

5. ADJECTIVES

5.1. INFLECTION OF ADJECTIVES

5.1.1. In IE III, 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: **wrsēn**⁷⁹, *male*, *man*, can be the subject of a verb (i.e., a noun), and can determine a noun.

Most of the stems are actually indifferent to the opposition noun/adjective, and even most of the suffixes. Their inflection is common, too, and differences are normally secondary. This is the reason why we have already studied the adjective declensions; they are the same as the noun's.

5.1.3. However, since the oldest IE language there were nouns different from adjectives, as **wīqos** or **pōds**, and adjectives different from nouns, as **rudhrós**⁶¹, **solwós**, 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, **patēr-mātēr**, **bhrātēr-swésōr**.

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, 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/-ntia** (or **-ntī**), **-us/-uī**.

The general system may be so depicted:

	<i>Animates</i>		<i>Inanimates</i>
	<i>Maskuline</i>	<i>Feminine</i>	<i>Neuter</i>
1.	-os	-ā	-om
2.	-is	-is	-i
3.	-nts	-ntiā̃/-ntī	-nt
4.	-ēs	-ēs	-es
5.	-us	-uī	-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 as, for example, the adjectives in **-ā** are only feminine (unlike nouns, which can also be masculine). An **o** stem 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 **-ós**, **-ā̃**, **-óm**, cf. **kaikós**, **-ā̃**, **-óm**, *blind* (cf. Lat. *caecus*, Gk. *κακία*, *a north wind*), **akrós**, **-ā̃**, **-óm**, *sour*, **newós**, **-ā̃**, **-om**, *new*, **rudhrós**, **-ā̃**, **-om**, *red*, **koilós**, **-ā̃**, **-óm**, *empty* (cf. Gk. *κοιλός*, maybe also Lat. *caelus*, *caelum*), **elnghrós**, **-ā̃**, **-óm**, *light* (cf. Gk. *ἐλαφρός*), etc.

2. For adjectives in **-ús**, **-uī**, **-ú**, cf. **swādús**, **-uī**, **-ú**, *sweet*, **mreghús**, **-uī**, **-ú**, *brief*, **lchús**, **-uī**, **-ú**, *light*, **tnús**, **-uī**, **-ú**, *stretched*, **mldús**, **-uī**, **-ú**, *soft*, **ōkús**, **-uī**, **-ú**, *quick*. Other common examples include **āsús**, *good*, **bhanghús**, *dense*, **gherús**, *small*, *bad*, **car(āw)ús**, *heavy*, **dalkús**, *sweet*, **dansús**, *dense*, **dhanghús**, *quick*, **laghús**, *light*, **maldús**, *soft*, **pnghús**, *thick*, **tegús**, *fat*, *dense*, **tanghús**, *fat*, *obese*, **udhús**, *quick*, *immediate*, etc.

5.3. ADJECTIVE SPECIALIZATION

5.3.1. The specialization of adjectives from nouns is not absolute, but a question of grade, as e.g.

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

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

3. Nouns in **-ti** have adjectives in **-tikós**, which usually has an ethnic meaning.

4. Sometimes distinction is made with alternating vowels: neuters in **-om** and adjectives in **-ēs**, **-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** (**-uent**), **-jo**, **-to**, **-no**, **-iko**, etc. There are, however, abundant remains of the old identity between noun and adjective in IE III and therefore in Modern Indo-European. An example of the accent shift is that of **Eurōp-ai-o-**, which as an adjective is **Eurōpaiós**, **Eurōpaiá**, **Eurōpaióm**, while as a noun the accent is shifted towards the root.

5.4. COMPARISON OF ADJECTIVES

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

NOTE. There weren't degrees in the Anatolian dialects, and therefore probably neither in Middle PIE. It is therefore an innovation of IE III, further developed by each dialect after the great IE migrations.

5.4.2. The Comparative is generally formed by adding **-iós**, which has variants **-ijó-** and **-ison**; as in **sen-iós** (Lat. *senior*), *older*, **meg-iós**, *bigger* (cf. “major”), etc.

5.4.3. The same suffix is the base for the Superlative **-istó-** (from **-is-to-**); as in **mreghwistós**, *briefest*, **newistós**, *newest*, etc.

Other dialectal Superlative suffixes include: O.Ind. and Gk. **-tero-**, Gk. **-tm-to-** (Gk. *tato*, cf. O.Sla., O.Ind. ***prījótmos**) O.Ind. **-tmo-**, Ita. and Cel. **-mo-**, **-smo-**, **-tmo-**, and extended **-is-smo-**, **-uper-mo-**, Lat. *summus* < **súp-mos**; Skr. *ádhamas*, Lat. *infimus* < **ídh-mos**; lat. *maximus* < **mág-s-mos**; lat. *intimus* (cf. *intus*) < **én-/n-t-mos**, *innermost*. These are all derivatives of the suffix **-mós**, i.e., [*mos*] or [*mōs*]. The suffix is also present in other adjectives, but it took usually the Superlative degree.

5.4.4. It is interesting to point out that both suffixes, **-io-** (also **-tero-**) and **-is-to-**, had probably an original nominal meaning. Thus, the elongations in **-ios** had a meaning; as in Latin, where **junióses** and **senióses** were used for groups of age; or those in **-teros**, as **māterterā**, *aunt on the mother's side*, **ekwáteros**, *mule*.

NOTE 1. Probably forms like **junióses** are not the most common in IE, although indeed attested in different dialects; actually adjectival suffixes **-iós**, **-istós** are added to the root (in e-grade) without the initial suffixes, while **-teros** and **-tmós** are added with the suffixes. Compare e.g. O.Ir. *sír*, cp. *sía* < **sēiós**, ‘longus, longior’; *lán* (*plēnus* cf. *lín* ‘numerus’), cp. *lia* < **plēiós** (Lat *plōios*, Gk. *plēos*); cf. Lat. *plourume*, zero-grade Lat. *maios*, O.Ir. *mía*. So, for **júwenes** we find Umb. cp. *jovie* < ***jowiē-s**, O.Ir. *óac* ‘iuuenis’, *óa* ‘iunior’; *óam* ‘iuuenissimus’, O.Ind. *yúva(n)-* (*yūnah*), cp. *yávīyas-*, sup. *yávīsta-h*.

NOTE 2. In Latin (and Germanic), as already said, the intervocalic **-s-** becomes voiced, and then it is pronounced as the trilled consonant, what is known with the name of rhotacism. Hence Lat. *iuniores* and *seniores*.

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, **óinos**, *one*; **dwo**, *two*, etc.
2. Ordinal Numbers, adjectives derived (in most cases) from the Cardinals, and answering the question *which in order?* as, **přwos**, *first*; **áleros**, *second*, etc.
3. Distributive Numerals, answering the question *how many at a time?* as, **sémni**, *one at a time*; **dwíni** (also **dwísnoi**), *two by two*, etc.

II. Numeral Adverbs, answering the question *how often?* as, **smís**, *once*; **dwis**, *twice*, etc.

5.5.2. CARDINALS AND ORDINALS

1. These two series are as follows, from one to ten: ¹⁵⁵

	<i>Cardinal</i>	<i>Eng.</i>	<i>Ordinal</i>	<i>Eng.</i>
1.	óinos, óinā, óinom	<i>one</i>	přwós	<i>first</i>
2.	dwó, dwá, dwói	<i>two</i>	alterós (dwoterós)	<i>second</i>
3.	tréjes, tresrés/trisóres, trī	<i>three</i>	triós, trit(i)ós	<i>third</i>
4.	qétwor (qetwóres, qetwesóres, qetwóř)	<i>four</i>	qturós, qetwrtós	<i>fourth</i>
5.	pénqe	<i>five</i>	pnqós, penqtós	<i>fifth</i>
6.	s(w)eks (weks)	<i>six</i>	(*suksós), sekstós	<i>sixth</i>
7.	séptm/septń	<i>seven</i>	septmós	<i>seventh</i>
8.	óktō(u)	<i>eight</i>	oktōwós	<i>eighth</i>
9.	néwn	<i>nine</i>	nownós, neuntós	<i>ninth</i>
10.	dékm/dekń	<i>ten</i>	dekmós, dekmtós	<i>tenth</i>

NOTE. The Ordinals are formed by means of the thematic suffix **-o**, which causes the syllable coming before the ending to have zero grade. This is the older form, which is combined with a newer suffix **-to**. For seven and eight there is no zero grade, due probably to their old roots.

2. The forms from eleven to nineteen were usually formed by copulative compounds with the unit plus **-dekm**, *ten*.¹⁵⁶ Hence Modern Indo-European uses the following system:

	<i>Cardinal</i>	<i>Ordinal</i>
11.	óindekm	oindekm(t)ós
12.	dwódekm	dwodekm(t)ós
13.	trídekm	tridekm(t)ós
14.	qetwǎrdekm	qeturdekm(t)ós
15.	penqédekm	penqedekm(t)ós
16.	séksdekm	seksdekm(t)ós
17.	septrídekm	septmdekm(t)ós
18.	októdekm	októdekm(t)ós
19.	newńdekm	newndekm(t)ós

3. The tens were normally formed with the units with lengthened vowel/sonant and a general -*kmtā/-komt(a)*¹⁵⁷, “group of ten”, although some dialectal differences existed.¹⁵⁸

	<i>Cardinal</i>	<i>Ordinal</i>
20.	(d)wīkrńtī	(d)wīkmt(m)ós
30.	trīkómt(ǎ)	trīkomtós
40.	qetwǎrkómt(ǎ)	qetwǎrkomtós
50.	penqékómt(ǎ)	penqēkomtós
60.	s(w)ekskómt(ǎ)	sekskomtós
70.	septmńkómt(ǎ)	septmńkomtós
80.	oktōkómt(ǎ)	oktōkomtós
90.	newnkómt(ǎ)	newnkomtós
100.	(sm)kmtóm	kmtom(t)ós
1000.	túsntī, (sm)ghéslo-	tusntitós

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 **túsntī**:

	<i>Cardinal</i>	<i>Ordinal</i>
200.	dwokrńtī	dwokmtós
300.	trīkrńtī	trīkmtós
400.	qetwrkrńtī	qetwrkmtós
500.	penqekrńtī	penqekmtós
600.	sekskrńtī	sekskmtós
700.	septmkrńtī	septmkmtós
800.	oktōkrńtī	oktōkmtós

900.	newnkíntom	newnkmtós
2000.	dwo/dwéi/dwō túsntī	dwo tusntitói, dwéi tusntitás, dwō tusntitóm
3000.	tréjes/trisóres/trī túsntī	tréjes tusntitói, trisóres tusntitás, trī tusntitóm

NOTE 1. These MIE uninflected cardinals are equivalent to most European forms; as, for *two hundred*, Lat. *quingenti*, Gk. *πεντακόσια*, and also Eng. *five hundred*, Ger. *fünfhundert*, Russ. *пятьсот*, Pol. *pięćset*, Welsh *pum cant*, Bret. *pemp-kant*. Inflected forms, such as modern Indo-European dialectal Da. *fem hundrede*, Fr. *cinq cents*, It. *cinquecento*, Spa. *quinientos*, Pt. *quinhentos*, Sr.-Cr. *petsto* (f. *pet stotina*), etc. are left for the ordinals in this Modern Indo-European system.

NOTE 2. In Germanic the hundreds are compounds made of a substantive “*hundred*”, MIE **knít(m)-radhom**, Gmc. *khund(a)-ratham*, v.s., but we have chosen this – for us more straightforward – European form, found in Italic, Balto-Slavic and Greek.

5. The compound numerals are made with the units in the second place, usually followed by the copulative **-qe**:

f. **(d)wīknítī óinā(-qe)**, *twenty (and) one*; m. **trikómta qétwor(-qe)**, *thirty (and) four*; etc.

NOTE. Alternative forms with the unit in the first place are also possible in Modern Indo-European, even though most modern European languages think about numeric compounds with the units at the end. In fact, such lesser used formation is possibly the most archaic, maybe the original PIE form. Compare e.g. for “*twenty-one*” (m.):

MIE **(d)wīknítī óinos(-qe)**, as Eng. *twenty-one*, Swe. *tjuogoett*, Nor. *tjueen*, Ice. *tuttugu og einn*, Lat. *uiginti unus* (as modern Romance, cf. Fr. *vingt-et-un*, It. *ventuno*, Spa. *veintiuno*, Pt. *vinte e um*, Rom. *douăzeci și unu*), Gk. *είκοσι ἓν*, Ltv. *divdesmit viens*, Russ. *двадцать один*, Pol. *dwadzieścia jeden*, etc.

For **óinos(d)wīknítīqe**, maybe the oldest form, compare Gmc. (as Ger. *einundzwanzig*, Du. *eenentwintig*, Fris. *ienentweintich*, Da. *enogtyve*), and Lat. *unus et uiginti*, Skr. *ékaviñśati*, Bret. *unan-warn-ugent*, etc.

6. In compounds we find:

sm-, *one-*; **du-** (or **dw-** followed by vowel), **dwi-**, *two-*; **tri-**, *three-*; **q(e)tur-**, *four-*

5.5.3. DECLENSION OF CARDINALS AND ORDINALS

Of the Cardinals only **óinos**, **dwo**, **tréjes** (and dialectally **qétwor**), as well as **(sm)gheslós**, are declinable.

a. The declension of **óinos**, **-ā**, **-om** has often the meaning of *same* or *only*. The plural is used in this sense; but also, as a simple numeral, to agree with a plural noun of singular meaning. The plural occurs also in phrases like **óinoi alterói-qe**, *one party and the other (the ones and the others)*.

b. The declension of **sem-** (and o-grade **sōm-**), *one*, is as follows:

PIE <i>sem-/som-</i> , <i>one</i>		
NOM.	sems	sōms
ACC.	sémm	sómm
GEN.	smós	somós
D.-A.	sméi	soméi
L.-I.	smí, sémi	somí/sómi

c. **Dwo**, *two*, and **tréjes**, *three*, are thus declined:

	<i>dwo</i>			<i>trejes</i>		
	<i>m.</i>	<i>n.</i>	<i>f.</i>	<i>m.</i>	<i>f.</i>	<i>n.</i>
NOM.	dwo	dwói	dwā	tréjes		trī
ACC.	dwom	dwói	dwām	trims		trī
GEN.	dwósio		dwésās	tríjom		
D.-A.	dwósmei		dwésiāi (>*-ei)	tríbhios		
LOC.	dwósmi		dwésiāi	trísu		
INS.	dwósmō		dwésiā	tríbhīs		

NOTE. **ámhho**, *both*, is sometimes declined like **dwo**, as in Latin.

d. **Túsntī**, *a thousand*, functions as an indeclinable adjective:

túsntī módois, *in a thousand ways*. **kom túsntī wírōis**, *with a thousand men*

e. The ordinals are adjectives of the Fourth and Third Declensions, and are regularly declined.

6.3.2. Cardinals and Ordinals have the following uses:

a. In numbers below 100, if units precede tens, the number is generally written as one word; as in f. **dwā(d)wīkrntīqe**, *twenty one*; otherwise it is separated: **(d)wīkrntī dwā(-qe)**.

b. In numbers above 100 the highest denomination generally stands first, the next second, etc., as in English; as, *1764*, **túsntī septmkrntī sekskómta qétwor(-qe)**, or **túsntī septmkrntī qétworsekskómtqe**.

NOTE. Observe the following combinations of numerals with substantives:

wīkrntī óinos(-qe) wírōs, or **wīkrntī wírōs óinosqe**, *21 men*.

dwo túsnti penqekrntī tridekm cénās, *2513 women*.

c. The Proto-Indo-European language had no special words for *million*, *billion*, *trillion*, etc., and these numbers were expressed by multiplication. In Modern Indo-European they are formed with IE common loan from Italic **smghésli** (cf. Ita. **(s)m'ighēli* > O.Lat. *mīhīli* > Lat. *mille*), a derivative of **sm+ghéslos** meaning “a thousand”; as, **smghésliōn**, *million*, **dwighésliōn**, *billion*, **trighésliōn**, *trillion*, etc. For the word *milliard*, *one thousand million*, **smghesliárdos** can also be used.

d. Fractions are expressed, as in English, by cardinals in the numerator and ordinals in the denominator. The feminine gender is used to agree with **pártis**, *part*, either expressed (with adjective) or understood (nominalized): *two-sevenths*, **dwá séptmāi** (or **dwá séptmāi pártēs**); *three-eighths*, **tréjes októwāi** (or **tréjes októwāi pártēs**).

One-half is **(dwi)medhjá pártis** or **(dwi)médhjom**.

NOTE. When the numerator is one, it can be omitted and **pártis** must then be expressed: *one-third*, **tritá pártis**; *one-fourth*, **qetwrtá pártis**.

5.5.4. DISTRIBUTIVES

1. Distributive Numerals are usually formed with the zero-grade forms and the suffix **-ni**.

NOTE. These answer to the interrogative **qóteni?**, *how many of each?* or *how many at a time?*

1.	sémni , <i>one by one</i>	20.	(d)wikrntīni
2.	dwí(s)ni , <i>two by two</i>	21.	(d)wikrntīni sémni-qe , etc.
3.	trí(s)ni , <i>three by three</i>	30.	trīkrntīni
4.	qtúrni	40.	qetwrkrntīni
5.	pnqéni	50.	penqekrntīni
6.	sék(s)ni (older <i>*suksni</i>)	60.	sekskrntīni
7.	septmni	70.	septmkrntīni
8.	októni	80.	oktōkrntīni
9.	néwnni	90.	newnkrntīni
10.	dékmni	100.	kmtmni
11.	sémni dékmni	200.	dukmtmni
12.	dwíni dékmni	1.000	túsntīni
13.	tríni dékmni	2.000	dwíni túsntīni
14.	qtúrni dékmni , etc.	10.000	dékmni túsntīni

NOTE 1. The word for “one by one” can also be **sémgoli**, *one, individual, separate*, as Lat. *singuli*, from **semgolós**, *alone, single*, formed with suffixed **sem-go-lo-**, although that Lat. *-g-* is generally believed to be a later addition, i.e. proper MIE **sémoli**, from **sem-o-lós**.

NOTE 2. Suffixed **trísni**, *three each*, is found in Lat. *trīni*, Skr. *trīṇi*, giving derivative **trísnos**, *trine*, as Lat. *trinus*, as well as **trísnitā**, *trinity*.

2. Distributives are used mainly in the sense of *so many apiece* or *on each side*, and also in multiplications.

5.5.5. NUMERAL ADVERBS

The Numeral Adverbs answer the question *how many times? how often?*, and are usually formed with **i** and sometimes a lengthening in **-s**.

1.	smís , <i>once</i>	20.	(d)wīkrntīs
2.	dwis , <i>twice</i>	21.	(d)wīkrntī smīs-qe ,
3.	tris , <i>thrice</i>	30.	trīkómti
4.	qéturs, qétrus	40.	qetwrkómti
5.	pénqei	50.	penqekómti
6.	sék(s)i	60.	sekskómti
7.	séptmi	70.	septmkómti
8:	óktōi	80.	oktōkómti
9.	néwni	90.	newnkómti
10.	dékmi	100.	kmtómi
11.	óidekmi	200.	dukmtómi
12.	dwódekmi	1.000	túsntīs
13.	trídekmi	2.000	dwis túsntīs
14.	qetúrdekmi, etc.	10.000	dékmi túsntīs

5.5.6. OTHER NUMERALS

1. The following adjectives are called Multiplicatives, formed in PIE with common suffix **-io**, and also dialectally in compound with PIE root **pel**¹⁵⁹, as Greek and Latin zero-grade suffixed with **-plos**, or Germanic full-grade compound with **-póltos**, *fold*:

semiós, **sem(g)olós**, *single*, **oinikós**, *unique*; **dwoiós**, **dwiplós/duplós**, *double*, **dwopóltos**, *twofold*; **treijós**, **triplós** *triple*; **trejespóltos**, *threefold*; **qetworiós**, **qeturplós**, *quadruple*, **qetworpóltos**, *fourfold*, etc.; **mtiplós**, **mtipléks**, *multiple*, **monoghopóltos**¹⁶⁰, *manifold*, etc.

NOTE. For **óinikos**, *any, anyone, unique*, compare Gmc. *ainagas* (cf. O.S. *enig*, O.N. *einigr*, O.E. *ænig*, O.Fris. *enich*, O.H.G. *einag*, Du. *enig*, Eng. *any*, Ger. *einig*), Lat. *unicus*. Compare also O.Ir. *óen* into Sco. *aon*, from **óinos**, as Welsh *un*.

2. Other usual numerals (from Latin) are made as follows:

a. Temporals: **dwimós**, **trimós**, *of two or three years' age*; **dwiátnis**, **triátnis**, *lasting two or three years* (from **átnos**⁶²); **dwiménstris**, **triménstris**, *of two or three months* (from **mēns**⁶¹); **dwiátniom**, *a period of two years*, as Lat. *biennium*, **smgheslátniom**, *millenium*.

b. Partitives: **dwisnāsios**, **trisnāsios**, *of two or three parts* (cf. Eng. *binary*).

c. Other possible derivatives are: **óiniōn**, *unity, union*; **dwisniōn**, *the two (of dice)*; **prwimanos**, *of the first legion*; **prwimāsiós**, *of the first rank*; **dwisnos** (distributive), *double*, **dwisnāsiós**, *of the second rank*, **tritāsiós**, *of the third rang*, etc.

NOTE 1. English *onion* comes from O.Fr. *oignon* (formerly also *oingnon*), from Lat. *unionem* (nom. *unio*), colloquial rustic Roman for a kind of onion; sense connection is the successive layers of an onion, in contrast with garlic or cloves.

NOTE 2. Most of these forms are taken from Latin, as it has influenced all other European languages for centuries, especially in numerals. These forms are neither the only ones, nor are they preferred to others in this Modern Indo-European system; they are mainly indications. To reconstruct every possible numeral usable in Indo-European is not the aim of this Grammar.