems and the *ijan*-stems inflected identically, except that in the nom. sg. the latter had *-i*, which was then adopted by the *n*-stems (similarly Boutkan 1995b: 281). Cf. the discussion in Syrett 1994: 134–52. To the contrary, Nedoma (2005: 172–3) and Jón Axel Harðarson (2005: 227–8; see also Ringe & Taylor 2014: 520) assume that Runic *-a* actually reflects PIE **-ēn*.
4. The usual assumption is that **-ô* and **-ē* were the result of loss of the final consonant in PIE, and Bammesberger (1990: 167 n. 275, 169) defends this view by reference to PGmc. **nefō*, reduced from PIE **nepōs*. But only Balto-Slavic and Gmc. require the reconstruction of trimoric vowels in this declension, and trimoricity is otherwise to be related to hiatus between vowels (usually through loss of a laryngeal consonant), not length in vowels resulting from compensatory lengthening (but see §5.4 *supra*). Jasanoff (2002: 37), who intends the term ‘trimoric’ literally and thus assumes that trimoric vowels were simply overlong, proposes a rule of Gmc. and Balto-Slavic whereby **ō* (but not any other vowel) gained an extra mora in final position. This is a simple solution, but the motive for the change is obscure. Lane (1963, supported in part by Boutkan 1995b: 127, 281) supposes that **-an* (from earlier **-an-un*) was leveled into the nom. sg. in WGmc., and that this accounts for the attested endings. This entails certain complications, one of which is that **-an-un* should have developed to **-un-*: see §5.5. The form of the suffix **-an-* could have been extended, however, from other cases, e.g. nom. pl., though this leaves unexplained the coincidence of Baltic intonation and of what would appear to be a trimoric Gmc. reflex.
5. Prokosch (1939: §84c) remarks a complementarity in the development of the nom. sg. between Go. and Olcel., on the one hand, and WGmc. on the other: “The ending with two morae (*-ēn/-ōn*) is used in Gothic and Old Norse with masculines, but in WGmc. with feminines and neuters. On the other hand, the tri-moric ending *-ô* is used in Gothic and Old Norse with feminines and neuters, in WGmc. with masculines (in Old Saxon there is a good deal of variation between the MSS).”
6. To the contrary, it is usually assumed that **-an-* spread from the acc. sg. to other cases (e.g. Prokosch 1939: §84d; Bammesberger 1990: 168). Certainly, the spread of **-an-* is justly assumed, since it has replaced **-ōn-* in the feminine *n*-stems in OE, but the acc. sg. ending is not likely to be the source, at least in WGmc.
7. Bammesberger (1990: 168) suggests that at least in Gmc., gen. **-en-* may be analogical to the dat. suffix (PIE loc.). Boutkan (1995b: 283–4) argues that **-en-* remained as such in the gen.
8. However, Prokosch 1939: §84d posits the replacement of *-na* by *-a* from stems like *hani* ‘cock’, gen. pl. **hanna* > *hana*, facilitated by the disappearance of inflectional *-n-* from the rest of the paradigm.

7.32 The *ōn*-stems

This class includes feminine nouns only. The inflections may be illustrated by the paradigms of Go. *tuggō* ‘tongue’ and cognates:

	Go.	Olcel.	OE	OS	OHG
sg. nom.	tuggō	tunga	tunge	tunga, -e	zunga
acc.	tuggōn	tungu	tungan	tungun, -on, -an	zungūn
gen.	tuggōns	tungu	tungan	tungun, -on, -an	zungūn
dat.	tuggōn	tungu	tungan	tungun, -on, -an	zungūn
pl. nom.	tuggōns	tungur	tungan	tungun, -on, -an	zungūn
acc.	tuggōns	tungur	tungan	tungun, -on, -an	zungūn
gen.	tuggōnō	tungna	tungena	tungono	zungōno
dat.	tuggōm	tungum	tungum	tungun, -on, -an	zungōm, -ōn

A subtype, the *jōn*-stems, have *-j-* before the inflection, which causes umlaut, e.g. Olcel. *brynja* ‘coat of mail’, and these have gen. pl. in *-a* instead of *-na*, e.g. *brynja*, unless the stem ended in a velar consonant, e.g. gen. pl. *kirkna* (to *kirkja* ‘church’). Contracted

forms are generally uninflected in the sg., e.g. *frú* ‘lady’, pl. *frúr*, and *kona* ‘woman’ has gen. pl. *kvenna*, *kvinna*, probably based on a stem **kven-* to a different noun (Go. *qinō*, OE *cwene*, OHG *quena*: see Jón Axel Harðarson 1989).

7.33 Origin and development of *ōn*-stem inflections

In PIE there was no inflectional distinction between masc. and fem. *n*-stems (if in fact any PIE *n*-stems were fem.), but in PGmc. the two genders became differentiated by the elimination in fem. nouns of the variation in vowel quality and quantity in the stem-forming suffix, which was regularized as **-ōn-*.¹ The likeliest source of the long vowel in this analogical process is the *ō*-stem nouns. Of those that survive in Gmc., nearly all PIE *ā*-stem nouns designating persons have become *ōn*-stems, e.g. PIE *ā*-stem **g^wenā* ‘woman’ (cf. Russian *жена* (*žena*)) > Go. *qinō*, gen. *-ōns* (Krahe & Meid 1969: III, §91). There thus arose a correspondence between the masc. proportion *a*-stem *-a-* : *n*-stem *-an-* and the fem. proportion *ō*-stem *-ō-* : *ōn*-stem *-ōn-* that could be exploited and expanded. There may also have been influence of the fem. adjectives upon the nouns (Kurylowicz 1968). The conversion of *ō*-stems to *ōn*-stems must have been a relatively late development, as *ō*-stem forms are still encountered in *ōn*-stem nouns in Gothic, e.g. dat. sg. *bandwái* to *ōn*-stem *bandwō* ‘sign’ (Streitberg 1910: 111).

At first, then, the use of **-ōn-* was the only distinction between masc. and fem. *n*-stems, since they bore the same inflections after the stem-forming suffix. This situation remains little changed in Gothic, the only alterations being the extension of gen. pl. *-ō* (to form *-ōnō*) and dat. pl. *-ōm* (for original **-ōnam*) from the *ō*-stems. Although the phonological changes are much disputed, the commonest assumption is that PGmc. **-ōn-* should have changed to NWGmc. **-ūn-* before *u* in the next syllable (§5.5)—i.e., in the acc. sg. and pl.—and before tautosyllabic *n* at a later date (§5.6) in all the remaining cases except nom. sg. and gen. and dat. pl. This situation is well preserved in OS and OHG. Some analogical reformation has taken place in Olcel.: in the plural, nom. acc. *-ur* is analogous to *-ar* (borrowed from the *a*-stems) in the masc. *n*-stems, and the dat. pl. corresponds to the Go. form. PGmc. **-ōn-ō* should have yielded ON **-ana*; gen. pl. *-na* may be influenced by masc. forms like *yxnā* (§7.30; Krahe & Meid 1969: II, §29), but it is likelier to have been influenced by the neuter form, as the original nom. acc. pl. inflection would have agreed with the neut. (Heusler 1967: §233). In OE, the fem. paradigm has been made to conform almost entirely to the masc.; Northumbrian acc. sg. *foldu* ‘earth’ and *eorðu* ‘earth’ are most likely relics of an earlier inflection like that in Go., though it should be noted that these forms are not necessarily exceptions to the rule of conformity to the masc. paradigm: cf. masc. acc. sg. *galgu* ‘gallows’. Original **-ōn-* is reflected also in OE pl. *Ēastron*, *-un* ‘Easter’. For alternative analyses, see Ringe & Taylor 2014: 163–4.

1. Cf. similarly in Greek, masc. nom. sg. *ἀγών* ‘assembly’, gen. *ἀγῶνος*, etc., and in Latin, nom. *sermō* ‘conversation’, acc. *sermōnem*, etc.

7.34 The *īn*-stems

Like the *ōn*-stems, this class includes feminine nouns only. The inflections may be illustrated by the paradigms of Go. *managei* ‘multitude’ and its cognates, along with Olcel. *gorsimi* ‘treasure’:

	Go.	Oldcel.	OE	OHG
sg. nom.	managei	gørsimi	menigu	menigī(n)
acc.	managein	gørsimi	menigu	menigī(n)
gen.	manageins	gørsimi	menigu	menigī(n)
dat.	managein	gørsimi	menigu	menigī(n)
sg. nom.	manageins	gørsimar	menigu	menigī(n)
acc.	manageins	gørsimar	menigu	menigī(n)
gen.	manageinō	gørsima	meniga	menigīno
dat.	manageim	gørsimum	menigum	menigīm

It will be seen that the Go. paradigm corresponds precisely to that of the *ōn*-stems, but with *-ei-* (/i:/) where the other has *-ō-*.¹ The OHG paradigm closely resembles the Gothic, corresponding exactly to the OHG *ōn*-stem paradigm above (§7.32). The OHG forms in *-īn* (as opposed to *-ī*) are limited to a small number of textual sources: see Braune 2004a: §228 Anm. 1, Boutkan 1995b: 292–3. In OS the inflection of these nouns is indistinguishable from that of fem. *i*-stems, though occasional *jō*-stem forms occur, e.g. dat. sg. *menigo* (1× beside usual *menigi*). In Oldcel. the sg. corresponds phonologically to the Go. sg., whereas the pl. inflections are the same as those of the *ō*-stems. In OE a few forms, mostly in early or Anglian texts, e.g. acc. gen. dat. sg. *strengē*, show that originally the OE paradigm was more closely comparable to the OHG one. The substitution of the ending *-u* for *-e* < **-i* is usually explained as the result of analogy to stems in Gmc. **-iþō*, e.g. OE *strengþu* (see, e.g., A. Campbell 1977: §569(7), and cf. Brunner 1965: §280), though the extension of *-u* within the paradigm of the latter type is difficult to account for, and doubts have been raised (see Bammesberger 1975, and cf. Ringe 2002: 149 & n. 42).

The origin of the suffix **-īn-* in this class is uncertain, as it is unparalleled in the IE languages. But if, as supposed above (§7.33), the *ō*-stems played a significant role in the spread of **-ōn-* throughout the paradigm of the *ō*-stems, it may be supposed that **-īn-* was analogously constructed on the basis of the *jō*-stems, in which the nom. sg. ended in **-ī* (§7.17).

1. In Gothic, the suffix *-ein-* is found also in feminine abstract nouns derived from weak verbs of the first class, e.g. *dáuþeins* ‘baptism’ (cf. *dáuþjan* ‘baptize’), but these bear different inflections: those of the *i*-stems in most cases, but those of the *ō*-stems in the nom. gen. plural. Gothic and ON first participles and adjectives in the comparative degree are also inflected as *īn*-stems (§§9.9–10).

7.35 The *r*-stems

This small class comprises nouns of family relationship, which were formed in PIE with a suffix **-ter-* or **-er-* in alternating ablaut grades. The inflections may be illustrated by the paradigms of Go. *brōþar* ‘brother’ and its cognates:

	Go.	Oldcel.	OE	OS	OHG
sg. nom.	brōþar	bróðir	brōþor	brōðer, -ar	bruoder
acc.	brōþar	bróður	brōþor	brōðer, -ar	bruoder
gen.	brōþrs	bróður	brōþor	brōðer, -ar	bruoder
dat.	brōþr	bróður	brēþer	brōðer	bruoder
pl. nom.	brōþrjus	bræðr	brōþor	gibrōðer, -ar	bruoder
acc.	brōþruns	bræðr	brōþor	gibrōðer, -ar	bruoder
gen.	brōþrē	bræðra	brōþra		bruodero
dat.	brōþrum	bræðrum	brōþrum	brōðrun, -on	bruoderum, -un

The other nouns in this class are Go. *fadar* ‘father’ (once, in the voc., beside usual *atta*), **mōdar* ‘mother’,¹ *dauhtar* ‘daughter’,² *swistar* ‘sister’, and their cognates.³ Note Runic **swestar** on the (probably) 5th-century Norwegian Opedal stone. Beside OIcel. dat. sg. *foður* ‘father’ there occurs the (probably more original) by-form *feðr*, which may be extended to the acc. and reformed in gen. *feðrs*; *foður* itself is then probably analogical to the gen. acc. sg. (Gutenbrunner 1951: 104). In OHG, *muoter* is inflected like *bruoder*, but *fater* has nom. acc. pl. *faterā*, and there develop alternative forms modeled on the *a*-stems, gen. sg. *fateres*, dat. *faterē*. Similarly, OE *fæder* always has *a*-stem nom. acc. pl. *fæd(e)ras*, and analogical gen. sg. *fæd(e)res* occurs not infrequently. Umlaut is usually missing from dat. sg. *fæder*, but cf. Northumbrian *feder* beside *fæder*; conversely, umlaut may be extended to cases in which it is not etymological, as in Mercian gen. sg. *dæhter* (spelt with ⟨œ⟩). OE *mōdor* has always nom. acc. pl. *mōdru* or *mōdra*, and the variation suggests that the origin of the inflection is in a collective neuter plural (see Hogg & Fulk 2011: §2.93), as PGmc. acc. pl. *-*unz* should have been lost (otherwise Boutkan 1995b: 275). The lack of umlaut in nom. pl. *brōþor* (as opposed to dat. sg. *brēþer*) is unexpected.⁴ Of particular interest is Mercian gen. sg. *feadur*, Northumbrian *-fadur*, *fador*, on which see §7.36.

1. Go. *áiþei* is used instead of **mōdar*, which is entirely unattested, but which is reconstructible from related forms. According to Prokosch (1939: §85), and as might be expected from the vocalism, **mōdar* (as well as OE *mōðar*, OS *mōðar*, OHG *muoter*; OIcel. *móðir* is ambiguous) derives from PIE **mātēr*, with root accent throughout (cf. Gk. *μήτηρ*, Lith. *mótė*, but cf. Pokorny 1959–69: II, 700), and the apparent effect of Verner’s law (§6.6) is thus to be attributed to analogy to *fadar*; cf. Skt. *mātār*- beside *pītār*-.

2. Go. *au* in *dauhtar* is due to the following *h* (§4.5), whereas *o* in NWGmc. **dohter*- is due to lowering of *u* before the following mid vowel (§4.3; the etymon is PIE **dhug(h)h₂ter*-, as in Gk. *θυγάτηρ*), with compensatory lengthening upon loss of /x/ in OIcel. *dóttir* (§4.9).

3. The OHG words *swehur* ‘father-in-law’, *swigar* ‘mother-in-law’, *swāgur* ‘brother-in-law’, *zeihhur* ‘husband’s brother’ and their cognates are not inflected as *r*-stems. On the intrusive consonant in *zeihhur* (cf. Skt. *dēvár*-, Gk. *δαίηρ*), see Fulk 1993b: 341–2.

4. It cannot be due to full grade of the stem suffix in PGmc. **brōþer*-iz-, with early loss of *i* in a third syllable (as in dat. pl. *-*miz*, §5.2 n. 7, §7.8), unless it is assumed that *e* was not raised to *i* before *-*ri*- (§§4.4, 5.5). Umlaut is lacking in the plural throughout WGmc.; the umlaut in NHG *Väter*, *Mütter*, *Brüder*, *Töchter* is modern and analogical. Umlaut is found in all the NGmc. forms, however: *feðr*, *mæðr*, *bræðr*, *dætr*.

7.36 Origin and development of *r*-stem inflections

In PIE at least ‘father’ had a regular alternation between strong and weak cases (§7.4), with shift of accent between stem and inflection, as in Greek acc. sg. *πατέρα* ‘father’, gen. *πατρός*. In Go. and OIcel. the weak stem has been extended to all cases but the nom. and acc. sg., whereas in WGmc. it is the strong stem that prevails. If it is assumed that alternation in the place of the accent occurred in all these words, not just ‘father’, it must be supposed that the consequent alternations in voicing under Verner’s law (§6.6) have been leveled away.

Nom. sg. **brōþēr* (< PIE **bhrātēr* < **bhrāter*-s) may be assumed for PGmc. This would explain OHG *bruoder*, though the stem **brōþer*- of the acc. and voc. would produce the same result if extended analogically to the nominative.¹ The usual assumption is that in Go. *brōþar*, *-*ēr* has resulted in *-ar* (§5.3), and that *-*ēr* also explains OIcel. *-ir* as well as early Runic **swestar**, assuming that ⟨a⟩ stands for /æ:/, which later developed to /e/ in the unstressed syllable, still later merging with /i/. Alternatively,

Streitberg (1892: 108, *idem* 1896: §§160, 179), followed by some others, has argued that **swestar** reflects the **-ōr* of PIE **syesōr*. Both of these assumptions have been challenged by Stiles, who argues that Go. *fidwōr* ‘four’ must be derived from PIE neut. **k^wetyōr* rather than the usually assumed masc. *k^wetyōres*, with subsequent analogical extension of *ō* from the neuter (see Stiles 1985–6: 6.86–8), and therefore shortening in Gothic is not to be expected in **brōpēr*; rather, Go. nom. *brōpar* has acquired the stem of the vocative or, less likely, the acc. (Stiles 1988). He also argues that Runic **swestar** is unlikely to represent a nom. in **-ēr* but a voc. in **-ar* (Stiles 1984). Hamp (1990) supports Stiles but posits nom. sg. **brōpē* for PGmc. Boutkan (1992, 1995b: 272) argues that Runic **swestar** reflects the original **-ōr*, whereas Oicel. *systir* reflects the analogical ending **-ēr*. The issues are complex and capable of more than one interpretation, but the analysis of Stiles seems quite likely.

Acc. sg. PGmc. **brōper-u* < PIE **bhrāter-ŋ* develops normally in Gothic and Oicel., in the latter instance through the series of changes **-eru* > **-aru* > **-oru* > *-ur* (see Heusler 1967: §113). The WGmc. developments appear to be natural; on OE *-or*, see note 1.

Gen. sg. The Gothic and main NWGmc. forms may be derived regularly from PIE **bhrātr-os* or **bhrātr-es*. Oicel. *faðir* has gen. sg. *foður*, which is usually associated with Skt. *pitúr* and derived from **ph₂tṛs*, though how such a form arose in PIE is difficult to explain, since the original ending should have been PIE **-r-os* (see Szemerényi 1996: §7.3.3, with references, and cf. Stiles 2013: 30). Accordingly, Bammesberger (1983a) argues that the Gmc. and the Skt. forms are analogical creations. Corresponding to *foður* are the variant Anglian OE forms cited above, *feadur*, *-fadur*, *fador*.

Dat. sg. The Gmc. dat. corresponds to the PIE locative, hence PIE **ph₂tr-i* ‘father’ (cf. Gk. *πατρί*, Lat. ablative *patre*), in which the loss of final **-i* after the heavy syllable was earlier in Go. than elsewhere in Gmc. (§5.2). PIE **bhrātr-i* explains all the forms in the paradigms in §7.35 except for Oicel. *bróður* (for expected *bræðr*, which is rare), which is analogical to the acc. and gen., like dat. *foður* beside etymological *feðr*. But doubts have been raised about the retention of **-i* in Proto-Norse: see §5.2 n. 2.

Nom. pl. PIE **bhrāter-es* > PGmc. **brōper-iz* develops regularly into the OS and OHG forms (aside from the elimination of voicing of *p* under Verner’s law, if instead **bhrātér-es* is assumed, as explained above). Oicel. *bræðr* results from generalization of the weak grade of the suffix **-r-* in PNorse, resulting in **brōprir*; cf. Runic **dohtrir** on the Tune stone of ca. 400. OE *fæderas* has been analogically reformed on the model of the *a*-stems. Go. *brōprjus*, with zero grade of the suffix, as in ON, has acquired the *u*-stem ending because the acc. and dat. pl. endings of Go. *r*-stems were indistinguishable from those of *u*-stems.

Acc. pl. PIE **bhrātr-ns* > PGmc. **brōpr-unz* produces the Go. form by regular sound change, whereas the NWGmc. forms are analogical to the nom. pl.

Gen. pl. PIE **bhrātr-oHom* produces the expected results everywhere except in Oicel., where the umlauted vowel of the nom. pl. is extended throughout the plural, and in OHG, where *bruodero* may be due to analogical generalization of the stem with **-er-* (cf. the dat. pl.), or, less likely, it may reflect an original variant with full grade of the suffix: cf. Gk. *πατέρων* beside Homeric *πατρῶν*, Lat. *patrum*.

Dat. pl. PIE **bhrātṛ-mis* is an instr. form (§7.2; cf. Skt. instr. *mātrbhis* ‘mothers’) which may be assumed to give PGmc. **brōpru-miz* (with **-ru-* rather than **-ur-* under the influence of the other weak cases: see §12.31 n. 3). This produces

regular results, except that the umlauted vowel of the nom. pl. is extended to the dat. in Olcel., and in OHG the stem with *-er-* has been generalized.

1. By contrast, OE has *-er* (as in *fæder*) or *-or* (as in *brōþor*) depending on whether the vowel of the preceding syllable is front or back, due to nuclearization originating in the gen. and dat. sg., according to A. Campbell (1977: §631). Alternatively, Krahe & Meid (1969: II, §23) suppose that *-er* in nom. sg. *fæder* directly reflects PIE **-ēr*, with loss of the vowel after a heavy syllable in all the remaining *r*-stems and subsequent parasiting. But phonological loss of the stem vowel in an uninflected form seems unlikely.

7.37 The *s*-stems

In PIE these were almost all neuter, and in Gmc. they are exclusively so.¹ They bore the PIE accent on the root in the nom. sg., but otherwise there is wide disagreement about the pattern of accentuation in this class.² The category remains distinct in several IE languages; an example of an *s*-stem is, from PIE **ǵénh₁-os* ‘kind, family’, gen. **ǵénh₁-es-os*, Skt. *jánaḥ*, gen. *jánasaḥ*, Gk. *γένος*, gen. *γένεος*, Lat. *genus*, gen. *generis*. In Gmc. the *s*-stems as a noun class remain nowhere very distinct, having conformed to the inflection of more productive classes, though in OE the cooccurrence of alternative stems in different noun classes attests to the alternations in earlier *s*-stem paradigms. Thus, for example, beside *gāst* ‘spirit’, *hlāw* ‘mound’, *hrāw* ‘corpse’ there occur also the umlauted *gāest*, *hlēw*, *hrēw*. The only plain exceptions to the obscuration of paradigm alternations are to be found in Anglian texts. One exception is *dōgor* ‘day’: in Northumbrian (Lindisfarne Gospels) this has a singular stem *dæg-* (spelt <doeg>), whereas the plural stem is *dōg(o)r-*, the latter used for both sg. and pl. in poetry.³ Similarly, the Mercian gloss on the Vespasian Psalter has sg. *cælf* (with *i*-umlaut)⁴ but pl. *calfur*, *calfer-*. In poetic texts, nom. sg. *hrēð* ‘glory’ occurs beside *hrōð(o)r(-)* in the dat. sg. and in the plural. On the basis of such alternations may be reconstructed an original paradigm like the following (see Brunner 1965: §289, Hogg & Fulk 2011: §2.96):

	singular	plural
nom.	dæg	dōgor
acc.	dæg	dōgor
gen.	dōgores	dōg(o)ra
dat.	dōgor(e)	dōgrum

The two residual signs of *s*-stem inflection are thus variable umlaut of the the root vowel and variable appearance of suffixal *r* < *z*. Aside from the exceptional examples of preserved paradigm alternation noted above, the OE paradigms of original *s*-stems are of two types: (1) The nouns *cealf* ‘calf’, *lamb* ‘lamb’, and *æg* ‘egg’ decline as neut. *a*-stems, except that in the plural the inflection is preceded by *-r-*, e.g. nom. acc. *cealfru*, gen. *cealfra*, dat. *cealfrum*. (2) The remainder are declined mostly as neut. *a*-stems but have extended stem-final *-r-* throughout the paradigm, e.g. nom. sg. *hōcor* ‘derision’. Usually it is the stem without *i*-umlaut that is generalized, though a few nouns show generalization of the umlauted form, e.g. nom. pl. *scērero* ‘shears’. In some instances there is a dual development, e.g. OE *i*-stems *sige* ‘victory’, *sele* ‘hall’, *hæl* ‘salvation’ beside *a*-stems *sigor*, *salor*, *hālor* (see A. Campbell 1977: §636).⁵

In Gothic and Olcel., the *s*-stems are declined entirely like *a*-stems, e.g. Go. *riqis* ‘darkness’ (cf. Skt. *rājaḥ*, Gk. *ῥέβος*), gen. *riqizis* = Olcel. *røk(k)r*, gen. *røk(k)rs*. A probable exception is gen. sg. *hatis* (for expected *a*-stem **hatizis*) ‘hatred’ < PIE **-es-*

os (though this is disputed: see Braune 2004b: §94 Anm. 5); other forms of the word decline on the pattern of *a*-stems.⁶ In OHG and OS, the few remaining *s*-stems decline as *a*-stems, but with *r*-suffix in the plural and, in OHG, umlaut, e.g. OHG *lamb* ‘lamb’, nom. pl. *lambir* < **lambizu* < **lambezō*, gen. *lambiro*, dat. *lambirum*. This method of forming the plural was to become quite productive in German, for reasons sketched by Klein (2013). A few OHG forms with *-ir* or *-ar* in the sg. also occur (Braune 2004a: §197 Anm. 1).

1. The Gmc. material is collected in Kluge 1926: §84, also Schlerath 1995: 259–60. See also Schenker 1971, Casaretto 2000, the latter arguing that the type was productive in Gmc. Adamczyk 2012 traces the decline of the type in OE and OHG.

2. For instance, Clackson (2007: 94) reconstructs nom./acc. sg. **nébhos* ‘cloud’, gen. sg. **nebhés-os*, nom./acc. pl. **nebhés-h₂*, whereas Ringe (2017: 62–3) reconstructs root accent throughout, and Beekes (2011: 198) assumes for the *s*-stems accent on the root in the nom. sg., on the suffix in the acc. sg., and on the inflection in the gen. sg. See further Schaffner 2001, Mottausch 2011. There must be assumed an alternating PIE accent, sometimes on the suffix, in order to explain the generalization of *s* or *z*, alternants under Verner’s law, for example *z* in Go. *aqizi* ‘axe’ but *s* everywhere else in Gmc., e.g. OE (Mercian) *æces*.

3. The two Northumbrian stems are not uncommonly regarded as belonging to separate paradigms (so, e.g., Cook 1894: 40–1, Klein 2013: 170 n. 1), but the complementary distribution by number is unmistakable.

4. In Anglian there is retraction of *æ* to *a* before covered *l*, and this *a* then may be umlauted to *æ*.

5. Wagner (2011) argues that PGmc. *a*-stem **daʒaz* ‘day’ was in origin an *s*-stem, derived from the etymon of OE *dæg*: cf. Gk. *Δαγισθαῖος*, probably a Go. name, and OHG *tagar-ōt* ‘dawn’. There does not appear to be evidence outside of Gmc., however, for quantitative ablaut alternations in the root of *s*-stems.

6. In Go. the *s*-stems have *-s-* after *h* or a diphthong, otherwise *-is-*. For the reason, see Boutkan 1995b: 266–7.

7.38 Origin and development of *s*-stem inflections

The usual pattern in PIE was for the suffix to take the form **-os* in the nom. voc. acc. sg. only (cf. the Finnish loanword *lammas* ‘lamb’), elsewhere **-es-*, which should produce PGmc. **-iz-*. Thus, the reconstructed paradigm of OE *dæg* in §7.37 shows precisely the opposite of the expected historical distribution of *i*-umlaut, which is found in the nom. acc. sg. only, with the expected loss of final **-iz* after the heavy stem. Against the usual IE pattern, then, the reflex of PIE **-os-* must have prevailed outside the nom. acc. sg., though how *-or-* developed from **-os-* is a matter of some debate.¹ The likeliest explanation (that of Bammesberger 1990: 210) is that nom. acc. pl. **dōʒazō* developed to **dōʒr* (with rhotacism and syncope of **-a-*, followed by apocope of **-u* < **-ō*), in which **-r* was then syllabified to *-ur*, which was subsequently extended to most cases, with subsequent lowering to *-or*. Yet this explanation, too, faces some difficulties.² OE gen. sg. *dōgores* was formed by analogy to the *a*-stems, since **-a-* should have been lost from the final syllable of PGmc. **dōʒazaz*, giving **dōʒaz* > **dōʒar*, a situation reflected in the Mercian gen. sg. *calfur* (with analogical replacement of **-ar* by *-ur*, as above). OE dat. sg. *dōgor* is perhaps to be derived from a PIE instr. in **-ē*, which ending should have been lost; but a locative in **-i* would explain the form if the ending is assumed to have been lost in a third syllable (§5.2 n. 7). The alternative dat. *dōgore* (in poetry beside *dōgor*) probably does not reflect the PIE dat. in **-eī* reconstructed for this class (note the lack of umlaut) but is analogical to the *a*-stems.

1. For discussion and references, see Boutkan 1992, Hogg & Fulk 2011: §2.99 n. 1, Klein 2013: 171–5. Boutkan’s analysis, whereby *-or(-)* always reflects syllabified *r*, is discounted by Hogg & Fulk (2011: §2.100 n. 6), who conclude that *-or* in at least some instances must reflect **-uz-*, a conclusion agreed to by Klein, though no very convincing explanation as to how **-uz-* arose has yet been devised (see Schaffner 2001: 589–91, Klein *loc. cit.*).

2. This hypothesis could be tested metrically, since nom. acc. pl. *dōgor* should then be monosyllabic in the meter of *Beowulf*, where, unfortunately, the relevant cases do not occur. Acc. pl. *lomber* at *Guthlac B* 1042 is disyllabic, but the metrical features of this poem are not conservative enough to ensure that the second syllable is not due to parasiting. The Mercian gloss on the Vespasian Psalter perhaps suggests that Bammesberger’s explanation is incorrect, since in this text the final sequence PGmc. **-arō* yields *-eru* rather than *-ur* (as in nom. sg. fem. *ōderu* ‘other’), and this must be the etymological outcome rather than the result of analogy (see Fulk 2010b). In this text are to be found nom. acc. pl. *calfir* (3×) and *lombur* (1×), but also *calferu* and *lomberu*, once each. It is possible, though, that *-r-*, later syllabified, originated elsewhere in the paradigm. The hypothesis that PIE forms in **-us-* and **-ĥs-* should be reconstructed among the *s*-stems reflected in Gmc. is highly questionable: see Fulk 1988: 155–6 for references.

7.39 The *nd*-stems

These are sometimes categorized under the dental stems (§7.41), which also bore athematic inflections in PGmc., though the development of the two types is different. The inflections may be illustrated by the paradigms of Go. *frijōnds* ‘friend’ (cf. *frijōn* ‘love’) and its WGmc. cognates, along with Olcel. *bóndi* ‘farmer’ (cf. *búa* ‘settle’):¹

		Go.	Olcel.	OE	OS	OHG
sg.	nom.	frijōnds	bóndi	frēond	friend	friunt
	acc.	frijōnd	bónða	frēond	friend	friunt
	gen.	frijōndis	bónða	frēondes	frundes, -as	friuntes
	dat.	frijōnd	bónða	frēnd	frunde, -a	friunt, -e
	voc.	frijōnd				
pl.	nom.	frijōnds	bændr	frēnd	friend	friunt
	acc.	frijōnds	bændr	frēnd	friend	friunt
	gen.	frijōndē	bónða	frēonda	frundo	friunto
	dat.	frijōndam	bóndum	frēondum	frundun, -on	friuntum, -un, -on

In WGmc. there occur also analogical forms. Thus, in the nom. acc. pl. are to be found forms analogical to the *a*-stems, OE *frēondas* (regularly in Anglian), OS *friundos*, *friunda*, OHG *friuntā*. OS OHG dat. sg. *-e* is also analogical to the *a*-stem ending (dat. sg. *friunt* is rare in OHG), and beside OE *frēnd* there occurs *frēonde*, the ending *-e* being universal in stems of more than one syllable such as dat. sg. *hettende* ‘enemy’. OE polysyllabic stems regularly have genitive plural in *-ra* and frequently nom. acc. pl. in *-e*, both of which endings are borrowed from adjectives.

1. Olcel. *bóndi* is represented here because in *frændi* ‘kinsman’ a single stem vowel has been extended throughout the paradigm, though a rare, archaic, uncontracted pl. *friendr* is also attested.

7.40 Origin and development of *nd*-stem inflections

These are in origin substantivized polysyllabic present participles in PIE **-nt-* (cf. Gk. pl. *φέρωντες* ‘bearing’), which in PIE bore consonant-stem inflections (§7.2), as present participles still do in Skt., though on a dialectal basis the true participles acquired *a*-and

ō-stem inflections and were thus distinguished from these nouns in Gmc.¹ As in the participles, since the vowel before **-nt-* was unstressed, PGmc. **-nþ-* was voiced to **-nð-* under Verner's law, with subsequent development to **-nd-* (§§6.5–6).

The original set of inflections is best preserved in Gothic, where the nom. acc. dat. sg. and nom. acc. gen. pl. directly reflect the consonant-stem endings (cf. Go. *baúrgs* 'city', §7.27). Several of these endings, however (nom. acc. sg., gen. pl.) are identical to the *a*-stem endings, and probably on that basis *a*-stem inflections were adopted for the gen. voc.² sg. and the dat. pl.

Umlaut in the nom. pl. in OE and OIcel. (and cf. OIcel. nom. acc. pl. *gefendr* 'giver' beside nom. sg. *gefandi*) is the result of the consonant-stem ending **-iz* < PIE **-es*, with the acc. pl. patterned after this, and in OE there is umlaut in the dat. sg., just as in the root-stems and the *r*-stems (§§7.27, 7.35), due to PGmc. and PIE **-i* (locative). OIcel. thus preserves the consonant-stem character of these nouns in the plural, whereas the singular has been made to conform to the declension of the *an*-stems (§7.30). Aside from the endless forms (those which in OE have umlaut), there is nothing to distinguish these nouns from *a*-stems in WGmc., though that is in part due to regular sound change, in part to analogy, the latter having applied in the gen. sg., where **-iz* (cf. Go. *-is*) should have been lost.

1. Ringe (2017: 224) doubts that there was a class of *nd*-stem nouns in PGmc, supposing that they were still regarded as participles. That is not impossible, but since Go. *frijōnds* and its Gmc. cognates all have the meaning 'friend' and do not inflect like participles in any Gmc. language, the assumption that PGmc. had *nd*-stem nouns cannot justly be called rash.

2. The voc. sg. would normally have developed to **frijōn* (§6.11).

7.41 The dental stems

Most of these are disyllabic stems ending in *þ*, which reflects a PIE *t*-suffix (as in Lat. *nepōs*, gen. *nepōtis* 'grandson'); but cf. Go. *weitwōds* 'witness'. In Gothic and OIcel., in large part, these bear the same inflections as the masc. root-stems, e.g. Go. *mēnōþs*, OIcel. *mánaðr* 'month' (originally an *s*-stem: cf. Gk. *μήν*, gen. *μηνός* < **μηνσός*, Lat. *mēnsis*, but perhaps with PIE nom. **mēnōt*: Pokorny 1959–69: I, 731). In WGmc. only the nom. acc. pl. remains distinctively athematic: cf. OE *mōnað*, OHG *mānōt*. In WGmc. some dental stems developed in ways similar to the *n*-stems, so that the original athematic inflections were lost in most case-forms, leaving the dental element to serve as an inflection. Only OE preserves this situation recognizably, and in just a few words, as illustrated by nom. acc. sg. *ealu* 'ale', gen. dat. sg. *ealap*, gen. pl. *ealeþa*, though analogical forms occur beside these, e.g. Northumbrian gen. sg. *alðes*. Although *mōnaþ* shows its origin in this class only by the nom. acc. pl., *mæg(e)þ* 'maiden' is uninflected in the gen. dat. sg. and nom. acc. pl., though *-þ* has been extended analogically to the nom. acc. singular. OE nom. acc. sg. *hæle* 'hero' has nom. pl. *hæleþ* (beside *hæleþas*), gen. pl. *hæleþa*, dat. pl. *hæleþum*. In the other WGmc. languages such nouns are declined according to other classes, e.g. OS *helið* 'hero' as an *a*-stem, OHG *magad* 'maiden' as an *i*-stem.

7.42 The heteroclitic stems

In PIE there was a class of neuter nouns with stems in **-r-* in the nom. and acc. sg., whereas in the other cases the stem was in **-n-*, as in Lat. *femur*, gen. *feminis* ‘thigh’.¹ This irregularity must have survived in some words into PGmc., since the different branches of Gmc. have generalized one or the other stem individually. The plainest example is Go. *watō* ‘water’, gen. *watins*, inflected as a regular neut. *an*-stem, except that the dat. pl. is *watnam* (other pl. cases unattested; hence, like gen. pl. *aúhsnē*, §7.30); cf. Gk. *ῥῶον* ‘water’, gen. *ῥῶατος* < **h₂ud-ŋ-* with post-PIE dental extension; cf. also Hittite *watar* (PIE **h₂uód-r-*), gen. *witenas*. NGmc. has also generalized the form of the stem with *-n-* in OIcel. *vatn*, a regular *a*-stem, though rare *vatr* occurs early, as confirmed by the rhyme in some skaldic poetry, e.g. *vatr* (in one manuscript, but *vatn* elsewhere) rhyming with *vitri* in Sigvatr Þórðarson, *Lausavísa* 19. WGmc. reflects only the stem in *-r-*, e.g. OE *wæter*, an *a*-stem. Also notable is Go. *fōn* ‘fire’, gen. *funins*, dat. *funin* (comprising all the attested cases), hence inflected as a root-stem, the only neuter root-stem in Gothic. To this corresponds OIcel. *funi*, inflected as a masc. *an*-stem, whereas WGmc. has again generalized the stem in *-r-*, OE *fȳr*, OS OHG *fiur* (neuter *a*-stems), but cf. the derivative OHG *funcho* ‘spark’ and the alternative, disyllabic form OHG *fuir* (spelt *vugir* in *Muspilli*), which is difficult to explain: see Bammesberger 1990: 205, Ringe 2017: 147, 162.² On the ablaut in heteroclitics, see Schindler 1975. On Go. *aba* ‘man’ as a heteroclit, see Johnsen 2005.

1. Schindler (1975) posits separate singular and collective paradigms for such nouns, e.g. nom. acc. sg. **h₂uód-r*, gen. **h₂uéd-ŋ-s*, nom. acc. collective **h₂uéd-ōr*, gen. **h₂ud-n-ēs* (though he does not assume an initial laryngeal).

2. On the reconstruction of a heteroclitic *l/n*-stem on the basis of comparison of Go. *sauil* ‘sun’ and OE *sunne* ‘sun’ (with cognates), see Bammesberger 1990: 206. See also Mottausch 2011: 80–1, Simms 2017.