4. NOUNS

4.1. DECLENSION OF NOUNS

4.1.1. Declension is made by adding terminations to different stem endings, vowel or consonant. The various phonetic changes in the language have given rise to the different declensions. Most of the case-endings, as shown in this Modern Indo-European grammar, contain also the final letter of the stem.

Adjectives are generally declined like nouns, and are etymologically to be classed with them, but they have some peculiarities of inflection which will be later explained.

4.1.2. Nouns and adjectives are inflected in four regular Declensions, distinguished by their final phonemes – characteristic of the Stem –, and by the opposition of different forms in irregular nouns. They are numbered following Graeco-Latin tradition: First or a-Declension, Second or o-Declension, Third or i/u-Declension, Fourth or Consonant Declension, and the variable nouns.

NOTE. The *Second* or *o-Declension* is also the Thematic Declension, opposed to the rest – and probably older in the evolution of PIE nominal inflection –, which form together the Athematic Declension.

Decl.	Stem ending	Nominative	Genitive
1.	**ā (ja/ī, ē, ō)**	*-Ø*	*-s*
2.	**e/o** (*Thematic*)	*m., f.-s, n.-m*	*-os, -osjo*
3.	**i, u** and Diphthong	*m., f.-s, n.-Ø*	*-eis, -eus; -jos, -wos*
4.	Sonants & Consonants	*-s, -Ø*	*-(e/o)s*
(**5**)	*Heteroclites*	*-Ø, -r*	*-(e)n*

The Stem of a noun may be found, if a consonant stem, by omitting the case-ending; if a vowel stem, by substituting for the case-ending the characteristic vowel.

NOTE. Most Indo-Europeanists tend to distinguish at least two major types of declension for the oldest PIE, Thematic and Athematic. Thematic nominal stems are formed with a suffix *-o-* (in vocative *-e*), and the stem does not undergo *ablaut*. The Athematic stems are more archaic, and

they are classified further by their ablaut behaviour: *acro-dynamic*, *protero-dynamic*, *hystero-dynamic* and *holo-dynamic*, after the positioning of the early PIE accent in the paradigm. For more on this, see Beekes (1995) and Meier-Brügger (2003).

4.1.3. The following are General Rules of Declension:

a. The Nominative singular for animates ends in -***s*** when the stem endings are **i**, **u**, **ī**, **ū**, Diphthong, Occlusive and Thematic (-***os***), or -Ø in **ā**, Sonant and **s**; while in the plural -***es*** is general, -***s*** for those in ā, and -***os*** for the Thematic ones.

b. The Accusative singular of all masculines and feminines ends in -***m*** or -***m̥*** (after consonant), the Accusative plural in -***ns*** or -***n̥s***.

c. The Vocative singular for animates is always -Ø, and in the plural it is identical to the Nominative.

d. The Genitive singular is common to animates and inanimates, it is formed with -***s***: -***s***, -***es***, -***os***. A very old alternative possibility is extended -***os-jo***. The Genitive plural is formed in -***ōm***, and in -***ām*** in a-stems.

e. The Obliques singular end usually in -***i***: it can be -***i***, -***ei***, -***ēi***, -***oi***, -***ōi*** or -***āi***, and their extensions. In the plural, there are two series of declensions, Instr. -***bhis***/-***mis*** (from Sg. -***bhi***), Dat.-Abl. -***bhos***/-***mos*** (PII -*bhjas*) as well as (BSl. and PII) Loc. in -***su***, Gk. -*si*.

NOTE. Meier-Brügger (2003) considers that "[e]vidence seems to indicate that while the dative and ablative plural were marked with *-*mos*, the instrumental plural was marked with *-*bʰi*" in PIH, and similarly Mallory & Adams (2006) differentiate for the oldest PIE declension a Dat. -*mus*, instrumental -*bhi*, and Abl. -*bh(j)os*. Comparison shows an Ins. Sg. -***bhi***, (cf. Gk. -*pʰi*, Myc -*pi*, and also *Arm.* Ins. *marb*), BSl. -***mi*** (cf. Lith. *akmenìmì*, O.C.S. *kamenĭmĭ*) and for North-West IE dialects a division between Italic+Celtic and Germanic+Balto-Slavic Plural forms: Celtic shows traces of an Instrumental -***bhis*** (cf. O.Ir. Dat.-Loc.-Inst.-Abl. *cridib*, and in Graeco-Aryan O.Ind. *sūnúbhis*, Av. *bāzubīs*, Arm. *srtiwkh*), Italic and Celtic show a Dat.-Abl. -***bhos*** (cf. Celtiberian Dat.-Loc.-Inst.-Abl. *arecoraticubos*, Lat. *matribus*, Osc. *luisarifs*), while Balto-Slavic shows Inst. -***mis*** (cf. Lith. *sunumìs*, O.C.S. *synumĭ*), Dat.-Abl. -***mos*** (cf. O.C.S. *synŭmŭ*, Lith. *sūnùms*, *sūnùmus*), and Germanic shows a Dat.-Abl.-Inst. -***m***-. Also, Indo-Iranian -*bhjas* (<*-*bhjos*), according to Meier-Brügger, "can thus be regarded as a cross between the instrumental *-*bʰi* and the dative/ablative *-*mos*". Even if some might consider these data enough to draw conclusions about a well-differentiated common PIH plural declension system, we think it is more appropriate to maintain in MIE the (conservative) reconstructible North-West IE West/East dialectal

differentiation, i.e. Dat.-Abl. **-bhos**/**-mos** (PII -*bhjas*), and Instr. **-bhis**/**-mis**, without using any of those *assimilation* theories proposed, as e.g. PIE Inst. *-m- → dialectal *-bh-.

f. Inanimates have a syncretic form for Nom.-Ac.-Voc. -Ø in Athematic, or -**m** in Thematic. The plural forms end in -**ā** in thematics and -**a** in athematics.

NOTE. About the nominative/accusative neuter plural, Meier-Brügger states: "in terms of content, the idea of a collective mass is certainly dominant. Therefore, the collective suffix (= athematic *-h_2- and thematic *-e-h_2-) is used, no ending (zero) added (...) The understanding of the neuter plural as collective explains the ancient IE characteristic, observable in isolated cases, of combination of the neuter plural and the singular of a verb (...)".

g. All Animates have the same form in the plural for Nom.-Voc., in -**es**.

4.1.4. The so-called Oblique cases – opposed to the Straight ones, Nom.-Acc.-Voc –, are Genitive and the Obliques proper, i.e. Dative, Locative, Instrumental and Ablative. IE languages show an irregular Oblique declension system.

NOTE. Sanskrit or Avestan had 8 cases, Anatolian and Italic dialects show up to 8 (cf. Osc. Loc. *aasai* for Lat. '*in ārā*', or Ins. *cadeis amnud* for Lat. '*inimicitiae causae*', *preiuatud* for Lat. '*prīuātō*', etc.), while Latin shows six and a semisystematic Locative notion; Balto-Slavic shows seven, Mycenaean at least six cases, while Koiné Greek and Proto-Germanic had five.

Nominal Desinences (Summary)

	Singular		*Plural*	
	Animates	*Inanimates*	*Animates*	*Inanimates*
NOM.	-**s**, -Ø		-**es**	
ACC.	-**m**	-**m**, -Ø	-**ns**	-**ă**, -Ø
VOC.	-**e**, -Ø		-**es**	
GEN.	-**os**, -**osjo**		-**om**	
DAT.	-**ei**		-**bhos**/-**mos**	
LOC.	-**i**		-**su**	
INS.	-**ē**, -**bhi**		-**eis**; -**bhis**/-**mis**	
ABL.	-**ed**, -**os**		-**bhos**/-**mos**, -**om**	

4.2. FIRST DECLENSION

4.2.1. FIRST DECLENSION PARADIGM

1. They are usually Animate nouns and end in **ā** (or **jā**), and rarely in **ja/ī**, **ē**, and **ō**. Those in **ā** are very common, generally feminine in nouns and always in adjectives, and they are used to make feminines in the adjectival Motion. Those in **ja/ī** are rare, generally feminine, and etymologically identical to the Neuter plural in Nom.-Acc.-Voc. Those in **ō** and **ē** are feminine only in lesser used words.

NOTE. The entire stem could have been reduced to MIE **a** (hence a-Declension), because this is the origin of the whole PIE stem system in PIH, the ending *-*(e)h₂*. See §3.7.3.

2. MIE First Declension corresponds loosely to the Latin First Declension (cf. Lat. *rosa, rosae*, or *puella, puellae*), and to the Ancient Greek Alpha Declension (cf. Gk. χώρᾱ, χώρᾱς, or τῑμή, τῑμῆς).

a-Declension Paradigm

	Animate	**Inanimate**
NOM.	-Ø	
ACC.	-**m**	-Ø
VOC.	-Ø	
GEN.	-**s**	
DAT.	-**i**	
LOC.	-**i**	
INS.	-Ø, -**bhi**/-**mi**	
ABL.	-**d**, (-**s**)	

NOTE. This declension in **ā**, older *-*eh₂*, is usually reconstructed in the Singular as from older PIH Nom.-Vocc. *-*eh₂*, Acc. *-*eh₂m*, Gen.(-Abl.) *-*eh₂os*, Dat. *-*eh₂ei*, Loc. *-*eh₂i*, Ins. *-*eh₂eh₁* or *-*eh₂bhi*, Abl. *-*eh₂ed*; as, Dat. *-*h₁ekweh₂ei* → **ekwāi**.

3. It is therefore identical to those nouns in **r**, **n**, **s** of the Fourth Declension, but for some details in vocalism: the Gen. has an -**s** and not -**es/-os**; the difference between Nom. and Voc. is that of -**ā** and -**a**. The zero-grade of the Nom.-Acc.-Voc. in **ja/ī** stems is different from the Gen. in -**jā**.

4.2.2. FIRST DECLENSION IN EXAMPLES

1. Nominative Singular in -*Ø*; as, **ekwā**, *mare*, **deiwā**, *goddess*, **patrjā**, *fatherland*, adj. **cowijā́**, *bovine*.

Examples of **ja/ī** include **potnja/potnī**, *lady*, *mistress*, **djewja/djewī**, *(sky) goddess*.

NOTE. Even though **ja/ī** was known to Late PIE speakers, those are rarely seen in North-West IE, and consequently they are usually MIE -**jā**; as, MIE **potnjā**.

Those in **ē**, **ō**, also rare, make the Nominative in -**s**; as, **bhidhēs**, from Lat. *fides* (but cf. O.Lat. *fidis*), *trust*, **spekjēs**, *species*, etc.

2. Accusative Singular in -**m**; as, **ekwām**, **patrjām**, **potnjam/potnīm**, **spekjēm**.

3. Vocative Singular in -Ø. It is normally identical to the Nominative, but disambiguation could happen with distinct vowel grades, i.e. Nom. in -**ā**, Voc. in -**a**.

4. Genitive Singular in -**s**; as, **ekwās**, **patrjās**, **spekjēs**.

The theme in **ja/ī** produces a Genitive Singular in -**ās**; as, **potnjās**.

5. Dative-Ablative Singular in -**āi**, **ekwāi**, **patrjāi**.

NOTE. It comes probably from an older PIE general Dat. *-**ei** ending; as, *$h_1$ekweh_2-ei* → **ekwāi**.

There is also a form -**ei** for themes in **ē** and in **ja/ī**.

6. Locative in -**āi**; as, **ekwāi**, **patrjāi**.

7. Instrumental in -*Ø, -ā-**bhi**/-ā-**mi***; as, **ékwābhi**, **pátrjāmi**.

	f. **ekwā**	*adj. f.* **cowijā́**	*f.* **potnja/potnī**	*f.* **spekjē**-
NOM.	ekwā	cowijā́	potnja/potnī	spekjēs
ACC.	ekwām	cowijā́m	potnjam/potnīm	spekjēm
VOC.	ekwă	cowijā́	potnja/potnī	spekjē
GEN.	ekwās	cowijā́s	potnjās	spekjēs
DAT.	ekwāi	cowijā́i	potnjāi	spekjei
LOC.	ekwāi	cowijā́i	potnjāi	spekjei
INS.	ékwābhi	cowijā́bhi	potnjā	spekjē
ABL.	ekwād	cowijā́d	potnjās	spekjēd

4.2.3. THE PLURAL IN THE FIRST DECLENSION

1. The following table presents the plural paradigm of the *a-Declension*.

NOM.	-*s*
ACC.	-*ns*
VOC.	-*s*
GEN.	-*m*
DAT.-ABL.	-*bhos*/-*mos*
LOC.	-*su*
INS.	-*bhis*/-*mis*

NOTE. The Plural is reconstructed as from PIH Nom.-Vocc. *-*eh₂s*, Acc. *-*eh₂ns* (<*-*eh₂-m-s*), Gen.(-Abl.) *-*eh₂om*, Dat.-Abl. *-*eh₂bh(j)os,* Loc. *-*eh₂su*, Ins. *-*eh₂bhis*; as, *h₁ekweh₂es* → **ekwās**.

2. The Nominative-Vocative Plural in -*s*: **ekwās**, **patrjās**, **cowijā́s**.

3. The Accusative Plural in -*ms*: **ekwāns**, **patrjāns**.

4. The Genitive Plural in -*m*: **ekwām**, **patrjām**.

5. The Dative and Ablative Plural in -*bhos*, -*mos*, and -*bhjos*; as, **ékwābhos**, **ékwāmos**.

6. The Locative Plural in -*su* (also PGk -*si*); as, **ékwāsu**, **pátrjāsu**.

6. The Instrumental Plural in -*bhis*, -*mis*; as, **ékwābhis**, **ékwāmis**.

NOTE. The Obliques have also special forms Gk. -*ā́isi*, -*ais*, Lat. -*ais*; as, Lat. *rosīs*<*rosais*.

	f. *ekwā*	f. *cowijā́*	f. *potnja*
NOM.	ekwās	cowijā́s	potnjas/potnīs
ACC.	ekwāns	cowijā́ns	potnjans/potnīns
VOC.	ekwās	cowijā́s	potnjas/potnīs
GEN.	ekwām	cowijā́m	potnjā́m
DAT.	ékwābhos	cowijā́mos	pótnjabhjos
LOC.	ékwāsu	cowijā́su	pótnjasu
INS.	ékwābhis	cowijā́mis	pótnjabhis
ABL.	ékwābhos	cowijā́mos	pótnjabhjos

4.3. SECOND DECLENSION

4.3.1. SECOND DECLENSION PARADIGM

1. The Stem of nouns of the Second Declension ends in **e/o**, and they are usually called *Thematic*. They can be animates and inanimates, as well as adjectives. The inanimates have an ending -**m** only in Nom.-Acc.-Voc. The animates, with a Nominative in -**s**, are generally masculine in nouns and adjectives, but there are also feminine nouns and animate adjectives in -**os**, probably remains of the old indistinctness of declension.

NOTE. The o-Declension is probably very recent in PIE – even though it happened already in PIH, before the Proto-Anatolian split – and that's why it is homogeneous in most IE dialects. As Mallory & Adams (2006) say, "[t]he o-stems were the most productive form of declension. By this is meant that through time, especially at the end of the Proto-Indo-European period and into the early histories of the individual Indo-European languages, the o-stems appeared to proliferate and replace other stem types. In Vedic Sanskrit, for example, they constitute more than half of all nouns. High productivity is often interpreted as evidence that the o-stems are a later declensional form than many of the other stems. Highly productive forms are ultimately capable of replacing many other forms as they provide the most active model by which speakers might decline a form".

2. MIE Second Declension is equivalent to the Second Declension in Latin (cf. Lat. *dominus*, *dominī*, or *uinum*, *uinī*), and to the Omicron Declension in Greek (cf. Gk. λόγος, λόγου, or δῶρον, δῶρου).

o-Declension Paradigm

	Animate	*Inanimate*
NOM.	-**os**	
ACC.	-**om**	-**om**
VOC.	-**e**	
GEN.	-**os**, -**osjo**	
DAT.	-**ōi**	
LOC.	-**oi**	
INS.	-**ō**	
ABL.	-**ōd**	

NOTE 1. This model could have been written without the initial vowel -*o*-, because the probable origin of this vowel is the ending vowel of some thematic stems, while other, primitive athematic stems were reinterpreted, and an -*o*- was added to their stems by way of analogy. So, this paradigm could be read Nom. -*s*, Acc. -*m*, Gen. -*s*, -*sjo*, -*so*, and so on.

NOTE 2. The thematic declension is usually reconstructed in the Singular as from older PIH Nom. *-*os*, Voc. *-*e*, Acc. *-*om* (neu. Nom.-Voc.-Acc. *-*om*), Gen. *-*os*, Dat. *-*ōi* (<*-*o*-*ei*), Loc. *-*oi*, Ins. *-*oh₁*, Abl. *-*ōd* (<-*o*-*ed*); as, Dat. **wĺkʷo*-*ei* → *wļqōi*, Abl. **wĺkʷo*-*ed* → *wļqōd*.

4.3.2. SECOND DECLENSION IN EXAMPLES

1. Nominative Singular Animate in -*os*; as in **wļqos**, *wolf*, **dómūnos**, *lord*, **wīrós**, *man*, adj. **cīwós**, *alive*.

2. Accusative Singular Animate in -*om*; as in **wļqom**, **dómūnom**, **cīwóm**.

3. Vocative Singular Animate in -*e*; as in **wļqe**, **dómūne**, **cīwé**.

5. The Nom.-Acc.-Voc. Sg. Inanimate in -*om*; as in **jugóm**, *yoke*, adj. **newom**, *new*.

4. Genitive Singular in -*os*, -*osjo*, also -*e/oso*, -*ī*; as in **wļqosjo**, **jugós**, **dómūnī**.

NOTE. The original Genitive form -*os* is rare, as the Genitive had to be distinguished from the Nominative. This disambiguation happens by alternatively lengthening the ending, as -*os*-*jo* (or *e/os*-*o*) or changing it altogether, as in -*ī*.

6. Dative Singular in -*ōi*: **wļqōi**, **dómūnōi**, **newōi**, **jugói**.

7. Locative Singular in -*oi*: **wļqoi**, **dómūnoi**, **newoi**, **jugói**.

8. Instrumental Singular in -*ō*: **wļqō**, **dómūnō**, **newō**, **jugó**.

9. The Ablative Singular is formed in -*ōd*: **wļqōd**, **cīwód**, **jugód**.

	*m. **wļqo**-*	*n. **jugó**-*
NOM.	wļqos	jugóm
ACC.	wļqom	jugóm
VOC.	wļqe	jugom
GEN.	wĺqosjo	jugós
DAT.	wļqōi	jugói
LOC.	wļqoi	jugói
INS.	wļqō	jugó
ABL.	wļqōd	jugód

4.5.3. THE PLURAL IN THE SECOND DECLENSION

1. The Thematic Plural system is usually depicted as follows:

	Animate	*Inanimate*
NOM.	*-ōs, (-oi)*	
ACC.	*-ons*	*-ā*
VOC.	*-ōs, (-oi)*	
GEN.	*-ōm*	
DAT.-**ABL**.	*-obhos/-omos*	
LOC.	*-oisu*	
INS.	*-ōis*	

NOTE. The Animate Plural is reconstructed as PIH Nom.-Voc. *-ōs (<*-o-es), Acc. *-ons (<*-o-m-s), Gen.(-Abl.) *-ŏm (<*-o-om), Dat.-Abl. *-o(i)bh(j)os/-omos, Loc. *-oisu (<*-o-eis-su), Ins. *-ŏis (<*-o-eis); as,*wḷkwo-es → **wḷqōs**. Inanimates have a Nom.-Voc.-Acc in *-oh₂ (or *-eh₂) evolved as -**ā** in most dialects. A Nom.-Voc. (pronominal) ending -**oi** is also found.

2. The Nominative-Vocative Animate Plural in -**ōs**; as, **wḷqōs, dómūnōs, wīrṓs**.

3. The Accusative Animate Plural in -**ons**; as, **wḷqons, dómūnons, cīwóns**.

4. The Nom.-Voc.-Acc. Inanimate Plural usually in -**ā**; as, **jugā́, cīwā́**.

5. The Genitive Plural in -**ōm**; as, **wḷqōm, dómūnōm, cīwṓm, jugṓm**.

6. For the Obliques Plural, Dat.-Abl. **wḷqomos**, Loc. **wīrṓisu**, Ins. **jugṓis**.

	*m. **wlqo**-*	*n. **jugo**-*
NOM.	wḷqōs	jugā́
ACC.	wḷqōms	jugā́
VOC.	wḷqōs	jugā́
GEN.	wḷqōm	jugṓm
DAT.	wĺqobhos	jugṓmos
LOC.	wĺqōisu	jugóisu
INS.	wḷqōis	jugṓis
ABL.	wĺqobhos	jugómos

4.4. THIRD DECLENSION

4.4.1. THIRD DECLENSION PARADIGM

1. Third Declension nouns end in **i**, **u** (also **ī**, **ū**) and Diphthong.

2. This declension usually corresponds to Latin nouns of the Third Declension in -*i* (cf. Lat. *ciuis*, *ciuis*, or *pars*, *partis*), and of the Fourth Declension in -*u* (cf. Lat. *cornū*, *cornūs*, or *portus*, *portūs*).

i/u-Declension Paradigm

	Animate	*Inanimate*
NOM.	-***s***	
ACC.	-***m***	-*Ø*
VOC.	-*Ø*	
GEN.-**ABL**.	-***s***	
DAT.	-***ei***	
LOC.	-*Ø*, -***i***	
INS.	-*ī*/-*ū*, -*ē*, (-***bhi***/-***mi***)	

NOTE 1. The so-called *common*, *basic* or *athematic* paradigm, the hypothetically oldest attainable PIE noun declension system, is reconstructed in the Singular as Nom. *-*Ø*, *-*s*, Acc. *-*m*, Voc. *-*Ø*, Gen.(-Abl.) *-*(é/o)s*, Dat. *-*ei*, Loc. *-*Ø*, *-*i*, Ins. *-*(é)h₁*, Abl. *-*(e)d*. This was a paradigm common to the i/u and Consonant declension (*v.i.*), and it was probably inherited (and innovated) by the first and second declensions.

NOTE 2. Reduplication or combination with the alternating endings -***i***, -***ei***/-***oi*** and -***u***, -***eu***/-***ou***, was a common resort in the attested dialects that distinguished Dat. and Loc. in this declension, as in -***i***-***ei***, -***ei***-***ei***, -***eu***-***ei***, and so on, to differentiate similar forms.

3. The animates in **i** and **u** are masculine or feminine (indifferent to the distinction in adjectives); those in **ī** and **ū**, always feminine.

4. The -***s*** can indicate Nominative and Genitive: the distinction is made through the full-grade of the vowel before the declension, i.e. Type I (older) Gen. -***ei***-***s*** (or ***oi***-***s***) for **i**, -***eu***-***s*** (or ***ou***-***s***) for **u**; Type II (newer) in -***(e)i***-***os***, -***(e)u***-***os***.

NOTE. The Vocative of the animates is the same as the Nom.-Acc.-Voc. of the inanimates.

4.4.2. IN I, U

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1. Nominative Singular Animate in -**s**; as in **owis**, *sheep*, **noqtis**, *night*, **ghostis**, *guest*, **sūnús**, *son*, **egnis**, *fire*, **pṛtus**, *ford*, **swḗdhus**, *custom*; adj. **swādus**, *pleasant*.

2. Accusative Singular Animate in -**m**; as in **owim**, **noqtim**, **ghostim**, **sūnúm**.

3. Vocative Singular Animate in -**Ø**, or full -**ei**, -**eu**; **owi**, **sūnéu/sūneu**, **swēdhu**.

NOTE. Full vocalism helps differentiate animates (in -**ei**, -**eu**) from inanimates (in -**i**, -**u**).

4. The Nom.-Acc.-Voc. Singular Inanimate in -**Ø**; as in **mari**, *sea*, **kṛdi**, *heart*, **peku**, *cattle*, **deru**, *wood*, **medhu**, *mead*, adj. **swādu**.

5. Type I Genitive Singular in -**eis**, -**eus**, also -**ois**, -**ous**; as, **ghosteis**, **mareis**, **sūnéus**, **swēdheus**, adj. **swādeus**.

Type II in -**(e)jos**, -**(e)wos**; as, **owjos**, **noqtjos**, **kṛdejós**, **swḗdhewos**, **pékewos**.

NOTE. Some -**ei**-, -**eu**- genitives were remade into the newer -(**e**)**jo**-, -(**e**)**wo**-; as, old *dreus*, *pṛtéus*, *owéis*, *egnéis*, *pekéus*, into MIE **dérewos**, **pṛtwos**, **owjos**, **egnjos**, **pékewos**.

6. Dat. Sg. in -**ei**, usually full -**ei-ei**, -**eu-ei**; as, **ghóstejei**, **pékewei**.

NOTE. For a Dat. Sg. in -**ei**, pure stem or full ending plus -**i**, cf. Gk. -*seï* (<*-*t-ej-i?*), O.C.S. *kosti*.

7. Loc. Sg. in -**ei**, -**eu**, usually lengthened -**ēi**, -**ēu**, -**ewi**; as, **noqtēi**, **sunḗu**.

8. Ins. -**ī**, -**ū** (<*-*h₁*), in -**ē** (<*-*eh₁*) following the Gen., or -**bhi**/-**mi**: **pṛtū**, **pṛtwē**.

NOTE. The Obliques show weak stems (root ablaut and accent shift) in old root nouns, *v.i.*

	Type I			*Type II*		
	f. **ghosti**-	m. **sūnu**-	n. **mari**-	f. **noqti**-	m. **pṛtu**-	n. **peku**-
NOM.	ghostis	sūnús	mari	noqtis	pṛtus	peku
ACC.	ghostim	sūnúm	mari	noqtim	pṛtum	peku
VOC.	ghosti	sūnéu	mari	noqtei	pṛtu	peku
GEN.	ghosteis	sūnéus	mareis	noqtjos	pṛtwos	pékewos
DAT.	ghóstejei	sūnéwei	márejei	nóqtejei	pṛtewei	pékewei
LOC.	ghostēi	sūnḗu	marēi	noqtēi	pṛtēu	pékewi
INS.	ghostī	sūnewē	marī	noqtī	pṛtwē	pekū
ABL.	ghosteis	sūnéus	mareis	noqtjos	pṛtwos	pékewos

THE STRONG TYPE

Its inflection is similar to the consonant stems, and they have no alternating vowels before the declension; **ī** and **ū** are substituted before vowel by -**ij**, -**uw**. They are always feminine, and they cannot be inanimates nor adjectives. They are mostly PIE roots (in *-*iH*, *-*uH*), and found mainly in Indo-Iranian.

	f. *bhrū*-	f. *sū*-	f. *dhī*-	f. *wḷqī*-
NOM.	bhrūs	sūs	dhīs	wḷqīs
ACC.	bhrūm	sūm	dhīm	wĺqīm
VOC.	bhrū	sū	dhī	wḷqī
GEN.	bhruwós	suwós	dhijós	wḷqijós
DAT.	bhruwéi	suwéi	dhijéi	wḷqijéi
LOC.	bhruwí	suwí	dhijí	wḷqijí
INS.	bhrūbhí	sūbhí	dhībhí	wḷqībhí
ABL.	bhruwós	suwós	dhijós	wḷqijós

4.4.3. IN DIPHTHONG

1. There are long diphthongs **āu**, **ēu**, **ōu**, **ēi**, which sometimes present short vowels.

NOTE. Other endings that follow this declension, as **ā**, **ē**, **ō** are probably remains of older diphthongs. Therefore, these can all be classified as Diphthong endings, because the original stems were formed as diphthongs in the language history.

	cōu-	m. *djēu*-	f. *nāu*-
NOM.	cōus	djēus	nāus
ACC.	cōm	djēm/dijḗm	nāum
VOC.	cou	djeu	nau
GEN.	cous	diwós	nawós
DAT.	cowéi	diwéi	nawéi
LOC.	cowí	djewi/diwí	nawí
INS.	coū	djeū	naū
ABL.	cous	diwós	nawós

In zero grade Genitives there are forms with -*i*- or -*ij*- or -*u*- or -*uw*-, depending on the diphthongs.

NOTE 1. Some secondary formations – especially found in Greek – are so declined, in -*eus*, -*euos* as in Av. *bāzāus*, Arm.,Gk. *Basileus*, possibly from PIE -**āus** (Perpillou, 1973) but Beekes (2007) considers it Pre-Greek.

NOTE 2. Stang's law governs the word-final sequences of a vowel + semivowel *j* or *w* + nasal, simplified in PIE so that semivowels are dropped, with compensatory lengthening of a preceding vowel, i.e. *VwM, VjM* → **V:M**; as, **djēm**, not *$*djewm̥$; **cōm**, not *$*g^wowm̥$, **cōns**, not *$*g^wown̥s$, etc.

A similar trend is found with laryngeals, *$*Vh_2m$ > **V:M**; as, **sūm**, also attested as **suwm̥**, etc.

4.4.4. THE PLURAL IN THE THIRD DECLENSION

1. The following table depicts the general plural system, common to the Fourth Declension.

	Animate	*Inanimate*
NOM.	-*es*	
ACC.	-*ns*	-*a*
VOC.	-*es*	
GEN.	-*om*	
DAT.-**ABL**.	-*bhos*/-*mos*	
LOC.	-*su*	
INS.	-*bhis*/-*mis*	

NOTE. A general Accusative Plural ending -**ns** (-**n̥s** after consonant) is usually reconstructed for Late PIE, because e.g. with the -**u**- stem PIE *$*-u-ns$, descendents in early IE languages show *$*-uns$, *$*-ūns$, *$*-ūs$; cf. Goth. *sununs*, O.Ind. *sūnū́n*, Gk. *υἱυνς*, Lith. *sū́nus*, O.C.S. *syny*, Lat. *manūs*. See H. Rix (FS Risch 1986 p. 586-590). Most scholars also posit an original, older *$*-ms$ form (a logical accusative singular -**m**- plus the plural mark -**s**), but they usually prefer to reconstruct the attested -*ns*, thus (implicitly) suggesting an intermediate phase common to all proto-languages in a Late PIE stage, i.e. PIH *$*-ms$ → Late PIE *$*-ns$. For a PIH *$*-ms$, cf. maybe Hitt. -*uš* (Ottinger 1979), but Lyc -*s* (<*$*-ns$?). To be consistent with decisions taken elsewhere in this grammar (as e.g. reconstructed PIE -TT- as MIE intermediate -sT-, see §2.8.5), the intermediate, attested -**ns** is the conservative choice, whereas *$*-ms$ is just a quite certain hypothesis about its origin.

2. Unlike in the Singular, in which only some Nominatives have an -**s**, in Nom.-Voc. Plural the -**s** is general, and there is always one fix-grade vowel, **e**. So, the opposition Singular-Plural in -**s**/-**es** is actually Ø/**e**.

3. The Nom.-Voc. Plural Animate is made in -**es**, in full-grade -**ei-es** for **i**, -**eu-es** for **u**, and -**ijes**, -**uwes**, for **ī**, **ū**; as **ówejes**, **sūnewes**, **pŕtewes**, **bhruwes**.

4. The Accusative Plural Animate is in -**ns**: **owins**, **sūnúns**, **pŕtuns**, **cōns**.

5. Nom.-Voc. Acc. Plural Inanimate in -**a**: **pekwa**, **marja**, **swādwá**.

NOTE. The Athematic inanimate plural ending commonly represented by -**a** corresponds to an older collective *-*h₂*, which sometimes lengthened the preceding vowel (**i** or **u**) instead; as, for Nom.-Acc.-Voc. Pl. *triH, *three*, cf. Skr. *trī*, Lat. *trī*, Ir. *trī*, but Gk. *tría*; see §3.7.3.

6. Gen. Pl. in -**om** (Type I usually in full -**ei-om**, -**eu-om**); as, **ghóstejom**, **pŕtwom**.

NOTE. The -**m** of the Acc. sg. Animate, Nom.-Acc.-Voc. sg. Inanimate and this case could sometimes be confused. It was often disambiguated with the vocalic grade of the Genitive, full or lengthened, as the singular is always Ø.

7. For the Obliques Plural, cf. Dat.-Abl. **ówibhos**, **sūnumos**, **nóqtimos**; Loc. **sūnusu**, **nóqtisu**, Ins. **sūnubhis**, **ówimis**, **máribhis**.

NOTE. In the plural, as in the singular, the Genitive and the Obliques are made with the weak form (vowel change and accent shift), if it hadn't been replaced. This rule, common to the fourth declension, affects the oldest nouns; as, Nom. *owis*, Gen. *oweis*, but remade Nom. **owis**, Gen. **owjos**; old *pertus*, *pŕteus*, but remade **pŕtus**, **pŕtwos**; n. *kerd*, *kŕdés*, new **kŕdi**, **kŕdejós**.

	Type I		Type II		Diphth.
	f. **owi**-	m. **sūnu**-	f. **noqti**-	n. **peku**-	m. **cou**-
NOM.	ghóstejes	sūnewes	nóqtejes	pekwa	cowes
ACC.	ghostins	sūnúns	noqtins	pekwa	cōns
VOC.	ghóstejes	sūnewes	nóqtejes	pekwa	cowes
GEN.	ghóstejom	sūnewom	noqtjom	pékwom	cowom
DAT.	ghóstibhos	sūnumos	nóqtibhos	pékumos	coubhos
LOC.	ghóstisu	sūnusu	nóqtisu	pékusu	cousu
INS.	ghóstibhis	sūnumis	nóqtibhis	pékumis	coubhis
ABL.	ghóstibhos	sūnumos	nóqtibhos	pékumos	coubhos

4.5. FOURTH DECLENSION

4.5.1. FOURTH DECLENSION PARADIGM

1. The Stem of Nouns of the Second Declension ends in Consonant or Sonant, i.e. -**n**, -**r**, -**s**, Occlusive (especially -**t**), and rarely -**l**, -**m**. The inflection of animates is essentially the same as that of the Second or Thematic Declension.

2. Nouns of the Fourth Declension in MIE correspond to Latin nouns of First Declension in -*r* (cf. Lat. *magister*, *magistrī*), and Third Declension in consonant (cf. Lat. *prīnceps*, *prīncipis*, *phoenīx*, *phoenīcis*, *cōnāmen*, *cōnāminis*, etc.), and to the Ancient Greek Labial and Velar declension (cf. Gk. Ἄραψ, Ἄραβος, or Φρὺξ, Φρυγός).

The Nominative ending is -**s** (with Occlusive, -**m**, -**l**), but there is also a Nominative Sg. with pure stem vowel (desinence -Ø and lengthened ending vowel), so that the full-grade Vocative is differentiated. And there is no confusion in Nom./Gen., as -**s** has a different vowel grade (Nom. -**s**, Gen. -**és** or -**os**).

Consonant-Declension Paradigm

	Occlusive, -*m*, -l	-*r*, -*n*, -*s*
NOM.	-**s**	-Ø (long vowel)
ACC.	-ṃ	
VOC.	-Ø	-Ø (full grade)
GEN.-**ABL**.	-**os**	
DAT.	-**ei**	
LOC.	-**i**, -Ø	
INS.	-ē̄, -**bhi**/-**mi**	

NOTE. Beside the usual Loc. ending -*i* there was also the bare stem without ending. Such unmarked ('flat') locatives are widely encountered in modern languages (cf. Eng. *next door*, *home*), and in PIE they are well-attested in n-stems, but are rare in other consonant stems.

3. Inanimates have pure vowel stems with different vowel grades. In nouns there should be no confusion at all, as they are different words, but neuter adjectives could be mistaken in Nominative or Vocative Animate. Distinction is thus obtained with vocalism, as in Animate -**ōn** vs. Inanimate -**on**, Animate -**ēs** vs. Inanimate -**es** (neuter nouns in -**s** are in -**os**).

4.5.2. IN OCCLUSIVE, M, L

1. Nominative Sg. Animate in -*s*; as, **pods**, *foot*, **regs**, *king*, **preks**, *plea*, **bhurghs**, *watch-tower*, adj. **bélowents**, *strong*.

NOTE. The Nom. of some stems are often reconstructed in long vowel; as, *pōds*, *rēgs*, *prēks*. Such forms were probably levelled due to the loss of the Nom. ending -*s* in some dialects, *v.i.*

2. Accusative Singular Animate in -*m̥*; as, **podm̥**, **regm̥**, **bhurghm̥**, **bélowentm̥**.

NOTE. Forms in **m** make the accusative by lengthening the root vowel, *Vmm > *V:m, as a consequence of Stang's Law (v.s.); as, Nom. *doms*, *house*, Acc. *dōm* (<*dom-m̥*), cf. Arm. *tun* or Gk. δῶ, or Nom. *dhghōm*, *earth*, Acc. *dhghōm* (<*dhghom-m̥*), cf. Skr. *kṣām*. Root nouns like these ones are quite old in the language history, and are therefore rare in Late PIE dialects, which had usually replaced them by newer derived nouns; as, MIE **domos**, *house*, or **dhghm̥ós**, *earth*.

3. Vocative Singular Animate in -Ø; a sin **pod**, **reg**, **bhurgh**, **bélowent**.

4. The Nom.-Acc.-Voc. Singular Inanimate in -Ø; as **somn̥t**, *body*, or adj. **bheront**.

5. Genitive Singular in −*os*; as, **pedos**, **rēgos**, **bhurghos**, **bélowentos**, **bhérontos**.

NOTE. Older root nouns made the Genitive-Ablative often in -*s,* -*és*, i.e. Ablaut and Accent on stem vowel; as, for strong Nom. *doms*, weak Gen. *dems* or *dmés*, for strong Nom. *dhghōm*, Gen. *dhghmés* or (probably already in Late PIE) metathesized *ghdhmés*. They appear in Late PIE dialects mainly frozen in compounds; as, *dems* in *demspots* (v.s.), because most of them were reinterpreted; as, Nom. *pods*, Gen. *pedés*, into a newer paradigm **pods**, **pedos**.

6. Dative Singular in -*ei*: **pedei**, **rēgei**, **bhurghei**, **bhérontei**.

7. Locative Singular in -*i*: **pedi**, **rēgi**, **bhurghi**, **bélowenti**.

	m. pod-	*f. prek-*	*f. bhurgh-*	*n. bheront-*
NOM.	pods	preks	bhurghs	bheront
ACC.	podm̥	prekm̥	bhurghm̥	bheront
VOC.	pod	prek	bhurgh	bheront
GEN.	pedos	prēkos	bhurghos	bherontos
DAT.	pedei	prēkei	bhurghei	bherontei
LOC.	pedi	prēki	bhurghi	bheronti
INS.	pedmi	prēkbhi	bhurghmi	bherontbhi
ABL.	pedos	prēkos	bhurghos	bherontos

4.5.3. IN R, N, S

1. Nominative Singular Animate in -Ø with lengthened vowel; as in **mātḗr** (also **mátēr**), *mother*, **elōr**, *swan*, **kwṓn**, *dog*, **Osēn**, *autumn*, adj. **juwṓn**, young.

NOTE. For those in **n**, a Nom. without -**n** is alternatively reconstructed; as, *kwṓ* (cf. Skr. *śvā*).

Stems in **s** don't show a systematic vowel lengthening; as, **opos**, *work*, **nebhos**, *cloud*, **ōs**, *mouth*, **mōs**, *character*, **spes**, *hope*, etc. Adjectives usually end in -**es**; as, **sugenḗs**, *well-born, of good stock* (cf. Gk. *eugenḗs*, O.Ind. *sujanāḥ*).

2. Accusative Sg. Animate in -**m**; as in **māterṃ**, **élorṃ**, **kwonṃ**, **júwonṃ**, **óposṃ**.

3. Voc. Sg. An. in -Ø with full vowel; as **mātér**, **élor**, **kúon**, **juwon**, **opos**, **sugenés**.

4. The Nom.-Acc.-Voc. Singular Inanimate in -Ø; as in **nōmṇ**, *name*, **genos**, *kin*.

The adjectives in -**s** have a neuter in -**es**; as, **sugenés**.

5. Genitive Singular in -**os**, usually with an **e**, not an **o**, as the final stem vowel; as, **éleros**, **nomenos**, **bhugenos**, **júwenos**, **nébheses**, **géneses**, **ópesos**, **ēsos**, **spēsos**; but cf. zero-grade in old stems, as **mātrós**, **kunos**, and also **o**, as **mosós**.

NOTE. Old root nouns made the Genitive in -**és**, with Ablaut and Accent shift; as, *kunés*. For **mātḗr**, **patḗr**, **bhrātēr**, apart from standard Gen. **mātrós**, **patrós**, **bhrātros**, older Gen. -**és**), alternative *mātŕs*, *patŕs*, *bhrātŕs*, existed in PIE; as, O.Ind. *mātúr*.

6. Dative Singular in -**ei**, **mātréi**, **élerei**, **kunei**, **júwenei**, **ópesei**, **sugenesei**.

7. Locative Singular in -**i**: **mātrí**, **éleri**, **kuni**, **júweni**, **ópesi**, **sugenesi**.

8. Instrumental Singular in -**ē** or -**bhi**/-**mi**: **mātṛmí**, **élerbhi**, **patrē**, **kunmi**, **júwenbhi**, **ópesbhi**, **sugenesbhi**.

	m. kwon-	*f. pater-*	*n. genes-*	*n. nōmṇ-*	*adj. sugenes-*
NOM.	kwṓn	patḗr	genōs	nōmṇ	sugenḗs
ACC.	kwonṃ	paterṃ	genōs	nōmṇ	sugenesṃ
VOC.	kwon	patér	genōs	nōmṇ	sugenés
GEN.	kunos	patrós	génesos	nómenos	sugeneses
DAT.	kunei	patréi	génesei	nómenei	sugenesei
LOC.	kuni	patrí	génesi	nómeni	sugenesi
INS.	kunmi	patṛbhí	génesmi	nómenbhi	sugenesmi
ABL.	kunos	patrós	génesos	nómenos	sugeneses

4.5.4. THE PLURAL IN THE FOURTH DECLENSION

With a paradigm common to the Third Declension, here are some inflected examples.

	*m. **pod**-*	*f. **prek**-*	*m. **kwon**-*	*f. **māter**-*	*n. **genes**-*
NOM.	podes	prekes	kwones	māteres	génesa
ACC.	podn̥s	prekn̥s	kwonn̥s	matern̥s	génesa
VOC.	podes	prekes	kwones	māteres	génesa
GEN.	pedom	prēkom	kunom	mātróm	génesom
DAT.	pedmos	prēkbhos	kunmos	mātr̥bhós	génesbhos
LOC.	pedsu	prēksu	kunsu	mātr̥sú	génesu
INS.	pedmi	prēkmi	kunmi	mātr̥bhís	génesbhis
ABL.	pedmos	prēkmos	kunmos	mātr̥bhós	génesbhos

4.6. VARIABLE NOUNS

4.6.1. Many nouns vary in Declension, and they are called *Heteroclites*.

4.6.2. Heteroclitic forms are isolated and archaic, given only in Inanimates, as remains of an older system, well attested in Anatolian.

4.6.3. They consist of one form to mark the Nom.-Acc.-Voc, and another for the Obliques, usually ***r/(e)n***; as, **ghēsr̥/ghésenos**, *hand*, **gutr̥/gútenos**, *throat*, **kowr̥/kówenos**, *cavern*, **ūdhr̥/ū́dhenos**, *udder*, **bhemr̥/bhémenos**, *thigh*, **wedhr̥/wédhenos**, *weapon*, **gutr̥/gútenos**, *throat*, **kowr̥/kówenos**, *cavern*, etc.

4.6.4. Different paradigms are also attested:

- Opposition ***r/(e)n***- (legthened); as, **jeqr̥/jeqóneros**, *liver*,

NOTE. For PIE **jeqr̥**, cf. Ved. *yákr̥t*, Gk. *hēpar*, Lat. *iecur*, Av. *yākarǝ*, and compare its Obl. Skr. *yakn-ás*, Gk. *hḗpat-os<*hēpn̥t-*, Lat. *iecinoris*.

- Alternating with other suffixes; as, **gheimr̥/gheims/ghjiems**, *winter*, **skīwr̥/kīwōn/skinōn**, *shinbone*, later *column*, **wēsr̥/wēsn̥tós**, *spring*, **wedr̥/wédenos/wodā**, *water*, **swepr̥/swopnos**, *dream*.
- Formed from the consonant **r** or **n** of the heteroclite; as, **pāwr̥/pūr/puōn**, *fire*, **nomr̥/nómeros/nómenos**, *precision, number*, Gk. *skōr* (gen. *skatos*), Hitt. *šakkar* (gen. *šaknaš*), Lat. *-scerda*, "*shit*".

4.6.5. The *Heteroclites* follow the form of the Genitive Singular when forming the Obliques. That is so in the lengthening before declension, vocalism, and in the accent too.

4.7. VOCALISM BEFORE THE DECLENSION

4.7.1. The Predeclensional vowel is that which precedes the ending, even the Ø ending; i.e., we say that Nom. **patḗr** has a long predeclensional vowel; that the Vocative **patér** has a full one, and that **patréi** has it Ø. Other example of the three possibilities is the alternating *pod*, *ped* and -*pd*-.

NOTE. The vocalic changes in timbre and grade aren't meaningful by themselves, they are multifunctional: they can only have meaning in a specific declension, and it is not necessarily always the same. They are thus disambiguating elements, which help distinguish homophones, i.e., words that sound alike.

Changes in vocalism, as we have already explained, happens mainly in PIE roots, and is found in Late PIE dialects only in words that were not remade into the new declension paradigm, i.e. the standard fixed vowel grade and accent.

NOTE. The lengthening of the predeclensional vowel in **r**/**n**/**s** stems has been explained (Szemerényi's law) as a consequence of an older (*regular PIE*) Nom. -**s** ending; as, *$ph_2tér$-s→*$ph_2tḗr$*, *$kwon$-s→*$kwōn$*, etc. Cf. e.g. the evolution PIE **pod-s** (PII *pads*) → Skr. *pāt*.

4.7.2. Two kinds of nominal inflection have no alternating stem vowel: that in **i**, **u**, and that of the participles of Reduplicates.

4.7.3. Stems in **r** and **n** had two possibilities, both with a Nom. sg. in -Ø and lengthened vowel.

1. Nom. with lengthened vowel, Acc., Voc. with full vowel, and Gen. -Ø. The timbre can be **e** or **o**, depending on the words.

a. In **r**, as in Nom. **mātḗr**, Acc. **māterm̥**, Voc. **mātér**, Gen. **mātrós**.

b. In **n**, as in Nom. **kwōn/kuwṓn**, Acc. **kwonm̥/kuwonm̥**, Voc. **kuon/kuwon**, Gen. **kunós/kunés**.

2. Sometimes, the Genitive had a full grade, as the Accusative and the Vocative. This grade is redundant, not necessary for the disambiguation of the Genitive from the Nominative. There were different timbres **e** and **o**, sometimes **o** in Nom.-Acc.-Voc., and **e** in Gen., sometimes **o** in Acc.-Voc.-Gen. and **e** in Obl.

4.7.4. There was usually the same vocalism in nouns ending in Occlusive.

An exception is made in the adjectives and participles in -**nt**, which present full vowel in Nom.-Acc.-Voc., and zero-grade in the Genitive; as, Nom. **bheronts**, Acc. **bherontm̥**, Voc. **bher̥ntós**.

NOTE. There are remains of what seems to be an old alternating vocalism in monosyllabics. The variants **dem**/**dom**, **ped**/**pod**, **neqt**/**noqt**, etc. suggest an original (i.e. IE II) paradigm Nom. **pod**-s, Acc. **pod**-m̥, Gen. **ped**-ós. This is, again, mostly irrelevant for Modern Indo-European, in which both alternating forms may appear in frozen vocabulary, either with **o** or **e**; as, i-declension **noqtis**, *night*.

4.7.5. Stems in **s** do not present a zero-grade. Animates, as already said, oppose a lengthened-vowel Nominative to the other cases, which have full vowel, i.e., Nom. -**ēs**, rest -**es**, Nom. -**ōs**, rest -**os**.

4.7.6. We know already what happens with stems in **i**, **u**, which have two general models or types:

Type I. In **i**, Nom. -**i-s**, Acc. -**i-m**, Voc. -**ei** or -**i**, Gen. -**ei-s** (or -**oi-s**).

In **u**, Nom. -**u-s**, Acc. -**u-m**, Voc. -**eu** or -**u**, Gen. -**eu-s** (or -**ou-s**).

Type II. In **i**, Nom. -**i-s**, Acc. -**i-m**, Voc. -**ei** or -**i**, Gen. -**(e)i-os**.

In **u**, Nom. -**u-s**, Acc. -**u-m**, Voc. -**eu** or -**u**, Gen. -**(e)u-os**.

NOTE. This is an inversion of the general paradigm: the Nom.-Acc.-Voc. has zero-grade (**i**, **u**) but for some Voc., the Gen. Ø or full (**ei**, **eu**). Distinction is obtained through alternating forms; as in Voc., in which the ending -**ei** distinguishes it from Neuters in -**i**; or with changes of Gen. **e**/**o**.

4.7.7. Those in Long Diphthong alternate the diphthong (or long vowel) with **j** or **w**, which represents the Ø-grade; as in **djēus**, **djēm**, **diwós**; or **nāu**-s, **naw**-ós. Uniform vocalism (i.e., no vowel change) is the general rule, though.

NOTE. These diphthongs reflect an older situation, of a vowel plus a laryngeal, and they are probably related to nouns in **a**, and also to those in **e** and **o**.

4.7.8. Stems in **ā** usually maintain an uniform vocalism: Nom.-Voc. -**ā**, Acc. -**ām**, Gen. -**ās**. But those in **ja/ī** may alternate Nom.-Voc. -**ja**/-**ī**, Gen. -**jās**.

NOTE. There are also remains of -*a* in Voc. (and even Nom.), as well as -*ai*, cf. Gk. γυναι (*gunai*, an example also found in Armenian), and other forms in -*ai* in Latin (as *rosae*<-*rosai*), Old Indian and other IE dialects. Those in ē and ō show also traces of alternating phonetic changes.

4.7.9. Neuter stems distinguish the Nom.-Acc.-Voc. forms by having a predeclensional vowel, normally Ø (the ending is also Ø, but for thematic stems), as generally in nouns in **i**, **u**, **r**, **n** and Occlusive; as **kṛdi**, **madhu**, **nōmṇ**. There are exceptions, though:

1. Nouns with lengthened or full vowel; as, PGk. udōr for MIE **wedṛ**;

2. Nouns in **s** cannot have -Ø-, they have -*o*- in nouns, -*e*- in adjectives; as, **genōs**, **sugenḗs**.

3. Finals **e/o** have a uniform predeclensional vowel, normally *o*, plus Nom.-Acc.-Voc ending -*m*.

In the Oblique cases, neuters are declined like the animates.

NOTE. There are no Neuters Sg. in -**ă̄**, but for those which became common plural nouns, as e.g. Nom. Sg. **Bubljā**, *The Bible*, lit."*the books*", from Gk. *bubliom*, *book*.

4.8. VOCALISM IN THE PLURAL

4.8.1. Vocalism in the Plural is generally the same as in the Singular. In the straight cases, Nom.-Acc.-Voc. have full vowel grade (there is no Nominative with lengthened vowel), and the Gen. is in the zero-grade.

There are also some special situations:

1. There are examples of full vowel in Nom.-Voc.; as, **i**, **u** stems in -*ei-es* and -*eu-es*; **r** stems in in -*er-es*, -*or-es*; **n** stems in -*en-es*, -*on-es*; **s** stems in -*es-es*.

2. Sometimes, the vowel timbre varies; as, **akmōn/ákmenes**, (*sharp*) *stone*, which give Lith. *akmuö/akmenes* and Sla. **kāmōn/kāmenes*, cf. O.C.S. *kamy/kamene*.

3. There are some Ø-grades, as Gk. *óies*, and analogical forms, as Gk. *kúnes*, Lat. *carnes*.

4.8.2. The Ø-grade, an exception in the Nom.-Voc., is usual in Accusative Plural in **i**, **u** stems; as in derivatives with forms -*i-ns*, -*u-ns*.

As a general rule, then, the Plural has a full vowel: **ákmenes**, **māteres**, etc.

4.8.3. In consonant declension, Inanimates in **s** have a Nom.-Acc.-Voc. Pl. -***es***- in the whole inflection (but Nom.-Acc.-Voc. Sg. in -***os***); the other stems are in -Ø.

4.8.4. The old vocalism of the Genitive Plural was Ø. The full grade is often found, though, especially in stems in **n** and often **r**; as, **ákmenom**, **júwenom**, **élerom**. Cf. also **mātróm**, or **māterom**. Type I **i**, **u** stems also show full grade in -***ei***-***om***, -***eu***-***om***.

To sum up, Nominative Plural is usually opposed to Nominative Singular, while Genitive and Accusative tend to assimilate Singular and Plural. When these are the same, full vowel is found in the Accusative, and Ø in the Genitive.

4.8.5. In the Obliques Plural, the zero-grade in the predeclensional syllable was very common, whether it has the Genitive vocalism or the full one; as, **kwōn/kunsí**. This Ø-grade is also found in **r** stems, as in **patrós**, **patṛbhós**. And so in **i**, **u**, stems too, in Nom. and Acc. Sg., while *e* is otherwise found (in Nom. Pl., and sometimes in Gen. Sg. and Pl.). The Obliques Plural have Ø; as, **egnibhos**, **ówisu**, **ghóstibhis**, etc. Indeed those with a lengthened Genitive form had it also in the plural; as, **rēgbhis**, **prēksu**.

Where there was a distinction straight/oblique stem, the Oblique Plural stem is that of the Nom. Sg. Animate or Nom.-Acc.-Voc. Sg. Inanimate; and when, in any of them, there was a distinction between full- and Ø-grade, they take the last. An example of Animates is **ped**-, which gives Nom. **pods**, Gen. **pedés** (remade **pedos**) Obl. Pl. **pedbhís**.

In Inanimates it happens with **s** stems which have -***os*** in Nom.-Acc. and -***es*** in the other cases; as in **genōs**, **génesi**, **genesbhos**. And in Heteroclites that oppose an -***n*** in the cases that are not Nom.-Acc.-Voc. with **r**, **s** or Ø.

4.9. ACCENT IN DECLENSION

4.9.1. Just like vocalic grades, the accent was used (normally redundantly) to oppose the *Straight* cases (Nom.-Acc.-Voc.) to the *Oblique* ones.

NOTE. This is one of the worst reconstructed parts of the oldest PIE, as each dialect developed its own accent system. Only Vedic Sanskrit, Greek and Balto-Slavic dialects appear to have more or less retained traces of the oldest accent system, and even these have undergone different systematizations, which obscure the original situation. See §2.6.

4.9.2. PIE Stress paradigms can be classed as Static or Mobile.

In a Static paradigm, the stress of each inflected form was fixed on the same syllable of the stem; as, Nom. **wĺqos**, Gen. **wĺqosjo**.

NOTE. Thematic nouns and adjectives were always of the static type; so were some common old athematic paradigms, as well as those Late PIE athematics that were remade as Static.

In a Mobile paradigm, the stress fell on the stem in some forms (usually the *strong* ones) and on the inflectional ending in others (usually the *weak* ones).

NOTE. Mobile stress was common among nouns belonging to athematic classes, especially when the stem ended in a consonant or was simply identical with the root (*root nouns*).

4.9.2. In monosyllabics, the oldest Mobile paradigm is clearly observed:

Nom. **pōds**, Acc. **pōdm̥**, Gen. **pedés**, remade (Static) **pedos**.

Nom. **kwōn**, Acc. **kwonm̥**, Gen. **kunés**, remade (Static) **kunos**.

NOTE. Even if the accent shift of the mobile paradigm was changed, remade declensions maintained the *weak* forms for the Oblique cases. According to Gąsiorowski, "[i]t is worth observing that in mobile paradigms the location of stress has an effect on vowel quality. Unstressed syllables may have so-called zero vocalism (where, in the absence of *e or *o glides, liquids or nasals take over their function as syllabic segments). A shift of stress may also lead to syncope, so that a vowel disappears altogether (as in *drous, leaving a consonant cluster. When neither syncope nor consonant syllabification seems possible, an unstressed vowel remains but *e is preferred to *o in this position (*pedós vs. *pódm̥). The result is a system involving complex alternations (so that the stem *kwon- may also be realised as *kuwōn, *kun- with a vocalised glide or *kwn̥- with syllabic [n]).

As complex systems are difficult to learn, many of the irregularities visible in the table tended to be levelled out already in PIE times. Static paradigms, with their immobilised stress and completely predictable forms, expanded at the cost of mobile declensions. This process was similar to the spread in English of regular plurals in *-(e)s*: *horses* (Old English *hors*), *hares* (OE *haran*), *cows* (OE *cy*), *sons* (OE *suna*) etc.; only a handful of odd archaic plurals remain (*oxen, men, geese, deer, sheep*) to show that English once had a number of declensions.

4.9.3. In polysyllabics, there is e.g. **mātḗr**, **mātrós**, etc., but also **mātḗr**, *mātŕs* (cf. O.Ind. *mātúr*), *patŕs* (cf. Skr. *pitúr*), *bhrātr̥s* (cf. Skr. *bhartuḥ*), and so on.

1. Stems in **i**, **u**, had probably originally a root accent in Nom.-Acc., and a Genitive with accent on declension, as in the rest of examples.

2. For those in **ā** the oldest system is not clearly reconstructed.

3. The Vocative could be distinguished with the accent. The general rule is that it is unstressed, but for the beginning of a sentence; in this case, the stress is on the first syllable, to differentiate it from the Nominative, with accent on declension.

NOTE. Stress is thus related to the intonation of the sentence. Gąsiorowski states "[i]t seems that in the vocative case of PIE nouns the main stress was invariably word-initial even in those static declensions that had paradigmatically enforced stress on some other syllable. This seems to mean that PIE vocatives had a characteristic falling intonation".

4.9.4. In the Plural system, Straight cases had the stress of the straight cases in the singular, and the Obliques shared the stress of the Genitive, when it was opposed to the Nom.-Acc; as in **patr̥bhós**, **pedmós**, **mātr̥bhís**, etc.

4.10. NUMBER DEVELOPMENTS: THE DUAL

4.10.1. While Singular and Plural are relatively fixed values, the dual has proven to be unstable; it is found in Ind.-Ira., Gk., BSl. and Cel.

NOTE. Generally speaking, the rise and decline of the dual may be directly investigated in individual IE languages, e.g. in Greek, in which the dual is a fixed component of the language, while it is missing altogether in Ionic and Lesbian. The origins of the dual might be found in two word types: the personal pronoun and terms for paired body parts (as 'ears', 'eyes', 'breasts', etc.). It is uncertain whether the dual was an old category that gradually disappeared, or more likely a recent (Late PIE) development that didn't reach all IE dialects. See Meier-Brügger (2003).

4.10.2. The formations vary depending on the stems.

The Nom.-Acc.-Voc. is made:

- Stems in **a**: in -**ā̆i** for **ā**; in -**ī̆** for **ja/ī**.
- Stems in **o**: Animate in -**ō̆u** (alternating -**ō̆/-ō̆u**); Inanimate in -**oi**.
- Stems in **i**, **u**: Animates and Inanimates in -**ī**, -**ū**.
- Consonant stems: in -**e** (not general).

NOTE. The endings are usually summed up as a common PIE *-h_1(e), *-(i)h_1.

The Obliques were still less generalized, the system being reconstructed as follows:

Gen. -**ous**, Dat.-Abl. -**bhos**/-**mos**, Loc. -**ou**, Ins. -**bhis**/-**mis**.

5. ADJECTIVES

5.1. INFLECTION OF ADJECTIVES

5.1.1. In Proto-Indo-European, the noun could be determined in three different ways: with another noun, as in "*stone wall*"; with a noun in Genitive, as in "*the father's house*"; or with an adjective, as in "*paternal love*". These are all possible in MIE too, but the adjective corresponds to the third way, i.e., to that kind of words – possibly derived from older Genitives – that are declined to make it agree in case, gender and number with the noun they define.

5.1.2. The adjective is from the older stages like a noun, and even today Indo-European languages have the possibility to make an adjective a noun (as *English*), or a noun an adjective (*stone wall*). Furthermore, some words are nouns and adjectives as well: **wersis**, *male,* can be the subject of a verb (i.e., a noun), and can determine a noun.

Most stems and suffixes are actually indifferent to the opposition noun/adjective. Their inflection is common, too, and differences are usually secondary. This is the reason why we have already studied the adjective declensions; they follow the same inflection as nouns.

5.1.3. However, since the oldest reconstructible PIE language there were nouns different from adjectives, as PIE **wḷqos** or **pods**, and adjectives different from nouns, as **rudhrós**, **solwos**, etc. Nouns could, in turn, be used as adjectives, and adjectives be nominalized.

NOTE. There were already in IE II some trends of adjective specialization, with the use of suffixes, vocalism, accent, and sometimes inflection, which changed a noun to an adjective and vice versa.

5.2. THE MOTION

5.2.1. In accordance with their use, adjectives distinguish gender by different forms in the same word, and agree with the nouns they define in gender, number and case. This is the *Motion* of the Adjective.

5.2.2. We saw in § 3.4 that there are some rare cases of Motion in the noun. Sometimes the opposition is made between nouns, and this seems to be the older situation; as, **patḗr/mātḗr**, **bhrātēr/swesōr**.

But an adjective distinguishes between masculine, feminine and neuter, or at least between animate and neuter (or inanimate). This opposition is of two different kinds:

a. Animates are opposed to Inanimates by declension, and also vocalism and accent; as, -***os***/-***om***, -***is***/-***i***, -***nts***/-***nt***, -***ēs***/-***es***.

b. The masculine is opposed to the feminine, when it happens, by the stem vowel; as, -***os***/-***ā***, -***nts***/-***ntja***, -***us***/-***wja***.

The general system may be so depicted:

	Animates		*Inanimates*
	Masculine	*Feminine*	*Neuter*
1.	-***os***	-***ā***	-***om***
2.	-***is***	-***is***	-***i***
3.	-***nts***	-***ntja***	-***nt***
4.	-***ēs***	-***ēs***	-***es***
5.	-***us***	-***wja***	-***u***

NOTE. The masculine-feminine opposition is possibly new to Late PIE; IE II – as the Anatolian dialects show – had probably only an Animate-Inanimate opposition. The existence of this kind of adjectives is very important for an easy communication, because e.g. adjectives in **ā** are only feminine (unlike nouns, which can also be masculine). An **o** stem adjective followed by an -***s*** in Nom. Sg. is animate or masculine, never feminine only, whilst there are still remains of feminine nouns in -***os***.

5.2.3. Compare the following examples:

1. For the so-called *thematic adjectives*, in -***os***, -***ā***, -***om***, cf. **somós**, -**ā́**, -**óm**, *equal*, **rudhrós**, -**ā́**, -**óm**, *red*, **wolós**, -**ā́**, -**óm**, *willing*, **kserós**, -**ā́**, -**óm**, *dry*, etc. But note the root accent in **newos**, -**ā**, -**om**, *new*, **solwos**, -**ā**, -**om**, *whole*, **kaikos**, -**ā**, -**om**, *blind*, **lajos**, -**ā**, -**om**, *fat*, etc.

NOTE. Most adjectives have **o**-stem, among them verbal adjectives and compound adjectives, cf. **diwós**, *heavenly*, **klutós**, *heard, famous*. The corresponding feminine forms feature PIE **ā**.

2. For adjectives in -**us**, -**wja**/-**wī**, -**u**, cf. **ēsús**, -**wjá**, -**ú**, *good*, **mṛghús**, -**wjá**, -**ú**, *short*, **leghús**, -**wjá**, -**ú**, *light*, **ōkús**, -**wjá**, -**ú**, *swift*. With root accent, cf. **swādus**, -**wja**, -**u** (Southern IE *swādús*, -*wī́*, -*ú*), *pleasant*, **mḷdus**, -**wja**, -**u**, *soft*, **tṇghus**, -**wja**, -**u**, *fat*, **tṇus**, -**wja**, -**u**, *thin*, **tṛsus**, -**wja**, -**u**, *dry*, **dhṛsus**, -**wja**, -**u**, *bold*, etc.

NOTE. On the original stress of PIE **swādus*, see the so-called *Erlangen School Ablaut system*, e.g. Lubotsky (1987) at <https://openaccess.leidenuniv.nl/bitstream/1887/2667/1/299_021.pdf> and Frazier (2006) at <http://roa.rutgers.edu/files/819-0406/819-FRAZIER-0-0.PDF>.

3. For adjectives in -**is**, -**i**, cf. **gṛndhís**, -**í**, *grown*, **lēnis**, -**i**, *weak*, **moinis**, -**i**, *obliged*, **muttis**, -**i**, *speechless*, **ṇwidis**, -**i**, *ignorant*, etc.

5.3. ADJECTIVE SPECIALIZATION

5.3.1. The specialization of adjectives from nouns is not absolute, but a matter of grade:

1. Stems in -**nt** are usually adjectives, but they were also assimilated to the verbal system and became (Present) Participles.

2. Words in -**ter** are nouns, and adjectives are derived usually in -**trjós** and others.

3. Nouns in -**ti** have adjectives in -**tjós**, or -**tikós**, usually with an ethnic meaning.

4. Sometimes distinction is made with alternating vowels: neuters in -**om** and adjectives in -**és**, -**és**.

The accent is normally used to distinguish thematic nouns in -**os** with adj. in -**ós** (mainly -**tós**, -**nós**).

NOTE. There are sometimes secondary processes that displace the accent from an adjective to create a noun; cf. Gk. *leukós*, "*white*", *léukos*, "*white spot*". These correlations noun-adjective were often created, but from some point onward the derivation of adjectives was made with suffixes like -*ment*- (-*went*-), -*jo*-, -*to*-, -*no*-, -*iko*-, etc. There are, however, abundant remains of the old identity between noun and adjective in Late PIE. For adjectival suffix -**jo**- and -**ijo**-, cf. *istarniya*- '*central*' (<*ištarna* '*between*'), Ved. *dámiya*- '*domestic*', *gávya*- '*pertaining to cows*', Lat. *ēgregius* '*outstanding*' (<*ē grege* '*out of the herd*') etc. Other endings are dealt with as participles, *v.i.*

5.4. COMPARISON OF ADJECTIVES

5.4.1. In Proto-Indo-European, as in English, there are three degrees of comparison: the Positive, the Comparative and the Superlative.

5.4.2. The adjective in its natural or 'positive' state may be made comparative and superlative by the addition of suffixes.

5.4.3. The Comparative, a difference of grade between two compared values, is generally formed by adding the Primary Comparative suffix *-jos*- to the root; as, from **sen**-**os**, **sen**-**jos** (Lat. *senior*), *older*, from **mag**-**nos**, **mag**-**jos**, *bigger* (Lat. *maior*), etc.

NOTE. The form -*jos* varies allophonically with -*ijos*, cf. **new**-**jos**, **new**-**ijos**, *newer*. According to Meier-Brügger, "[*-ijŏs] replaces [*-jos] in nominative singular masculine and feminine forms with the structure KV.K- and KVR.K-; whereas, according to rules of phonetics, *-jos- is expected in forms with three or more syllables".

The suffix -*(t)er*-*o*- is the basis for the Secondary Comparative forms; as, from **upo**, *up, upon,* **up**-**er**-**o**- (cf. O.Ind. *úpar-a-*) *beneath, nearer*.

NOTE. The suffix -*(t)ero*- is the –o- adjective form of adverbs ending in -*(t)ṛ* and -*(t)er*; as, **sup**, under, **sup**-**er**-, *over*, and **sup**-**er**-**o**-, *found above*; **pro**, *at the front*, forward, and **pró**-**ter**-**o**-, *toward the front, earlier*. Adverbs and adjectives that were derived from them were capable of marking relative contrast, e.g. in the case of opposites or selection from a pair; cf. from **sem**-, one, **sṃ**-**ter**-**o**, *the other of two in a unity*, v.i.

5.4.4. The Superlative marks the highest grade among two compared values. The same suffix (with the ablaut -*is*-) is the base for common PIE -*is*-**tos**,-*is*-**ṃos**; as, **senistos**, *oldest*, **magisṃos**, *biggest* (Lat. *maximus<*magisemos*), **newistos**, *newest*, etc.

Superlative of the Secondary Comparative is made in -**ṃo**-*; as,* **uper**-**ṃo**-, **súp**-**mos** (Lat. *summus*), from **ṇdherós**, *underly*, **ṇdh**-**ṃos** (Lat. *infimus,* Skr. *ádhamas*), from **entós**, *inside*, **ent**-**ṃos**, (Lat. *intimus*), *innermost*.

NOTE. Dialectal Superlative suffixes include O.Ind. -*tṃo*- (cf. Skr. -*tama*-), and Gk. -*tṃ*-*to*- (cf. Gk. *tato*); -**ṃo**- appears in other PIE adjectives, but it took usually the Superlative degree.

These suffixes -*jo*-, -*tero*-, and -*is*-*to*-, had probably an original nominal meaning.

NOTE. Thus, the elongations in -*jos* had a meaning; as in Latin, where *iuniores* (<**jun-jos-es*) and *seniores* (<**sen-jos-es)* were used for groups of age; or those in -*teros*, as *mātérterā* 'aunt on the mother's side', *ekwắteros* 'mule'. Forms like **jun-jos-es* were not common in PIE, although indeed attested in different dialects; adjectival suffixes -*jós*, -*istós* are added to the root (in e-grade) without the initial suffixes, while -*teros* and -*ṃos* are added with the suffixes. Cf. O.Ir. *sír*, cp. *sía<sējós*, '*longus, longior*'; *lán* (*plēnus* cf. *lín* '*numerus*'), cp. *lia<plējós* (Lat *ploios*, Gk. *pléos*); cf. Lat. *ploirume*, zero-grade Lat. *maios*, O.Ir. *mía*. So, for **júwenos** we find Umb. cp.

*jovie<**jowjē-s**, O.Ir. *óac* 'iuuenis', *óa* 'iunior'; *óam* 'iuuenissimus', O.Ind. *yúva*(*n*)- (*yū́naḥ*), cp. *yávīyas-*, sup. *yáviṣṭa-ḫ*.

5.5. NUMERALS

5.5.1. CLASSIFICATION OF NUMERALS

Modern Indo-European Numerals may be classified as follows:

I. Numeral Adjectives:

1. Cardinal Numbers, answering the question *how many?* as, **oinos**, *one*; **dwōu**, *two*.

2. Ordinal Numbers, adjectives derived (in most cases) from the Cardinals, and answering the question *which in order?* as, **pr̄wos**, *first*; **ónteros**, *second*.

3. Distributive Numerals, answering the question *how many at a time?* as, **semli**, *one at a time*; **dwisni**, *two by two*.

II. Numeral Adverbs, answering the question *how often?* as, **dwis**, *twice*, **tris**, *thrice*.

5.5.2. CARDINALS AND ORDINALS

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1. These two series are as follows, from one to ten:

	Cardinal	*Eng.*	*Ordinal*	*Eng.*
1.	**oinos**, **oinā**, **oinom**	*one*	**pr̄wos**, **pr̄mos**	*first*
2.	**dwōu**, **dwāi**, **dwoi**	*two*	**ónteros** (***dwóteros***)	*second*
3.	**trejes**, **trja**, **trísores**	*three*	**tritjos**	*third*
4.	**qétwṛes**	*four*	**qétwṛtos**	*fourth*
5.	**penqe**	*five*	**penqtos**	*fifth*
6.	**s(w)eks**	*six*	**sekstos**	*sixth*
7.	**septṃ**	*seven*	**séptṃos**	*seventh*
8.	**oktōu**	*eight*	**oktowos**	*eighth*
9.	**newṇ**	*nine*	**néwṇos**	*ninth*
10	**dekṃ**	*ten*	**dékṃtos**, **dékṃos**	*tenth*

NOTE 1. From root **oi**-, PII *ai-kas* (<*oi-k-os), CAn *ei-kos*, PGk *oi-wos*. For **pr̄wos**, *first*, cf. O.Ind. *pūrva-*, O.C.S. *prŭvŭ*. For **pr̄mos**, cf. Gk.Dor. *pratos* (<*prā-wo-to<**prā-mo-*), Lith. *pìrmas*, O.Eng. *forma*, or Goth. *fruma*, Lat. *prīmus* (<*pri-isamos<***prī(w)isṃos**, Pael. *prismu*).

NOTE 2. The Ordinals were formed by means of the thematic suffix -**o**-, which caused the syllable before the ending to have zero grade. The newer suffix -**to**- was the most productive in Late PIE. For internal reconstruction in PIH, Late PIE and early dialects, see Szemerényi (1970).

2. The forms from eleven to nineteen were usually formed by placing the number and then **dekm̥**, *ten*. Hence Modern Indo-European uses the following system:

	Cardinal	*Ordinal*
11.	**óinodekm̥**	**óinodekm̥tos**
12.	**dwṓdekm̥**	**dwṓdekm̥tos**
13.	**tréjesdekm̥**	**tréjesdekm̥tos**
14.	**qétwr̥es-dekm̥**	**qétwr̥es-dékm̥tos**
15.	**penqe-dekm̥**	**penqe-dékm̥tos**
16.	**seks-dekm̥**	**seks-dékm̥tos**
17.	**septm̥-dekm̥**	**septm̥-dékm̥tos**
18.	**oktōu-dekm̥**	**oktōu-dékm̥tos**
19.	**newn̥-dekm̥**	**newn̥-dékm̥tos**

NOTE. Eleven and twelve were already fossilized collocations in O.Lat., O.Ind. (*áikadaḳm̥*), O.Gk. (*sémdekm̥*); also Gmc. and BSl. **óinoliqa**, "*one left*", **dwṓliqa**, "*two left*", with ordinals **óinoliqtos**, **dwṓliqtos**. For a frozen *thirteen*, cf. Skr. *trayodaśa*, Lat. *trēdecim* (<*trēsdecem*).

3. The tens were normally formed with the units with lengthened vowel/sonant and a general -**km̥ta** (<*$h_1$km̥th$_2$*< *dkm̥th$_2$?*), "*group of ten*".

	Cardinal	*Ordinal*
20.	**(d)wīkm̥tī**	**(d)wīkm̥tm̥os**
30.	**tríkm̥ta**	**tríkm̥tm̥os**
40.	**qetwr̄km̥ta**	**qetwr̄km̥tm̥os**
50.	**penqḗkm̥ta**	**penqḗkm̥tm̥os**
60.	**sékskm̥ta**	**sekskm̥tm̥os**
70.	**septm̄km̥ta**	**septm̄km̥tm̥os**
80.	**oktṓkm̥ta**	**oktṓkm̥tm̥os**
90.	**newn̄km̥ta**	**newn̥km̥tm̥os**
100.	**km̥tóm**	**km̥témtm̥os**

4. The hundreds are made as compounds of two numerals, like the tens, but without lengthened vowel. The thousands are made of the numerals plus the indeclinable **tū́sṇti**:

	Cardinal	*Ordinal*
200.	**dwikṃtós**	**dwikṃtémtṃos**
300.	**trikṃtós**	**trikṃtémtṃos**
400.	**qetwṛkṃtós**	**qetwṛkṃtémtṃos**
500.	**penqekṃtós**	**penqekṃtémtṃos**
600.	**sekskṃtós**	**sekskṃtémtṃos**
700.	**septṃkṃtós**	**septṃkṃtémtṃos**
800.	**oktōkṃtós**	**oktōkṃtémtṃos**
900.	**newṇkṃtós**	**newṇkṃtémtṃos**
1000.	**smīghslī/tū́sṇtī**	**smíghslitos/tū́sṇtitos**
2000.	**dwōu/dwāi/dwoi smīghslī/tū́sṇtī**	**ónteros smíghslitos/tū́sṇtitos**
3000.	**trejes/trja/trísores smīghslī/tū́sṇtī**	**tritjos smíghslitos/tū́sṇtitos**
4000	**qétwṛes smīghslī/tū́sṇtī**	**qétwṛtos**

NOTE. For *thousand*, adj. **smīghslī** (<*sṃ-ih₂+ghsl-ih₂*), cf. Lat. *n. mille*, (*n. pl*) *mi(l)lia*, Gk. *khīl(l)ioi* (<*ghsl-i-o-*), Gk. *khīl(l)ioi,* i-stems **gh(e)sl-i-** of **ghesl-o**-, as in PII *sṃ-gheslo-m,* cf. Skr. *n. sa-hásra-*, Av. *ha-zaŋra*. For Eastern EIE **tū́sṇtī,** (<*tus-kṃt-i-?*, "*fat hundred*"), cf. Gmc. *þūsund-i*, pl. *þūsundjōs* Bal. *tūksunt-i*, O.Prus. *tūsimtons*, Toch. *tumame*, Sla. *tīsōt-j-ā.

5. The other numerals are made similar to the tens, with the units in first place; as, **oinā-wīkṃtī**, f. *twenty-one*; m. **qétwṛes-trīkṃta**, *thirty-four*.

NOTE. For the simple type **oinos-wīkṃtī**, cf. Skr. *éka-viṁśati* (in compounds where the unit could be inflected); with copulatives, cf. Lat. *unus et uiginti*, Bret. *unan-warn-ugent*, Ger. *einundzwanzig*, Du. *eenentwintig*, Fris. *ienentweintich*, Da. *enogtyve*, etc.

Numbers beyond 100 usually have the copulative -**qe**; as, **kmtóm qétwṛes-qe**.

NOTE. The normal order of composite numerals is unit+tens, and there was a natural tendency to follow a 'unit+ten+hundred+...', e.g. RV *cátuḥ-śata-* (<**qetwṛes-kmtóm**), *one hundred and four*; nevertheless, an order '(large numbers)+hundred+unit-ten' prevailed in all dialects, usually with a copulative particle; as, *śatám ekám ca* (=**kmtóm oinom-qe**), *one hundred and one*.

Only the last member signals the ordinal; as, **oinā-wīkṃtṃos**, *twenty-first*, **trikṃtós trja-tríkṃtṃos-qe**, f. *three hundred thirty-third*.

NOTE. Cf. Skr. *ékaviṁśa-*, Lat. *unus et vicensimus*, Ger. *einunzwanzigste*, etc.

6. Numerals were often inserted as prefixes of possessive compound forms, cf. the type Gk. **tri-pod**-, *tripod*. As first members, numbers 1-4 had a special zero-grade form: **sm̥**-, *one-*; **dwi**-, *two-*, **tri**-, *three-*, and also **q(a)tur**-, *four-*.

5.5.3. DECLENSION OF CARDINALS AND ORDINALS

Of the Cardinals only **oinos**, **dwōu**, **trejes** (and dialectally **qétwr̥es**), are declinable.

a. The declension of **oinos**, -**ā**, -**om** has often the meaning of *certain*, *a*, *single*, *alone*; as, **oinā dinā**, *a certain day*. Also, as a simple numeral, to agree with a plural noun of singular meaning. The plural occurs also in phrases like **oinōs álterōs-qe**, *one party and the other one* (*the ones and the others*).

The root **sem**-, in **semos**, *one*, refers the unity as a whole, found in adj. **somós**, *equal*.

NOTE. Gk., Arm., Toch., show an old N. m. **sems**, A. **sēm**, N.-A. n. **sem** (G.-Ab. **smes**, D. **smei**, L. **sem(i)**, I. **smē**), and f. **smja/ī** (A. **smja/īm**, G.-Ab. **smjās**, D. **smjāi**, L. **smjā(i)**, I. **smjā**).

c. The inflection of **d(u)wōu**, *two*, is irregular, connected to issues concerning the dual:

	mas.	*fem.*	*neu.*
N.-A.-V.	**d(u)wōu**	**d(u)wāi**	**d(u)woi**
GEN.	dwous		
DAT.-**ABL**.	dwobhos/dwomos		
LOC.	dwou		
INS.	dwobhis/dwomis		

NOTE. Apparently an older *n./f.* **dwoi** was separated into a newer Late PIE *f.* **dwāi**. Also, PIE **ambhōu**, *both*, is inflected like **dwōu**.

c. The inflection of **trejes**, *three*, is mostly a regular i-stem one:

	m.	*f.*	*n.*
NOM.-**VOC**.	trejes	trija/trī	trísores
ACC.	trins	trijans/trīns	trísores
GEN.	trijom		
DAT.-**ABL**.	tribhos/trimos		
LOC.	trisu		
INS.	tribhis/trimis		

d. **smīghslī/tū́sṇtī**, *thousand*, functions as an indeclinable neu. adjective:

smīghslī modōis, *in a thousand ways*; **kom tū́sṇtī wīrṓis**, *with a thousand men*.

dwāi smīghslī penqekṃtós trejesdekṃ-qe cenām, (Acc. f.) *to 3513 women*.

NOTE. PIE plural nouns neu. **smīghslī/tū́sṇtī**, are old abstract (collectives) in **-ja/ī** (<*-*i-h₂*), etymologically identical to neuter plurals in Nom.-Acc.-Voc. **-a**; therefore, unlike feminine nouns of the first declension in **-ja/ī** (an innovation in Late PIE), their stems follow the old neuter plural declension in **i**, of the same type as **trja/trī** (which is nevertheless a PIE feminine). As, specific plural **smīghslijom/tū́sṇtijom cenām**, *of thousands of women*. From *sṃ-ih₂-ghsl-ih₂*, giving **smīghslī**, **smīghslja**, both Lat. *mīl(l)i* and *mīlia* "might be postulated as free forms within the same synchronic structure" J. Gvozdanović (1992) against a starting point *-*ijă̄* (E. Hamp, 1968).

e. The ordinals are adjectives of the **o** and **ā** declensions, and are regularly declined.

6.3.2. Cardinals and Ordinals have the following uses:

a. Numbers 11-13 have no gender or flexion; as, m., f., n. **óinodekṃ**, **dwṓdekṃ**, **tréjesdekṃ**; numbers above 20 have gender and flexion; as, *f.* **oinā-sékskṃta**, *f.* **dwāi-wīkṃtī**, *n.* **trísores-qetwŕkṃta**, *n.* **oinom-wīkṃtī putlā**, *Acc. 21 children*.

b. In numbers above 100 the highest denomination generally stands first, the next second, etc., and the 'ten' is last, as in German; as, **smīghslī/tū́sṇtī septṃkṃtós qetwṛes-sékskṃta-qe**, *1764*.

c. PIE had no special words for *million*, *billion*, *trillion*, etc. They were expressed by multiplication. In MIE they are formed with common loan *million*, from Lat. *mille*, "*one thousand*"; as, **smīghsljōn**, *million*, **dwīghsljōn**, *billion*, **trīghsljōn**, *trillion*, etc.

d. A common expression in PIE is the adverbial use of the accusative singular neuter of the ordinal; as, **pṛ́wom**, *firstly*; **ónterom**, *secondly*, etc.

e. Fractions are expressed, as in English, by cardinals in the numerator and ordinals in the denominator. The neuter is generally used for sustantivized ordinals, or the feminine with noun '*part*'; as, *n.* **dwōi séptṃā** (or f. ***dwāi septṃāi pṛtes***) *two-sevenths*; *n.* **trísores oktowā**, *three-eighths*.

When the numerator is one, it is usually omitted: **tritjom**, *one-third*; **qetwṛtom**, *one-fourth*, and so on.

NOTE. Indo-Iranian exhibits an old trend omit the parts in which it is divided, if only one is left; as, ***dwāi pṛtes***, *two-thirds* ("*two parts*"), ***trja pṛtes***, *three-fourths*.

The compositional PIE **sēmi**-, *half-*, is combined with ordinals to express cardinals plus *half*; as, **sēmi**-**tritjos**, *two and a half*, i.e. "*having a half of the third (item)*".

NOTE. For MIE *half*, a loan from Lat. adj. ***dwismedhjos***, noun ***dwismedhjom***, "*divided medially*", could be used; however, proper forms meaning *divided in two* are reconstructed from multiplicatives, v.i.

f. In Approximatives, the old disjunctive use of numerals was made by collocations of adjacent cardinals in ascending order, e.g. **penqe seks septṃ**, *five*, *six*, or *seven*. In MIE, a common IE **penqe**-**septṃ** (or **penqe septṃ**-**we**), *six or seven*, is also possible.

g. Time periods are made with compounds:

For years, as **dwiatnjom**, *a period of two years,* **triatnjom**, **qetwṛatnjom**, **smīghsliatnjom**, *millenium*, etc.

For days, as **dwidjówijom**, *a period of two days*, **tridjówijom**, **qetwṛdjówijom**.

For months, as **dwimēnstris**, *a period of two months*, *bimester*, **trimēnstris**, *trimester*, **qetwṛmēnstris**, **seksmēnstris**, *semester*, etc.

NOTE. For month names, a compound with ***mēns*-*ri*-** is followed; as, **Septṃmēnsris**, *september*, **Oktōmēnsris**, *october*, etc.

5.5.4. DISTRIBUTIVES

1. Distributive Numerals are number words which express group membership. They are used mainly in the sense of *so many apiece* or *on each side*, and also in multiplications. They answer to the question *how many of each? how many at a time?*

2. The oldest formations are collocations of geminated cardinals, with both members inflected; as, **semos**-**semos**, **oinos**-**oinos**, *each one*, **penqe**-**penqe**, *each five*, etc.

NOTE. For this kind of distributives, cf. Gk. *tri tri*, O.Ind., *éka- eka-*, Zor. Pahl. *ēk ēk*, Pers. *das das*, Parth. Sogd. ʿ*yw* ʿ*yw*, Arm. *tasn tasn*, Toch. A *sam sam*, B *ṣeme ṣeme, okt okt, ñu ñu*; also in Hittite iterated groups, in place of distributives, *1-aš 1-aš, 1-an 1-an.* Even in nouns, cf. Lat. *alteros alterom*, each other, O.Ind. *díve díve*, *each day*; Myc. *we-te we-te*, *each year*; etc. etc.

3. Some PIE distributives were formed with adj. suffix -*(s)no*-, and abstract/collective suffix -**ī**; as, **dwīsnī**, *two at a time, two each*, **trisnī**, **qátrusnī**.

NOTE. For this formation e.g. **dwīsnī**, cf. Lat. *bīnī*, Gmc. *twiznaz (<***dwisnōs***, cf. O.N. *tvenner*, O.H.G. *zwirnēn*, O.Eng. *twīn*, Du. *twijn*), Russ. *dvoĵnĭ* Lith. *dvynù*, Arm. *krkin*, Lyc.

kbisñni. Also, it is believed that **oi-no**- was originally the first member of that series (remember dialectal **oi-wos**, **oi-kos**), meaning "*singleness, unity*", before replacing **sem**-. Distributives for higher numerals were later expressed in EIE languages using a word that meant 'each', as, Eng. *each*, Fr. *chaque*, Alb. *kaa*, Bret. *cach*, etc.

4. Distributives can be used to express percentage; as, *twenty percent*, **dekm̥-dekm̥ dwōu**, "*two for each ten*", **km̥tóm-km̥tóm wīkm̥tī**, "*twenty for each hundred*".

5.5.5. NUMERAL ADVERBS

1. The so-called Numeral Adverbs are a ditinctive class of adverbs which specifically answer the question **qoti**, *how many times? how often?*

2. The most common ones are formed with zero-grade and a lengthening in -**s**; as, **semli**, *once*, **dwis**, *twice*, **tris**, *thrice*, and **qatrus** (<**qətwr̥-s*), *four times*.

NOTE. For EIE **semli**, cf. O.Lat. *semol*, Umb. *sumel*, Goth. *simble*, O.H.G. *simlē*, O.Ir. *amal*; for the expected **sm̥ni*-, maybe Hitt. *šani*. In PII, it is formed as *sm̥kŕt*, from PIE -**qr̥t**, *v.i.*; in PGk, **sm̥-pn̥qus**, *alone*, cf. Gk. *hapaks*, Hitt. *pa-an-ku-uš*, L. *cūnctus*. For the rest, e.g. **tris**, cf. Lat. *ter*, Myc. *ti-ri-se-roe* (<*Tris-(h)ĕ́rōhei*), Gk. *tris*, O.Ind. *triḥ*, Goth. *driror*, O.Ir. *thrí*, Luv. *tarisu*, Lyc. *trisu*. Higher numbers are found in Lat. and maybe behind Hitt. *3-iš*, 10-*iš*, 20-*iš*, 30-*iš*, etc.

3. Some old compounds are also found in -**ki**.

NOTE. A certain reconstruction is nevertheless difficult; cf. Hitt. *-an-ki*, Gmc. *zwis-ki*, Gk. *-ki*, Indian **-ki* (cf. Sogd. *-ky*, Yaghnobi *īki īki*, "*one by one, one each*", Chorasmian *-c*); maybe also in Arm. *erkics*. Variant Gk. *-kis*, Hitt. *-kis* are probably due to an assimilation to the type **dwis**, *twice, twofold*. For higher numbers, probably an innovation, cf. Greek numeral adverbs in *-a-kis*, and Hittite in *-an-ki*, maybe from a common PIE **-n̥ki*.

4. A system of simple collocations is used, placing the cardinal number before a noun meaning '*time*'; as, **penqe qŕtewes**, *five times*, **oktōu qŕtewes**, *eight times*, and so on.

NOTE. For *m.* **qr̥tus**, *time*, cf. O.Ind. *-kr̥twaḥ* (<**qŕt-wn̥t-m̥**, see Hollifield 1984), Bal. **kar̃t-a*-, Sla. *kortŭ, O.Ir. *cruth*, O.Welsh *pryd*. For (rare) compounds, viz. **sm̥-kʷr̥t*, 'once', cf. O.Ind. *sa-kr̥t*, Av. *ha-kərət*, also in Umb. *trioper*, 'three times', Osc. *petiropert*, 'four times'.

5.5.6. MULTIPLICATIVES

1. Multiplicatives like *single*, *double*, *triple*, etc. which answer the question *how many fold?*, had a variety of compounds for the first numerals.

3. The oldest PIE multiplicatives found were Collectives, made in -*jo*-, -*t*- and -*k*-; as, **óinokos**, *single, sole, unique*, **dwojós**, *two-fold, group of two, duad*, **trejós**, *three-fold, triad*, **penqstís**, *group of five*, **dekḿts**, *group of ten, decade*.

NOTE. For North-West common **óinokos**, cf. Gmc. *ainagas (cf. Goth *ainahs*, O.N. *einga*, O.Eng. *anga*, O.Sax. *enag*, O.H.G. *einac*), O.C.S. *inokŭ*, Lat. *unicus* (<**oine-kos? or* **oino-ikos?*); suffix -*ko*- is also found in O.Ind. -*śáḥ*, Gk. -*kás*, Hitt. -*kaš*. For PIE **dwojós**, cf. RV *tvayá*-, *trayá*, Myc. *duwojo-/dwojo*-, Gk. *doiós*, O.H.G. *zwī*, g. *zwīes*, Lith. *dvejì, trejì*, O.C.S. *dĭvojĭ, trojĭ*, O.Ir. *trēode*. Apart from -*jo*-, common PIE collectives are found in -*t*-, usually -*ti*-, as **penq-s-tis**, *group of five, fist*, cf. O.Ind. *paṇktí*-, Av. sastí-, xsvasti-, O.C.S. *pęstĭ, -tĭ*, Lith. -*t*-, -*ti*-, Gmc. *funxstiz* (cf. Goth. *fūst*) O.Ir. *bissi*, O.Welsh *bys*, but also -**ts**, as, **dekḿ-ts**, Gk. δεκάς, Lat. *dekents>*dekients, spreading *j-ṇts as new formant, into Gk. πεντάς, then τριάς, etc. Lat. *quinquens>*quinquiens*, then *triēns*, etc; cf. e.g. neuter plurals **wīkṃtī** (interpreted as dual), "*a group of two decades, double decads*", *twenty*, **trīkṃta**, "*triple decads*", *thirty*, and so on.

4. Proportional or Relative numerals express how many times more (or less) one thing is than another; they are made as follows:

 a. in -***plós***, as **sṃplós**, *simple*, **dwiplós**, *two-fold, double, twice as much, twice as large*, **triplós**, *three-fold, triple*.

NOTE. For ***dwi-plos***, cf. Lat. *duplus*, Hom. Gk. f. acc. *diplḗn* (<*dwi-plā́-m*) Umbr. *dupla*, Goth. *twei-fls*, O.H.G. *zvī-fal*, "*doubt*", O.Ir. *dīabul*, maybe Av. *bi-fra*-, "*comparison*", Lyc. B *dwiplē̃*. ***sṃ-plos*** is found in Gk. ἁ-πλός, Lat. *simplus*, ***tri-plos*** is found in Gk. τριπλοῦς, Lat. *triplus*, Umb. *tripler*. For -**plos** (cf. Arm. -*hal*), a connection with PIE **pel**-, *fold*, is usually assumed.

b. in -***pḷks***, as, **dwipḷks**, "*with two folds*", *duplex*, **tripḷks**, "*with three folds*".

NOTE 2. For **pḷk**-, also reconstructed as from root **pel**-, cf. Lat. -*plicare*, Gk. *plekō* <*pl-ek, '*to fold'*. For **dwipḷks**, cf. Lat. *duplex*, Gk. δίπλαξ, Umbr. *tuplak*.

c. with verbal adjective -***pḷtós***, *folded*, is used to denote something divided in *n* parts; as, **dwipḷtós**, *an object folded in two*.

NOTE. Cf. Gk. -*plasio*-<*-*platio*-<*pḷt-jo-s, a derivative that could express '*belonging to the class of objects folded in two*' (Gvozdanović, 1992); maybe also here i-stem O.Ir. *trilis*<*tripḷtis? For **dwipḷtós**, cf. Gk. διπλάσιος, Ger. *zwifalt*. A similar form is in Gmc. *poltos, *fold*.

d. with suffix -***dhā***, as **dwidhā**, *two-fold, divided in two parts*.

NOTE. cf. Skr. *duví-dha, dve-dha*, Gk. διχθά (<*δι-θα), and maybe also (with the meaning "*half*") O.N. *twēdi*, O.Eng. *twǣde*, O.H.G. *zwitaran*, O.Ir. *dēde*, Hitt. *dak-ša-an*.

6. PRONOUNS

6.1. ABOUT THE PRONOUNS

6.1.1. Pronouns are used as Nouns or as Adjectives. They are divided into the following seven classes:

1. Personal Pronouns: as, **egṓ**, *I.*

2. Reflexive Pronouns: as, **se**, *himself.*

3. Possessive Pronouns: as, **n̥serós**, *our.*

4. Demonstrative Pronouns: as, **so**, *this, that.*

5. Relative Pronouns: as, **jos**, *who.*

6. Interrogative Pronouns: as, **qis?** *who*?

7. Indefinite Pronouns: as, **qis**, *anyone.*

6.1.2. Pronouns have a special declension.

6.2. PERSONAL PRONOUNS

6.2.1. The Personal pronouns of the first person are **egṓ**, *I*, **wejes**, *we*; of the second person, **tū**, *thou*, **juwes**, *you*. The personal pronouns of the third person - *he, she, it, they* - are wanting in Indo-European, an anaphoric (or even a demonstrative) being used instead.

NOTE. IE III had no personal pronouns for the third person, like most of its early dialects. For that purpose, a demonstrative was used instead; as, from ***ki***, ***id***, cf. Anatolian *ki*, Gmc. *khi-*, Lat. *cis-*, *id*, Gk. *ekeinos*, Lith. *sis*, O.C.S. *si*, etc. It is this system the one used in Modern Indo-European; although no unitary form was chosen in Late PIE times, the general pattern (at least in the European or North-Western dialects) is obvious.

6.2.2. Since every finite verb form automatically indicates de 'person' of the verb, the nominal pronoun forms are already adquately marked.

In comparison with the Orthotonic forms, often stregthened by particles, the special Enclitic forms feature the minimal word stem and may be used in multiple cases.

6.2.3. The Personal (Non-Reflexive) Pronouns are declined as follows:

1ˢᵗ PERSON

	Singular *eg*-, *me*-		Plural *we*-, *no*-	
	Orthotonic	*Enclitic*	Orthotonic	*Enclitic*
NOM.	**eg(h)óm, egṓ**, *I*		**wejes, ṇsmés**, *we*	
ACC.	**mewóm**, *me*	***me***	**ṇsmé, nōns**, *us*	***nos***
GEN.	**mene**, *of me*	***moi***	**ṇseróm**, *of us*	***nos***
DAT.	**meghei, meghjom**	***moi***	**ṇsméi, nosbhos**	***nos***
LOC.	**mei**		**ṇsmí, nosi**	
INS.	**mojo**		**nosbhis**	
ABL.	**med**		**ṇsméd**	

2ⁿᵈ PERSON

	Singular *tu*-, *te*-		Plural *ju*-, *we*-	
	Orthotonic	*Enclitic*	Orthotonic	*Enclitic*
NOM.	**tū, tu**, *thou*		**juwes, jusmés**, *you*	
ACC.	**tewóm**, *thee*	***t(w)e***	**jusmé, wōns**, *you*	***wos***
GEN.	**tewe**; *of thee*	***t(w)oi***	**wesróm**, *of you*	***wos***
DAT.	**tebhei, tebhjo**	***t(w)oi***	**jusméi, wosbhos**	***wos***
LOC.	**t(w)ei**		**jusmí, wosi**	
INS.	**t(w)ojo**		**wosbhis**	
ABL.	**t(w)ed**		**jusméd**	

NOTE. 1) For 1ˢᵗ P. Nom. **eghóm** (<*egh_2-óm*), emphatic from **egṓ** (<*eg-óh_2*), cf. O.Ind. *ahám*, Av. *azəm*, Hom.Gk. εγων, Ven. *ehom*. 2) Enclitics **moi**, **mei**, and **t(w)oi**, **t(w)ei**, are found in Gen., Dat. and Loc., but they are deliberately specialized in this table. 3) 1ˢᵗ P. Dat. often found reconstructed as **mebhi**/**mebhei**, following the 2ⁿᵈ P. **tebhei**/**tebhi**. 4) -*es* endings in Nom. pl., **ṇsmés**, **(j)usmés** (<*juswés?) attested in Att.-Ion. Gk. and Gothic. 5) An older **ju(s)wes** is behind the generally reconstructed Nom. **jūs**. 6) Zero-grade forms in **jus**- are also found as **us**- (from ***wes***-*?* cf. Goth. *izwis<*uswes?*). 7) Possibly Accusatives **jusmé**<*jusmēn<*jusmens, and **ṇsmé**<*ṇsmēn<*ṇsmens. 8) Probably Acc. Pl. *nos-m-s*→**nōns** and *wos-m-s*→**wōns**. 8) Gen. **nŏsom, wŏsom**, is also attested. 9) Osc.-Umb., O.Ind. variant (orthotonic) series of Acc. Sg. in -*m*, as *mēm(e)*, *twēm*, *tewem*, *usóm*, *s(w)ēm*. Dual forms (in *-h_l*) are in Nom. for the 1ˢᵗ P. **wē** or **nō**, for the 2ⁿᵈ P. **wō**. For detailed etymologies, see Appendix III.2.3 or online at <dnghu.org>.

For the Personal Pronouns of the third person singular and plural, the anaphoric **i**- is used. See §6.5 for more details on its use and inflection.

a. The plural **wejes** is often used for the singular **egṓ**; the plural **juwes** can also be so used for the singular **tū**. Both situations happen usually in formal contexts.

b. The forms **nseróm**, **wesróm**, etc., can be used partitively:

óinosqisqe ņseróm, *each one of us.*

wesróm oljom, *of all of you.*

c. The genitives **mene**, **tewe**, **ņseróm**, **wesróm**, are used objectively:

es mnāmōn ņseróm, *be mindful of us.*

6.3. REFLEXIVE PRONOUNS

6.3.1. Reflexive Pronouns are used in the accusative and the oblique cases to refer to the subject of the sentence or clause in which they stand; as, **se lubhḗjeti**, *he/she loves himself/herself*; **sewe bhāmi**, *I talk about (of) me*, and so on.

a. In the first and second persons, the oblique cases of the personal pronouns were later commonly used as Reflexives: as, ***me widḗjō*** for **se widḗjō**, *I see myself*; ***nos perswādḗjomos*** for **se perswādḗjomos**, *we persuade ourselves*, etc.

b. The Reflexive pronoun of the third person has a special form used only in this sense, the same for both singular and plural. It is thus declined:

se, *-self*

ACC.	**se**, *myself, yourself, himself/herself/itself, ourselves, yourselves, themselves.*
GEN.	**sewe**, ***soi***, *of myself, yourself, himself/herself/itself, ourselves, etc.*
DAT.	**sebhei**, ***soi***, *to myself, yourself, himself/herself/itself, ourselves, etc.*
LOC.	**sei**, *in/with myself, yourself, himself/herself/itself, ourselves, etc.*
ABL.	**swed**, *by/from/etc. myself, yourself, himself/herself/itself, ourselves, etc.*

NOTE. Particular IE languages show an old **swoi** and **swe**, cf. Gk. Lesb. ϝε. According to J.T. Katz precisely this **swe** is regarded as ancient and **se** as secondary. In contrast, G.E. Dunkel connects **se**/**soi**, which he considers more ancient, with the demonstrative pronoun **so**.

6.4. POSSESSIVE PRONOUNS

6.4.1. From the bases of the personal pronouns, the oldest Possessive Pronouns seem to have been **(e)mos**, *mine*, **ņsmós**, *ours*, **t(e)wos**, *thine*, **usmós**, *yours*, **s(e)wos**.

NOTE. So e.g. in Gk. *emós* (<**emós**), *ammos, sós, ummos, hos*, Av. *ma-, θwa-*, O.Ind. *tva-*. Variants exist in **twos**/**tewós** (as Gk. *teϝós*, Lat. *tuus*), **swos**/**sewós** (as Gk. *heϝós*, Lat. *suus*).

6.4.2. The common Late PIE Possessives were formed from the same bases with suffixes -**(i)jo**- in the singular, -**(t)ero**- in the plural; as, **méwijos**, **menjos**, *my*, **ņserós**, *our*, **téwijos**, *thy*, **userós**, *your*, **séwijos**.

NOTE. For such common PIE forms, similar to the genitives of the personal pronouns (v.s.), cf. Gk. *ēméteros* (<*ņsmé-tero-*), *uméteros* (<*usmé-tero-*), O.Lat. *noster* (<*nos-tero-*) *uoster* (<*wos-tero-*), Goth. *unsara-*, (<*ņs-ero-*), *izwara-* (<*wesw-ero-?*), etc. all used as possessive pronouns; for the singular, cf. Lat. *meus*, O.C.S. *moji*, Goth *meina-*, etc. O.Ind. *madīya-, tvadīya*, etc. were formed from the ablatives *mad, tvad*, etc., while possessives *mamaka-, asmāka-, jusmāka-*, were made from the genitives. See Szemerényi (1970), Adrados (1998), Meier-Brügger (2003).

6.4.3. Possessives are declined like adjectives of the first type, in -**os**, -**ā**, -**om**.

NOTE. PIE **s(e)wos**, **séwijos**, are only used as reflexives, referring to the subject of the sentence. For a possessive of the third person not referring to the subject, the genitive of a demonstrative (anaphoric) must be used. Thus, **paterṃ séwijom chenti**, (*he/she/it*) *kills his* [*own*] *father*; but **paterṃ esjo chenti**, (*he/she/it*) *kills his* [*somebody* (m.) *else's*] *father*.

6.4.4. Other forms are the following:

a. A possessive **qosjos**, -**ā**, -**om**, *whose*, is formed from the genitive singular of the relative or interrogative pronoun **qo**- (v.i.). It may be either interrogative or relative in force according to its derivation, but is usually the former.

b. The Reciprocals *one another*, *each other*, were expressed like the distributives (v.s.); as, **oinos oinos**, **álteros álteros**, **aljos aljos**, **onjos onjos**, etc. For example,

álteros álterosjo prō autons énkonti, *they drive each other's cars* (*one drives the car of the other*),

aljōs aljons lubhḗjonti, *they love each other* (*the ones love the others*).

NOTE. Cf. Hitt. '*1-aš 1-an ku-w-aš-ki-iť*', "*one killed the other continuously*", O.Ind. *anyonya-*, Av. *aniiō.aniia-*, Chor. *nywny*, Lat. *alterius alterum*; **oinos álterom**, as in Latin *unus alterum*, Eng. *one another*, Ger. *einander*, etc. Reciprocity is one of the principal meanings of middle voice

forms in Sanskrit and Ancient Greek, and also in Latin -r forms, therefore assumed to have been inherited from the proto-language (cf. Hirt 1934, Georgiev 1935). For *mutually*, *each other*, *reciprocally*, an adv. **mistós** (<**mit-to-*), Ø-grade from **meit**-, *change*, exists; cf. O.Ind. *mithás*, Goth. *missō*, Lat. *mūtuum*, O.Ir. *mis-*, *mith*, Bal. **meit-u-*, O.C.S. мьстъ, мьстā; e.g. Goth. '*ni liugid iswis misso*', "*do not lie to one another*".

6.5. ANAPHORIC PRONOUNS

6.5.1. Anaphora is an instance of an expression referring to another, the weak part of the deixis. In general, an anaphoric is represented by a pro-form or some kind of deictic. They usually don't have adjectival use, and are only used as mere abbreviating substitutes of the noun.

NOTE. Old anaphorics are usually substituted in modern IE dialects by demonstratives.

They are usually integrated into the pronoun system with gender; only occasionally some of these anaphorics have been integrated into the Personal Pronouns system in Indo-European languages.

6.5.2. Modern Indo-European has a general Anaphoric pronoun, **is**, **ja**, **id**, an old demonstrative pronoun with basis on PIE root **i**- with ablaut **ei**-.

NOTE. PIE root **i**- is also the base for common PIE relative **jo**-. Demonstrative **is**, **ja/ī**, **id**, with anaphoric value, "he/she/it", in Italic (e.g. Lat. *is*, *ea*, *id*), Germanic (e.g. O.H.G. *ir*, *er/iz*, *ez*), Baltic (e.g. Lith. *jis/ji*), Greek (e.g. Cypriot *ín*), Indo-Iranian (e.g. Skr. *ay-ám*, *iy-ám*, *i-d-ám*).

6.5.3. The other Demonstrative pronoun, **so**, **sā**, **tod**, functions as anaphoric too, but tends to appear leading the sentence, being its origin probably the relative. They are also used for the second term in comparisons.

NOTE. Demonstrative **so**, **sā**, **tod** is also widely attested in Celtic (e.g. O.Ir. *-so/-d*), Italic (e.g. Lat. *is-te*, *is-ta*, *is-tud*), Germanic (e.g. Goth. *sa*, *sō*, *þata*, O.Eng. *sē*, *sēo*, *þæt*, O.H.G. *der*, *die*, *daz*), Baltic (e.g. Lith. *tàs*, *tà*), Slavic (e.g. O.C.S. *tǔ*, *ta*, *to*), Alb. *ai*, *ajo*, Gk. *ho*, *hē*, *tó*, Indo-Iranian (e.g. Skr. *sá*, *sā́*, *tát*), Toch B *se*, *sā*, *te*, Arm. *ay-d*, Hitt. *ta*. Modern IE languages have sometimes mixed both forms to create a single system, while others maintain the old differentiation.

6.6. DEMONSTRATIVE PRONOUNS

6.6.1. The function of Demonstrative pronouns, *deixis*, includes an indication of position in relation to the person speaking. It is possible to express a maximum of four (generally three) different degrees of distance; as, *I-deixis* (here, near the speaker), *thou-*

deixis (there, near the person addressed), *that-deixis* (there, without a particular spatial reference), *yonder-deixis* (yonder, over there).

6.6.2. The Demonstrative Pronouns **so**, *this, that*, and **is**, *this one, that one*, "*the (just named)*", are used to point out or designate a person or thing for special attention, either with nouns, as Adjectives, or alone, as Pronouns, and are so declined:

so, **sā**, **tod**, *this, that*

	Singular			Plural		
	m.	*n.*	*f.*	*m.*	*n.*	*f.*
NOM.	**so**	**tod**	**sā**	**toi**	**tā**	**tāi**
ACC.	**tom**		**tām**	**tons**		**tāns**
GEN.	**tosjo**		**tesjās**	**toisom**		**tāsom**
DAT.	**tosmōi**		**tesjāi**	**toibhos/toimos**		**tābhos/tāmos**
LOC.	**tosmi**		**tesjāi**	**toisu**		**tāsu**
INS.	**toi**		**tesjā**	**tōis**		**tābhis/tāmis**
ABL.	**tosmōd**		**tesjās**	**toibhos/toimos**		**tābhos/tāmos**

NOTE. Different variants are observed in the attested dialects: 1) Nom. **so** is also found as **sos** in Old Indian, Greek and Gothic, and as **se** in Latin (cf. Lat. *ipse*). 2) Nom. **sā** is found as **sja/sī** in Gothic and Celtic. 3) Nom. Pl. **tāi** is general, while **sāi** is restricted to some dialects, as Attic-Ionic Greek, possibly (Meier-Brügger) from original f. *tā* and m. *to*. However, linguists like Beekes or Adrados reconstruct the Nominative form in **s**- as the original Proto-Indo-European form. 4) The Instrumental singular forms are difficult to reconstruct with the available data.

is, **ja**, **id**, *this one*, *that one*

	Singular			Plural		
	m.	*n.*	*f.*	*m.*	*n.*	*f.*
NOM.	**is**	**id**	**ja/ī**	**ejes**	**ī/ja**	**jās**
ACC.	**im**		**jam/īm**	**ins**		**jāns**
GEN.	**esjo**		**esjās**	**eisom**		
DAT.	**esmōi**		**esjāi**	**eibhos/eimos**		
LOC.	**esmi**		**esjāi**	**eisu**		
INS.	**ei**		**esjā**	**eibhis/eimis**		
ABL.	**esmōd**		**esjās**	**eibhos/eimos**		

NOTE. Some emphatic forms exist; as, ***ejóm*** for **is**, ***idóm*** for **id**; ***ijóm*** for **ja**.

6.6.2. Distance degrees in Demonstratives might be classified as follows: **kos**, **kā**, **kod** (also **ghei**-**ke**, **ghāi**-**ke**, **ghod**-**ke**), *I-deixis*, "*this here*", **oisos**, **oisā**, **oisom**, *thou-deixis*, "*this there*", general **so**, **tod**, **sā**, *that-deixis*; **elne**, **elnā**, **elnod**, *yonder-deixis*.

6.6.3. Deictic particles which appear frequently with demonstrative pronouns include -**ke**/-**ko**-, *here*; -**ne**-/-**no**-, *there*; -**wo**-, *away*, *again*.

NOTE. For PIE **i**-, **se**-, *he*, cf. Lat. *is*, O.Ind. *saḥ*, *esaḥ*, Hitt. *apā*, Goth. *is*, O.Ir. *(h)í*; for (**e**)**ke**, **ghei**-(**ke**), **se**-, **te**-, *this* (*here*), cf. Lat. *hic* (<*ghe-i-ke), Gk. *ουτος*, O.Ind. *ay-am*, *id-am*, *esaḥ*, Hitt. *kā*, *eda* (def.), Goth. *hi-*, *sa(h)*, O.Ir. *sin*, O.Russ. *сей*, *этот*; for **oi-se**, **is-te**, **ene**, *this* (*there*), cf. Lat. *iste*, Gk. *οιος* (<*oihos), O.Ind. *enam* (clit.); for **el-ne**, *that*, cf. Lat. *ille* (<***el-ne***), *ollus* (<***ol-nos***), Gk. *εκεινος*, O.Ind. *a-sau*, *u-*, Goth. *jains.* Common derivatives **kei**, *here* (Loc. from **ke**)*,* **num-ke**, *now* (from **nū**, *now*), or **i-dhei**, *there*, **tom-ke**, *then* (from **tom**, *then*). See Appendix III.2.2 for more information.

6.7. INTERROGATIVE AND INDEFINITE PRONOUNS

6.7.1. INTRODUCTION

1. There are two forms of the Interrogative-Indefinite Pronoun in Modern Indo-European, and each one corresponds to a different class in our system, **qi**- (with ablaut **qei**-) to the Substantive, and **qo**- to the Adjective pronouns.

SUBSTANTIVE	*ADJECTIVE*
qis bhéreti? *who carries?*	**qos wīrós bhéreti?** *what man carries?*
qid widḗjesi? *what do you see?*	**qom autom widḗjesi?** *which car do you see?*

NOTE. In the origin, **qi**-/**qo**- was possibly a noun which meant "the unknown", and its interrogative/indefinite sense depended on the individual sentences. Later both became pronouns with gender, thus functioning both as (orthotonic) interrogatives or (enclitic) indefinites (Szemerényi, 1970). The form **qi**- is probably the original independent form (compare the degree of specialization of **qo**-, further extended in IE dialects), for which **qo**- could have been originally the o-grade form (Beekes 1995, Adrados 1998). The Substantive Interrogative pronoun in PIE was **qi**-, whereas **qo**- was used to fill adjectival functions (Meier-Brügger, 2003), hence MIE Substantive-**qi** and Adjective-**qo**. Some IE dialects have chosen the o-stem only, as Germanic, while some others have mixed them together in a single paradigm, as Indo-Iranian, Balto-Slavic or

Italic. Cf. Gmc. *khwo-* (cf. Goth. *hwas*, O.N. *hverr*, O.S. *hwe*, O.E. *hwā*, Dan. *hvo*, O.Fris. *hwa*, O.H.G. *hwër*), Lat. *qui, quae, quod*; *quis, quid*, Osc. *pisi*, Umb. *púí, svepis*, Gk. *tis*, Sktr. *kaḥ*, Av. *ko*, O.Pers. *čiy*, Pers. *ki*, Phryg. *kos*, Toch. *kus/kŭse*, Arm. *ov, inč'*, Lith. *kas*, Ltv. *kas*, O.C.S. *kuto*, Rus. *kto*, Pol. *kto*, O.Ir. *ce, cid*, Welsh *pwy*, Alb. *kush*, Kam. *kâča*; in Anatolian, compare Hitt. *kuiš*, Luw. kui-, Lyd. *qi*-, Lyc. *tike*, and Carian *kuo*.

2. The Substantive Interrogative Pronoun **qis?** *who?,* **qid?** *what?,* is declined like **i**-:

	Singular			Plural		
	m.	*f.*	*n.*	*m.*	*f.*	*n.*
NOM.	**qis**		**qid**	**qejes**		**qī/qja**
ACC.	**qim**			**qins**		
GEN.	**qesjo**			**qeisom**		
DAT.	**qesmei**			**qeibhos/qeimos**		
LOC.	**qesmi**			**qeisu**		
INS.	**qī**			**qeibhis/qeimis**		
ABL.	**qesmōd**			**qeibhos/qeimos**		

NOTE. PIE -**qe**, *and*, is derived from this root and was originally a modal adverb meaning "*as, like*"; e.g. **patḗr mātḗr-qe**, *father like mother*. Szemerényi (1970). Similarly, **jo**- is probably behind Hit. -*ya*.

3. The Adjective Interrogative Pronoun, **qos? qā?** *who (of them)?,* **qod?** *what kind of? what one?,* is declined throughout like the Relative:

	Singular			Plural		
	m.	*f.*	*n.*	*m.*	*f.*	*n.*
NOM.	**qos**	**qā**	**qod**	**qoi**	**qās**	**qā**
ACC.	**qom**	**qām**		**qons**	**qāns**	
GEN.	**qosjo**			**qoisom**		
DAT.	**qosmōi**			**qoibhos/qoimos**		
LOC.	**qosmi**			**qoisu**		
INS.	**qoi**			**qoibhis/qoimis**		
ABL.	**qosmōd**			**qoibhos/qoimos**		

4. The Indefinite Pronouns **qi**-/**qo**-, *any one*, *any*, are declined like the corresponding Interrogatives.

SUBSTANTIVE	**qis**, *anyone*; **qid**, *anything*
ADJECTIVE	**qos**, **qā**, **qod**, *any*

5. PIE had other interrogative or relative particle, **me**-/**mo**-.

NOTE. It survived in Celtic (e.g. Bret *ma, may*, "*that*"), Anatolian (Hit. *masi*, "*how much*"), and Tocharian (Toch. A *mänt*, "*how*").

6.7.2. COMPOUNDS

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1. The pronouns **qi**- and **qo**- appear in different combinations:

a. The forms can be repeated, as in substantive **qisqis**, *anyone*, **qidqid**, *anything*, or adjective **qāqos**, **qāqā**, **qāqod**, *whoever*.

NOTE. For this use, similar to the distributive ones, e.g. EIE **qāqos**, *whoever*, Gaul. *papon*, O.Ir. *cāch*, O.C.S. *kakŭ*, Lith. *kók(i)s*, and also Gk. *εκατερος, εκαστος*, O.Ind. *pratieka*, Hitt. *kuissa*, Goth. *ainhvaþaruh*; for **qisqis**, *anyone*, cf. Gk. *τις, οστις*, O.Ind. *kim kid, kacit, kaścana, kopi*, Hitt. *kuis kuis, kuis-as kuis*, Lat. *quisquis, quīlĭbĕt, quīvis*, Goth. *hvazuh, hvarjizuh*, Arm. *in-č*.

Other common PIE forms include (**sol**)**wos**, *all*, cf. Gk. *ολοι*, O.Ind. *visva, sarva*, Hitt. *hūmant*-, O.Ir. *u(i)le*; **enis**, *certain*, cf. Gk. *ενιαυτον*, O.Ind. *ekaścana* Lat. *quīdam*; **álteros**, **ónteros**, *the other*, from **aljos**, **onjos**, *some other*, etc.

b. In some forms the copulative conjunction -**qe** is added to form new pronouns, usually *universals*; as, **qiskomqe**, **qisimmoqe**, *whoever*. Indefinites **itaqe**, *and also*, **toqe**, *also*, **joqe**, *and*.

NOTE. Cf. Gk. *τις αν, τις εαν*, O.Ind. *yaḥ kaś cit, yo yaḥ, yadanga*, Hitt. *kuis imma, kuis imma kuis, kuis-as imma* (*kuis*), Lat. *quiscumque*, Goth. *sahvazuh saei*, Ger. *wer auch immer*, O.Ir. *cibé duine*, Russ. *кто бы ни*;

c. Some forms are made with prefixes, like (substantive) **edqis**, *some(one) among many*, **edqid**, *something*, (adjective) **edqos**, **edqā**, **edqod**, *whether*, *some*. Other forms with suffixes; as, **qéjespejoi**, *some*.

NOTE. For (**ed**)**qis**, cf. Gk. *τις*, O.Ind. *anyatama*, Hitt. *kuis ki*, Lat. *ecquis*, *quis*, *aliquis*, Goth. *hvashun*, Russ. *edvá*, O.Ir. *nech*, *duine*. For **qéjespejoi** cf. Gk. *οιτινες*, O.Ind. *katipaya*, Hitt. *kuis ki*, Russ. *несколько*.

d. The negatives are usually composed with negation particles, usually **ne**; as, **neqis**, *nobody*, **neqid**, *nothing*, **neqom**, *never*; but **neqos**, *someone*.

NOTE. For **neqis***, nobody, no one*, cf. Gk. *ουδεις*, O.Ind. *na kaḥ*, Hitt. *UL kuiski*, Goth. (*ni*) *hvashun*, Gaul. *nepon*, O.Ir. *ní aon duine*, Lat. *nec quisquam*, Russ. *никто*.

e. It is also found as in compound with relative **jo**-; as, **josqis**, *anyone*, **jodqid**, *anything*, cf. Gk. *hóstis hótti*, Skr. *yás cit, yác cit*.

f. With identity or oppositive forms; as, **qidpe**, *indeed*, **aljodhei**, *elsewhere*.

2. There are compounds with numerals; as, **ghei**-**sem**, *exactly so, in this one way*.

NOTE. Cf. Hitt. *ki-ššan*, '*thus, in the following way*', from **ghei-sem**, "*in this one way, exactly so*", also found in *eni-ššan*, '*thus, in the manner mentioned*', *apeni-ššan*, '*thus, in that way*', etc. For **ne**-**oinom**, "*no one*", *none, not any*, cf. Eng. *none*, Ger. *nein*, maybe Lat. *nōn*. Also, Latin loan *nūllus* (<**ne**-**oinolos**, "*not any*"), *none, null*.

3. Reflexives are found in **jota sei**, *alike, nearly*, **sweike**, *thus*, **swāi**, *so*, etc.

6.7.3. CORRELATIVES

1. Many Pronouns, Pronominal Adjectives and Adverbs have corresponding demonstrative, relative, interrogative, and indefinite forms in Proto-Indo-European. Such parallel forms are called Correlatives, and some are shown in the following table:

Demonstrative	*Relative*	*Interrogative*
so, **sā**, **tod**	**jos**, **jā**, **jod**	**qis? qid?**, **qos? qā? qod?**
this, that	*who, which*	*who?, what? which?*
ita	**jota**	**qota?**
so	*so*	*how?*
tālis	*jālis*	**qālis?**
so constituted	*as*	*of what sort?*
tām	*jām*	**qām?**
that way	*which way*	*how, in what way?*

tom, **todā́**	**jom**	**qom? qodā́?**
then	*when*	*when?*
idhei, **tor**	**jodhei**	**qor? qodhei?**
here, there	*where*	*where?*
toi	***joi***	**qoi?qote?**
thither	*whither*	*whither?*
totrōd	**jomde**	**qomde? qotrōd?**
from there	*wherefrom*	*from which?*
totjos	**jotjos**	**qotjos?**
so many	*as many*	*how many?*
toti	**joti**	**qoti?**
so often	*as often*	*how often?*
tā́wṇtos	***jā́wṇtos***	**qā́wṇtos?**
so much/large	*as much/large*	*how much/large?*
to(s)jos	**josjo**	**qosjos?**
of whom/which	*whose*	*pertaining to whom/what?*
íteros	**jóteros**	**qóteros?**
(an)other	*which (of two)*	*which (of two)?*
tori	**jori**	**qori?**
therefore	*wherefore*	*why?*

NOTE. Latin (*c*)*ibī*, (*c*)*ubī* is frequently reconstructed as a conceivable PIE *ibhi, *qobhi, but it is not difficult to find a common origin in PIE ***i*-*dhei***, ***qo*-*dhei*** for similar forms attested in different IE dialects; cf. Lat. *ubī*, Osc. *puf*, O.Ind. *kuha*, O.Sla. *kude*, etc. Relative forms in italics are reconstructed following the general paradigm; some relatives were made with the interrogative **qo**-, mainly used with this value in Anatolian and Northern IE, especially in the Western core; as, int. **qām?** *how, in what way?* and rel. **qām**, *which way*, cf. Lat. *quam*, Arm. *k'an*, *v.i.* For more information, see Appendix III.2.1 and <http://dnghu.org/indoeuropean_pronouns.pdf>.

6.8. RELATIVE PRONOUNS

6.8.1. There are two general pronominal stems used as relative pronouns, one related to the anaphorics (**jo**-), and one to the interrogative-indefinites (**qi**-/**qo**-).

NOTE. The interrogative pronoun is also used as indefinite in all IE languages. In some it is used additionally as relative, without differentiation in Anatolian, with it in Italic (e.g. Lat. *quo*- opposed to *quis*), Tocharian, later Celtic and Germanic; the other group, comprising Aryan, Greek, Phrygian and Slavic kept using the PIE relative pronoun **jo**- (<*Hjo-), from the anaphoric root **i**-; cf. Gk. *hós*, *hē*, *ho*, Skr. *yá*s, *yā*, *yad*, Av. *ya*-, Phryg. *ios*, Sla. *i-že*, Cel. *io*, Goth *ja-bai*, maybe Hitt. *ya*, Toch. A *yo.* Despite Szemerényi (1970), who considers it mainly a Southern innovation, only Proto-Italic shows no traces of the common PIE relative, and because of that it is generally considered lost in that branch, not an innovation of the others; hence its specialized use in MIE. Relatives **qi**-/**qo**- are found in Anat., Bal., Toch., Lat. and Gmc. It is used for indirect interrogatives, cf. O.H.G. *ni weistu hwaz ih sagen thir*, 'you don't know what I say to you'; and for indefinites, cf. Lat. *pecuniam quis nancitor habeto*, 'fortune, who acquires it own it'.

6.8.2. MIE general Relative Pronoun **jos**, **jā**, **jod**, the o-stem derivative from **i**-, is inflected like **so**, **sā**, **tod**.

6.9. OTHER PRONOUNS

6.9.1. Identity pronouns are those generally called intensifiers or emphatic pronouns, expressions like Eng. '*x-self*' (*himself*, *herself*, *myself*, *oneself*, etc.), Ger. *selbst*, *selber*, Lat. *ipse*, Ita. *stesso* or Russ. *sam*.

Proto-Indo-European formations that function as identity pronouns stem from a common **epe**, *self*; as, **se epse**, **s(w)el (e)pe**, -*self*.

NOTE. cf. Hitt. *apāsila*, O.Lat. *sapsa*, *sumpse*, *ipse*, Goth. *silba*, O.Ir. *fessin*, *fadessin* (>*féin*), Russ. *сам*.

6.9.2. Oppositive pronouns are usually derived from suffix -***tero***-; as, **qóteros?** *which of two?* **íteros**, *another*, **álteros**, *the other one*, **próteros**, *first (of two)*.

NOTE. For **qóteros**, *cf.* Lat *uter*, O.Eng. *hwæðer* (Eng. *whether*), Lith *kataràs*, OCS *koteryĭ*, Gk. *póteros*, Skr. *katará*-; from this word is common Latin loan '*neuter*', MIE **neqóteros**, "*neither one nor the other*". For **sṇterí**, *missing*, cf. Gmc. *sun-dr- (e.g. Ger. *sonder*), Gk ατερ, O.Ind. *sanutar*, from **sṇi**, *apart*, cf. Lat. *sine*, "*without*", O.Sla. *svene*, O.Ir. *sain*, "*different*".

6.9.3. Adjectival pronouns include identity as well as oppositive pronouns; as, **somós**, *the same*, or **aljos**, **onjos**, *the other*.

NOTE. Such nominal forms, properly categorized as vaguely belonging to the field of pronuns, receive pronominal inflection. For adj. **somós**, *equal, same*, cf. Gmc. *samaz, Gk. ὁμός, ὁμοῦ, ὁμαλός, Skr. *samaḥ*, Av. *hama*, O.C.S. *самъ*, O.Ir. *som*.