§ 1. The criteria determining the original analytic status of a grammatical morpheme can be defined as follows.

[1] Mobility: in the daughter languages the same morpheme sometimes precedes autosemantic words and sometimes follows them (e. g. the pN *mA that forms participles and other deverbal nominals in daugther-languages is found both before and after the verbal root).

[2] In some daughter languages the morpheme is still analytic or has phonological evidence for its former analytic status [e. g. the N morpheme *bA (that forms animal names and other nouns of quality bearers) survives in proto-Uralic *-pa; since the N intervocalic *-b- yields pFU *-w-, while the word-initial *b- yields U *p-, the Uralic suffix *pa must go back to a separate word].

[3] A grammatical morpheme of daughter-languages is etymologically identical with a separate word (e. g. the 1st person ending *-mi of the IE verb is identical with the N pronoun *mi that is preserved as a pronoun in daughter-languages).

Sometimes other typological features (position in the word) may be taken into account. For instance, if in Semitic and Cushitic (Beja) verbs the feminine marker (*-i) is used in the 2nd person only and is separated (as a suffix) from the person marker (prefix *-i), it is natural to suppose that it goes back to an address word (Hebrew tihyi ‘you’ [f. sg.] will live’ < N *t[i] ‘thou’ + *Xay[i] ‘live’ + *t[a]yV ‘mother’), which is typologically comparable with the gender distinction of a yes-word in spoken English: [yes:1] (< yes, sir) vs. [yes:2] (< yes, madam). Turkic bas-im-da ‘in my head’: -im < N *mi ‘I’, hence -da goes back to a separate word.
I. Nostratic etyma of the grammatical morphemes in daughter languages

A. The origin of case endings and preverbs

§ 2. *nu, postp., adverb and preverb ‘from’, postp. ‘of’. It functions as a postnominal genitive marker in U *-n, pM *-nu (*minü ‘my’, *cinü ‘thy’, modunu ‘of a (the) tree’), Tg *ŋī (< *-n- + adjectival sx. *-ki), pT *ŋ, the J postposition no, Omotic genitive ending *-nV, Sidamo -ni. The genitive marker *nu was used in constructions “noun + *nu + noun underlying later endings of oblique cases” (as in English for my father’s sake) and thus became a presuffix of oblique cases. This usage is preserved in pIE heteroclitic nouns (Hittite instrumental case wete-n-it ‘with water’ < N *wete nu *yu̯tì, where the noun is *yu̯tì ‘company, with’ and in the D pre-suffix (“increment”) of the oblique cases *-iit-. The meaning ‘from, away’ is preserved in the Lithuanian preposition nu and Latvian no [nīo] ‘from, off, out of’, in Berber *n (analytic particle ‘away’: Kabyle avi-n ‘carry away’), as well as in compound endings: Greek -θεν, Turkic *t\-i ya\-t\-i ‘(both from N locative *da + *nu). Evidence for the original analytic status: [1] mobility, [2] preservation of the analytic status (Baltic, Berber, Japanese).

§ 3. *mA, postposition denoting a direct object > accusative in IE, Uralic, Omotic *-m, proto-Mongolian *-ma-yì (with a new acc. ending *-yi) in pronouns (*ci-mayì ‘thee’), proto-Japanese wo > Japanese o (postposition), North Tungusian and Amur Tungusian *-ba/-be ~ *-ma/me (acc. ending), Written Manchu be [accusative postposition or suffix; according to the old descriptions (Harlez, Zaxarov) it is a postposition, according to recent comparativistic descriptions (Cincius, Benzing, Sinor) (influenced by the synthetic status of *-ba/-be in other Tungusian languages?) it is a suffix, but its phonology and usage point to its (former or actual?) analytic status: it is not connected with the nominal stem by vowel harmony or inner sandhi; the speakers of Manchu treated it as a separate word, which is reflected in the traditional Manchu spelling: morin be ‘equum’ with the final letter -n and not *morimbe (cf. Haenisch M: 41-2); if there are several coordinated direct objects, the accusative marker be follows the last noun only: abka na śun biya edun aya akyan talkiyan be tzwaci ‘wenn man Himmel und Erde, Sonne und Mond, Wind und Regen, Donner und Blitz betrachtet’ (Haenisch M 42), which also suggests its analytic status. Evidence for the original analytic status: preservation of this status or its traces in Japanese and Manchu.
§ 4. The origin of the nominative case markers. Nominative case markers are found in IE (*-s of the active [→ masc.] gender), Semitic (*-u in sg.), East Cushitic (*-i), Kartvelian (*-i). All of them go back to demonstrative pronouns or demonstrative particles (→ focalizing markers of the theme → markers of the grammatical subject). These demonstrative particles are: [1] *sE 'he\she' (→ IE *s), [2] *hju 'iste', dem. pc. (> Sem. *-u), [3] *hju 'iste' (or 'hic'), dem. pc. (> Kartvelian *-i [nom.], East Cushitic *-i [marker of the theme = marker of the subject case]). All of them still function as pronouns or definite articles (or as initial parts of pronouns) in many daughter-languages [NaIE *sE 'he\she' > IE *so (dem. prn. of the animate [masc.] gender), Finno-Ugric *sE 'he, she', S *siđa 'he, that'; N *hju > IE *?u- / *?y-u- *we- / *wo- 'iste', deictic pc. (> Old Indian, Avestan aos-va, Sl *onu 'jener', etc.), Beja u (def. article of masc. in the nom. case), Finno-Ugrian *u- (> Hungarian os-da 'dahin', ott 'there'), Turkic *o 'jener dort', Drav. *u 'iste]; N *hji > IE (Hier. Luwian i 'this'), Samoyed *-i- and Kartv. *[h]i 'iste', Korean i 'this', D *i 'hic (the nearer to the speaker)', etc. The pN analytic status of all these etyma is obvious.

§ 5. *fyliyo 'which', 'that which, related to' (individualization through relation). It underlies [1] suffixes of relative adjectives (related to...) in daughter-languages [NaIE *-iyo- id. (→ Ol pîtr(i)yah, Gk πάτρως, L patrius 'paternal, related to father', OCS človec̣o, R человеку, Tocharian A mań-i 'of the moon, lunar'), S *-i and Eg. -y (sx. of relative adjectives), Uralic = *-i ~ *.yV id. (> Ostyak չոջ 'house-', belonging to the house', Hungarian isten-i 'divine', legnap 'of yestersay, gestrig', Tundra Nenets ī 'gestrig', etc.), [2] suffix of the genitive base > branches of IE (Latin amic-i, vir-i, Ogam Irish maq-i 'son's, of the sun'), S *-i (genitive case ending), Beja -i id. (wi-դու i hāba 'pueri pater'), North Omotic *-i id. The etymon in question is found also in the function of a separate word, a relative pronoun [IE *yo-, rel. pronominal root (> Ol ya-s, Greek ὁς, Sl *jo-že 'which' rel.), Finno-Ugrian *yo- 'which' (rel), which proves its original status as a word. What is still to be elucidated is the possible relation between this *fyliyo and the interrogative pronoun *ya 'which?' (> Svan ɣa- ~ ya- 'who?', Mongolian *ya ~ *ya-n 'what?', Tungusic *ya 'what?', D *ya 'what?', which?, Chadic: Musgu ɣa 'where', Hausa ɣaɣa 'how?').

§ 6. ?? *h[a]lya 'for', directive-designative pc. > IE *-ei 'to', ending of the dative case (> *ped-ei 'to the\a foot' (> Ol pād-e, L ped-i), *matr-εi 'to the mother' (> Ol matr-e, L matr-i, OCS mater-i, etc.), HS: S *-hay > Gz -hē, = directive-locative pc.: k'alla-hē 'everywhere', k'alla-hē 'in every direction' (k'alla- is 'all, every'), Alt: Tung. *-ya as a designative pc. (Lamut, Ne-
gidal mō-yū-n 'tree (wood) for him') and probably Mong. *-yi, accusative ending, Drav.: Tamil, Old Malayalam accus. ending -a and Brahui dative-accusative ending *-e, Kartv. *-a, causative (designative) verbal px. [that follows the personal prefix for objects ('me, thee, him'): OG, G a-, Mgr, Lz a-, Sv a- e. g. OG m-a-su 'er tränkte mich, gave me a drink' (m- 'me' + a- + su 'drink'), Sv. χ-a-tre 'er tränkte ihn' (χ- 'him' + a- + tre 'drink'). The change dative → accus. (observed in Mong. and Drav.) has parallels in many languages [Spanish veo a Juan, Persian rā, Aramaic l-, Georgian -s (dative case used for direct objects as well)]. If the questionable Kartv. cognate *a- is valid, the mobility criterion points to the original analytic status of *hālya.

§ 7. *t[ā] 'away (from), from', ablative (separative) pc. > IE *-de / *-T (neutralized phoneme *-dE + *-d + *-t), separative (ablative) case ending (> Cretan Greek τό-δε 'from here', Gl βρακοῦ-δε 'ex merito'; *-T 'from' > OL *ma-d, Old Latin mē-d 'from me' with the *-o-stems *-ūT / *-ēT: OL vēkād 'from the wolf', Delphian Greek φόιξο from home', Old Latin -ād 'from', Gt hābrō 'from where?', Blt *-ā (> Lt -o, Ltv -a) and Sl *-a (gen.-abl. of the *o-stem): Lt tō of (from) this, vilko 'from (of) the wolf', Church Slavonic tēla razlūčiti se 'to separate from the body'; U *-tā/*tā 'from'; D *-ti 'from'. It survives as a separate word in IE *dē 'away (from), from' > L dē prep. 'from', OIr di, de 'from...down, from... away', etc.

§ 8. *bayV 'place, 'to be (somewhere) = estar' > HS: S *bi 'in' and instrumental 'with' (preposition → prefix), Beja -b, locative case sx., IE *-bwej/-bi, locative pc.: Gk Hm -pi, case pc. with the meaning of instrumental, locative, dative, ablative; marker of instr., dat. and ablative in several lgs.: Ir *bis instr. pl. (> OL -bih, Av -bih, OPrs -bih), *-b̥aṣas dat.-abl. pl. (> OL -bhāyāh, Av bhō), L -bus abl. pl., -bis in nobis, vobis, etc. The same etymology is preserved as a word in Egyptian bw - by.t 'place', Cushitic *bayV (> Sd baij-čo id., and Chadic *b̥aVi 'place' (> Bolewa bəyī, Karekare b̥i, etc.), in Mong. M *bayi- 'stand, stand, be' and in Tung. *bāy 'lying-place (within the house/hut), bed' (> Īdehe bəi, etc.). The analytic origin of the IE, Semitic, Beja, Qwara locative affixes is obvious.

§ 9. *dloya 'place (within, below), inside' (→ locative pc.) > IE *d-e locative ending ('in') in adverbs: *ku-d-e 'where?' (Old Ind. kuha, Sl *kude), Gk πρὸθεν(v) 'in front, before', IE *dhi (OIr adhī 'on', Gk πόθε 'where?', ὀκυθ 'at home'), A: Turkic *tla/*tla (loc. case ending), HS: Cush.: Agaw *-da id., U: Tundra Yukagir locative -da in qa-da 'where?', ta-da 'there', Ostyak ko-t 'where?', D *f[t]u (locative-ablative case ending), K *-da 'towards, to X's place, chez'. As a separate word it survives in South Cushitic (Iraqw di,
Burunge *da* 'place'), in Berber *d* (preposition 'in', directional particle *d* 'her'), Tungusic *đō* 'inside'.

§ 10. *mENV* (= *mEnV?*) 'from' > HS: Sem. *min (or *minu?)* 'from, out of' > Bibl. Hb., Bibl. Aram., Jewish Aram. *min ~ mi* + gemination of a consonant, Phoen. *mnn ~ bn*, Syriac *men*, Arabic *min*, Sabaic *mn*, Tigre *mın*, Mehri, Jibbalì, Soqotri *mn*, Eblaitic *minu* id. I Eg *m* 'aus etw. heraus, von einem Ort an' || K *-man*, ending of the ergative case > Old Georg. *-man*, Georg. *-m*, -ms, Svan *-m* id. I IE: Narrow IE *-mos*, ending of ablative-dative pl. > Lt. *-mos*, *-ms*, Slavic *-mo* (> OCS *mo*, etc.) id.; NaE *-mis* instrum. pl. > Lt. *-mis*, Slavic *-mo* (> OCS *mo*, etc.); Narrow IE *-mis x *-mos* > Germanic dat./abl./instr. pl. *-miz* > Old West Germanic [Kluge] *m(i)s* (in n. pr. Val-vins 'Vatviabus', Aflins 'Aflibus', Saichamin(is) 'Saithamiabus'), Gothic, Anglo-Saxon *-m*, Old Norse *-mr* The final *-s in *-mos, *-mis may go back (through the infl. of other cases of pl.) to IE *{(e)}s of pl. (< N *{[ʔ]}Vsā* 'they') || The loss of *-N* in IE may be accounted for either by the reg. change N *ni* > IE *{i} (if the N etymon is *mEnV*) or by reduction in a grammaticalized (hence unaccented) word → morpheme.

§ 11. *yu₅₅₅₅[ti]* 'with, beside' (L = unspecified consonant) > IE: Ht *-iī* 'with', K *-{i}, ending of the instrumental case, A: Tungusian *-ji* (< *-di* id.), D *-t[V, ending of the sociative case. As a separate word it survives in HS: Semitic *ittīV* id. > Akkadian *itti, ittum* 'with, along with', 'by' (agents of passive verbs), Bibl. Hebrew *tīt* 'with' (*itt- before pronominal endings: *itt it-* with me, etc.) and in U: Finno-Ugric *yutīV* > Ugr *yutīV* 'with' > proto-Vogul *yō’, proto-Ostyak pOs *yō* 'with'.

§ 12. *ʔVrV* (= *rV*) - theme-focalizing (topicalizing) particle > A *’-r[a]l* id. (marked topicalizing case, sg. of *’-er ‘der, das’) > M *te-re* (theme-focalizing case < stem of obl. cases *te-gūn* 'that' (used also as 'he'), Tg *tere ~ *tarV* 'that, he' || IE: nom.-acc. ending *-r in heteroclitic nouns: nom.-acc. sg. *’wodo'(r) ‘water’ (Ht *watar*, Gk *δῶ[ρ]*, AS *water*, OHG *wofisar*, etc.) < gen. sg. *’wet-n-os ~ *ud-n-os* (> Ht *wetens*, Gt *watisn*, Gk *δοξος* [= *udontos*], etc.) || HS: Eg *ʔyr* ‘as for’ (topicalizing pc., preceding the topic word). Since this particle remains analytic in Eg, it is likely to have been analytic in pN.

§ 13. *ʔiṁ(A)* 'place' (→ *in* in daughter-lgs.) turned into a locative suffix in Uralic and Kartvelian: Ur. *-n̂a*/*-nā* 'in' (F koto-*na* 'at home'), Kartv. *-na*, *-n* 'in', surviving in adverbs: Old Georg. *-ni* 'inside', *ci-* 'in front (of)', *ze-* 'above', *uk-*('ua-*na* 'behind', *gusin* 'yesterday', etc.), HS: Omotic *-n (locative ending in adverbs (Gofa *gaça-*n* 'in the middle', *giddo-*n* id., 'in between', *bolla-*n* 'above'); Alt.: proto-Mongolian *-nal*-ne: *’qoyi-*na* 'in the
rear, back', *dotu-na adv. 'inside', *gada-na 'outside', etc.; Drav. *-iň, *-uV' in' (e. g., Old Telugu *-ų, ni: perumataŋ 'in the west', bārānasi-ų 'in Benares'); IE *-en/*-ne, locative sx.: Ht *-an id. (audan 'inside', appan 'behind', piran 'in front'), Vedic *kṣām-an 'on earth', Latin super-ne 'upwards, from above', infer-ne 'below'). But in some languages it remains an autosemantic word (Turkic *in 'holeair of an animal', Manchu un 'straw-littered bedding-place in a pigsty'; Finno-Ugrian *[i]n\nV 'place' > Old Permian, Ziryene in 'place', Old Hung., Hung. [dial.] eny 'geschütztes Ort') or functions as a preposition (S *tina 'in' > Akk. ina -in 'in', Eblatic in 'in', Berber: Nefusi in 'in'; IE *ten/*u, *teni in' > Greek ἐν, Latin, Gothic, Anglo-Saxon, OHG in, Lith. Lt į, etc.). The analytic origin is obvious.

§ 14. The origin of the genitive case markers: [1] *nu (see above), [2] *yjyō (see above), [3] the pronominal particle *ha 'ille' or *he 'that' + pronominal *sE 'he\she' (see above); the meaning of genitive is expressed here syntactically: in groups 'noun Ni + nominal N2' the noun N2 functions as genitive, so that the nominal phrase 'Ni *ha le sE' means 'NI's that', i. e. 'that of the Ni' (the meaning of *ha le reduced to that of an article) > IE *-os/*-es (preserved best in the nominal inflection of consonantic stems) > OI -as (g of consonant noun, e. g. rajñ-as 'king's'), Gk -ος (id.), L -is (< *-es), OL -es (कमे-es 'of stone', mőter-ės 'mother's', dukter-ės 'daughter's'), Lt -s (akmei-s, duktei-s), pSl *-e (e. g. OCS कमे kamen-e 'of stone'), Gt -s (gumin-s 'person's'), Ht -as (halkij-as 'of corn'), K *-iś (= *-i - *-aś), marker of the genitive case > OG, G -is, -s, Mg -iś, -ś, Lz -ś, Sv -iś (~ īś), -aś (-aś) id. In order to understand this construction, we must keep in mind that sequences of demonstrative pronouns (and demonstrative particles) had syntactic properties of nouns (unlike singular demonstrative pronouns. cf. below § 51, point 6). Very archaic forms are present in the IE heteroclitic nouns: *-nos ~ *-nes in Ht pahhuenas 'of fire', witenas 'of water', Olt wändenes id., Ol yaknas 'of liver' - cp. nom. yakr); the underlying N word group is N1+ *nu ḫV sE [= *nu gen. + deictic *ha or *he + pronominal *sE = lit. "the Ni's he", i.e. 'that of the Ni']; the deictic pc. and the prn. function here as nominalizers of a phrase (*wete nu ḫV sE literally means 'that of the water'). A combination of several genitive markers may be discerned in the IE genitive form *tosyo ~ *tes(y)o (of the demonstrative pronoun *so / *tōd) > Old Ind. ṭasya, Gk τοῖο (τοῦ), Gt bis, as well as in Latin ist-iōus and in OCS česo.

§ 15. *saw ' (in the) middle' > IE: Narrow IE *-su, locative pl. ending (→ 'among' → 'in the middle'), e. g. *wīkvo(j)-su 'among wolves' (with the pl. marker *-oj- from the declension of demonstr. prns.) > Ol vrkē-su, Old Lith,
Aikštaitis Lith. vilkuo-su (Standard Lt vilkuo-se with the change *-u > -e under analogical influences), Slavic *volcę-čę (OCS vilcęčę), Gk λύκουτι [transformation *-su > -οι due to the infl. of the locative sg. ending *-ι or of the Gk locative marker -αι < *-bι] 'among wolves', Narrow IE *sūnu-su 'among sons' > Old Ind. sūnu-su, Aikštaitis Lith. sunuo-su, Standard Lt sunuo-se, Sl *sinu-čę (OCS sinućę), Narrow IE *tōi-su 'among \ in these' (m. pl.) > OI lęšu, OCS łęćbo, Lith. tōse || K *sōwa- or *suwo- 'middle', in the middle ' > Old Georg. sōwā ~ sōwo- 'middle' (sōwā łośos 'midnight'), etc. || HS: Central Cush: Awngi seealso, Damot Aiwi, Kunfāl seealso 'heart' || Uralic: Finno-Ugr. *sl̥a-wu 'lungs' > Lowland Cheremis šoše, Highland Cheremis šoš id., proto-Lappish *sōu-tē 'gill(s) (of a fish)' || Alt.: Tund. *saya(n) 'interstice between fingers (toes)'. It is obvious that IE *-su goes back to a N word.

B. The origin of plural forms

§ 16. *yE (= *y(f)?) 'these, they' (animate plural deictic element) > IE *-j, plural marker of animate gender (Narrow IE m. and f.) of dem. and interr. pronouns, e. g. *tōi- 'these' [animate gender] > Old Ind. tē, Loth. tiō, OCS ti, Old Russian tē, Russian te, Goth. bai id., Greek (Boeotic, Doric, Homeric) τοι (masc. pl. article), etc.; the pattern was later adopted by thematic nouns and adjectives in Latin, Greek, Lith. and Slavic (Latin -i, Greek -οι, Lith. -ai, Slavic *-i) || Uralic *-yī-jī (-i, -j), pl. marker in oblique cases > F koulu-i-ssa 'in schools', North Lappish N sul’lu-i-d accus. 'islands', Kamasian ǰaɣa-ɪ-m 'rivers' (acc.) || Altai: Tung. *-ya, pl. of the interr. pronoun *ŋlayj 'who? > Ewenki, Negidal nī-ɣa ~ nī-ya, Lamut nī-ɣi ~ nī-ya, Orochi nī-ɣi 'quiénes' || HS: Old Eg. y-, pl. marker of dem. pronouns: ypn 'these' m., yypn 'these' f. (<> py 'this' m., tn 'this' f.), ypypf 'those' m., ypypf 'those' f. (<> sg.: ψf m., τf f.), ypyp 'these' m., ypptw 'these' f. (<> sg.: ψv m., τv f.), etc. || Berber *-s, nominal px. of m. pl.: *t-ju-nāb 'teathers'; Beja ya / ā 'the' nom. pl. m., ɣe ~ yi / ẽ ~ i acc. pl. m. The mobility criterion suggests the original analytic status of this etymon.

§ 17. *V(s)V they ' > IE: [1] *-es (<<*-es), nom. pl. (animate gender) (with consonant stems; Old Ind. -as, Greek -eς, Gothic -s, Latin -es), [2] *-n-s (<<*-m acc. + *-s pl.), acc. pl. (animate gender) || Kartv. *V-s > Megrel -es / -is, Laz -es, verbal ending of 3 pl. aor. || Alt.: Chuvash -as ~ -xelő 'their', -as (3 pl. ending of verbs); Mong. *-s, pl. of nouns (Middle Mong. úge-s 'words', ere-s 'men') || Ur.: Ziryene -s, pl. of adjectives: žćid-s 'short' (pl.) || HS: West Chadic [Kraft] *sun 'they', *su(n) 'their, them' (in some Ch lgs.
postnominal, pre- and post-verbal) (> Hausa su 'they, them, their', Bolewa su 'they', -(s)si 'their', Fyer són, Bokos sin, Dwat sun 'they'). The original analytic status of this etymon is evidenced by its mobility and by its survival as a word in Chadic.

§ 18. *ʔa[h]a* 'thing(s)', collective pc. of inanimate (= 'de ça') > IE *h₁ > *h₂, ending of pl. ntr. (nom.-acc.) > OI *-i (asti 'bones'), Av *-i (nāμmāi 'names'), Gk τε τεταο- 'four' (pl. ntr.), OI cātvār-i id.; in the paradigm of thematic nouns *-eh [= *eAi] (the stem-final vw. *-e + pl. ntr. ending *-h = Ai) yields: (1) NaIE *-ā, e.g. *yugā pl. ntr. (nom.-acc) 'yokes' > Vd yugā, Gk Κυγά, L iuga, Gt juka, OCS ģa; Anatolian IE *-a id. > Hittite, Luwian ־a; Drav. *-a, inanim. pl. ending in pronouns of the 3rd person (MI iv-a id.); HS: Semitic patterns of nomina collectiva (> Arabic, Old South Arabian and Ge'ez 'broken plurals': Arabic ʔa12ā3- (ʔaqdām- 'footsteps' ← sg. qadam-, ʔasmā- 'names' ← ʔismn- 'name'), ʔabwēb- 'doors' ← bēb- 'door') and ʔa12u3- (ʔanfūs- 'souls' ← nafs- 'soul', ṭawqūhā- 'faces' ← wāqīh- 'face'), Gz patterns ʔa12ā3 (ʔaznāb- 'tails' ← ʔanāb, ʔadbūr 'mountains' ← darb), ʔa12u3 (ʔahgūr 'cities, towns' ← ḥagār, ʔahkūl 'fields' ← ḥukl), ʔa12u3 (ʔahsāl- 'cups' ← šahl [šahl], ʔabkāl 'mules' ← bākāl), OSA pattern ʔi123 (ʔhgr 'cities' ← hgr); Sem. *-ā, pl. of fem. and inanimate nouns: pred. gender *-ā (> WS pl. f. ending of the form of state → new perfective: *mawīlā pl. f. 'are dead' → pl. f. 'died' > Arabic mālā id.), in nom., acc. and gen. this *-ā-form has a substantivizing ending *-t- (nom. *-t-u, acc.-gen. *-t-i, with the determiner *m it is nom. *-t-um, acc.-gen. *-t-im): *layl-ā-tuli 'nights', *layl-ā-tum/tim 'the nights' > Hebrew lēl-ol, Akk. līlā-tum/tim. Both in IE (Old Indian, Greek) and in Sem. (Arabic) the noun forms with the reflexes of *ʔa[h]a* are treated syntactically not as plural, but rather as singular: if the subject is an *ʔa[h]a*-plural, the verbal predicate is singular. This suggests that the original function of *ʔa[h]a* is to form collective nouns. The word group *mi ʔa[h]a* what thing(s)? (with the interr. pronouns *mi what?) gave rise to inanimate interrogative pronouns ('what?'): Semitic *mah' what? > Ugar. mVh, Arabic Ar mah = mā, Hebrew ma + gemination of the initial consonant, Berber *maH id., Finno-Ugric *ma, Chuvash ma 'what?'. The mobility criterion proves the original analytic status of this etymon.

§ 19. *n-na(ā), prn. of collectivity and plurality > IE: "primary" verbal ending *(e)nt* 3 pl. [<> *-ti 3 sg.] and "secondary" verbal ending *(e)nt [<> *-t 3 sg.] *t in the 3 pl. ending is from 3 sg. (generalization in the forms of the 3rd person) | Kartv. *-en, verbal ending of 3 pl. (Old Georgian ʒam-en da səam-en 'edunt bibuncture'); *-n-, marker of pl. in the casus rectus (OG -*n- (kac-n-i 'men') | HS: Sem. *-n- > Arabic -*ān-, sx. of collectivity (*fursān-
Mongolian *-ta
IE *-§ 2O.
word.
'riders' <> fāris- 'a rider'), Ge'ez -ān (pl. of masc. nouns and adj.: kasīs-ān 'priests'), Akkadian -ān- (suffix of "individualizing plural": il-ān-ū 'personal gods'); Sem. *-na, marker of the rel. mood in 2 pl. m. and 3 pl. m. of verbs > Central Sem. ending of imperfective indic. (in 2/3 pl. m.) (Ar -na ta-ktub-ū-na 'you [2pm] write \ will write', ya-ktub-ū-na 'they [m.] write \ will write'); B pl. ending of nouns *-an, *-in; Cushitic (Agaw, East Cush.) *-an, nominal sx. of pl.; Chadic pl. marker *-n in pers. pronouns \ Alt.: Mongolian *-n, pl. suffix of nouns (Middle Mong. noqa-n 'dogs'), Tung. *(a)na / *(e)ne, pl. of kinship terms and other animate nouns \ The same N morpheme is found in the initial position in Finno-Ugric pl. of dem. pronouns (Finnish nāmā pl. 'these' <> tāmā 'this', nuo pl. 'those' <> tuo 'that', ne pl. 'those' <> se 'that') and in Old Eg, abstract forms [< coll.] and in Middle Eg, plural forms of dem. pronouns [Eg p? 'this, the' m. <> i? f. <> n? abstr. (MEg. pl.), p? 'this' m. <> tw f. <> n? abstr. (MEg. pl.), p? 'this [near me]' m. <> in f. <> nn abstr. (MEg. pl.), p? 'this' <> if f. <> nf abstr. (MEg. pl.). The mobility criterion proves that the N morpheme was a separate word.

§ 20. *lJlarwV 'together, many' > K *larawi > G larvo-i 'a field sown by different kinds of seed', larvo v. 'baste together (сметать)', Upper Bal Svan sx. of pl. -larv (mu-larv 'fathers' <> mu 'father', di-larv 'mothers' <> di 'mother') \ Alt. *laJlar > Narrow Turkic *-lar/*-lär ([Grønbech 1979] sx. of nomina collectiva plural sx. of nouns and finite verbs) (Gabain 1950, 84: "in sorgfältnen Handschriften [of OT] wird dies Formans mit dem Nomen nicht verbunden geschrieben"); Mong. *-nar/*-ner, suffix of pl.; it may be genetically identical with Written Mong. nar in nar-mai 'all, everything'; Manchu lar same 'densely, in multitudes' \ ?? Drav. *-nar > (unless a variant of the sx. -ar); Old Tamil -nar, -nār, pl. sx.: vilaj-nar ~ vilaiJnar 'merchants', makiJnar 'chieves of the agricultural tract', munaj-nār 'warriors', kīJaj-nar 'relatives', vinaj-nār 'farmers, servants, pakaj-nār 'enemies'. The formative of pl. in Turk., Mong., Svan and (?) Old Tamil is obviously of analytic origin because it is identical with autosemantic words (Georgian, Manchu).

§ 21. *rV yE (= *rV y[ǐ]f), a compound prn. of plurality \ collectivity > IE *-ēr/*-r, 3 pl. ending of the non-active paradigm of the verb > Ht hi-paradigm, Narrow IE perfect > Old Ind. -ur, Av. -ara, Tocharian B -āre, A -ar, Latin -ēre, -ērunt (e. g. NaIE *wid-ēr ~ *wid-ēr 'they have seen') > OI vidur, Av vidāre id., L vidēre 'they saw') \ Kartv.: Svan - ār, -īr, -ēr, -āres, sx. of nominal pl. \ HS: Cush.: Sidamo -ri, -re, pl. of adjectives and pronouns \ Alt.: Tung.: Manchu -ri, pl. sx. of nouns, Nanay mup>ri acc. pl. of the refl.
pronoun 'sich, се́бя'; Turkic *-t, pl. marker in pers. pronouns: *bi-ř 'we' (-> Narrow Turkic *biz, Chv e-řir), *si-ř 'ye, vos' (-> Narrow Turkic *siz, Chv əcup e-šir) || Ur.: Old Yukagir mi-ř 'we', Finno-Ugric *-rV, sx. of collectivity: Highland Cheremis lülüper 'alder-grove, alder-forest' (=> lülpo 'alder'). We suppose that this marker of plurality / collectivity goes back to a N compound: theme-focalizing *rV + pluralizing *yE (= y(l)?) 'these, they'.

§ 22. *tV - marker of plurality ('together?') -> K *-t, plural ending in the oblique cases > Old Georgian, Georgian -ta id.; *t, sx. of pl. subjecti in verbs of the 1st and 2nd person > Old and New Georgian, Megr., Laz -t, Svan -d; the same sx. functions (in all K lgs.) as a verbal marker of pl. objecti (with morphological positional limitations that differ in different lgs.) || HS *-t, marker of plurality (coalesced with the *t-endings of different origin and functioning, incl. *t of the fem. -and-inanimate gender, N *tā [dem. prn. of non-active objects] [q.v.] and N *t[2]atV 'female, woman' [q.v.:] -> Cush. *. -(V)tV/*-VttV, sx. of pl. || Ural. *-t, pl. of nouns || Alt.: Mong. *-d, pl. ending of nouns. In this case the analytic origin of the morpheme is suggested (but not proved) by its position in Katvelian verb conjugation, where it is separated from the marker of person: Old Georgian vi-km-t 'we do' (vi- 1st person subjecti + -km- 'do' + -t pl. <> vikm 'I do', h-kmen-it 'feci'isit) <> h-kmen 'feci'isiti, Svan ḥw-ari-d 'sumus' (ḥw- 1st pers., -d pl.) <> ḥw-ari 'sum'. The same is true when -t denotes the pl. of the object: Old Georgian mo-u-kła-čt 'he has seen us'. It means that the pl. marker cannot go back to a synthetic part of a personal pronoun.

§ 23. *HonmV 'kin, clan, everybody'. This word is the source of the IE ending of gen. pl. *-om, of the *-Vm-plural in several Cushitic languages and in the Drav. suffix *-um 'all': IE *-ōm, e.g., with *-o-stems: Gk λύκ-ōw, OHG wolf-o, Lt vil-ǭ, OCS ｒобъ 'of wolves', Vd car-ālh-ām 'der beweglichen', L deum 'of gods'; with *n-stems and *r-stems: Ol sün-ām, Gk κων-ōw 'of dogs', L homin-um 'of men', Lt akmen-ā. OCS ｒамъ 'stones', Gt tuggōn-ō, OHG zungōn-ō 'of tongues'; in several lgs. the ending *-ōm was lengthened due to metanalysis: Ol -nām, L -ōrum (Ol yrkānām, L lupōrūm 'of wolves'); HS: East Cush.: Dasenech -um ~ -ām, Arbore -mē ~ -mā, endings of pl.; South Cush.: Iraqw -ēmo id.; Drav. *-um 'all' > Tamil ellā-m 'everything, everybody', yāzum 'everything', Td -m 'all, any', etc. The same etymon survives as a root in many languages: HS: S *humm-(at-) 'kin, clan' (Hebrew ūmm m-ā 'tribe', Arabic ūmm-at- 'many people; people, nation'); East Cush.: Af ummān 'all, every' || IE *Homm- 'every, all' > Latin omnis id., Armenian amēn amēn 'all', etc. || Alt.: Mong. *omug ~ *obiug 'clan', Turk.
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*C*bù 'clan, extended family' || Uralic *{o}ma > Taz Selqup ōmi 'tous les autres'.

C. Origin of verbal affixes

§ 24. *mi* 'I' > IE and Uralic *-mi, *-m (1 sg. marker in verbs), Kartv. *m-* 'me' (verbal prefix). These affixes go back to a N pronoun (i.e. a word), because *mi* survives as a pronoun in almost all daughter-families.

§ 25. *š[u] (>*ti) and its assimilated variant *š[u] (>*ši) 'thou' gave rise to verbal endings of the 2 sg. in many languages (incl. IE *-si and -s) and survive as pronouns in almost all branches of Nostratic.

§ 26. *HoV (>*hoyV?) 'by me, my' underlies the IE ending *-H in 1 sg. perfecti, the Ht ending -hi (and possibly the laryngeal component of the Narrow IE ending *-o of 1 sg.), the HS (Semitic, Cushitic) *?- (1 sg. prefix), Sem. *-yu ~ 'my' (possessive sx. of 1 sg.), Kartv. *hu~ (-> Georgian v-, Svan χw-) (verbal prefix of 1 sg. subjecti). It survives as a pronoun in Eg wy T. This fact and its mobility points to its original analytic status. For more details see Dolgopolsky 1984.

§ 27. *n|n, prn. of collectivity and plurality > IE: verbal endings of 3 pl. *-anti and *-nt 3 pl. (see above).

§ 28. *n|n, 'to go' (-> 'to go to do sth.') > IE *-n- (infix of the verbal present stem) || HS: possibly Beja -n-present, unless it goes back to the construction *?au + verbal stem || Alt.: Tung *-nà-/*nè- (verbal sx.) 'go to [do sth.]' -> Ewenki diku-na~ 'go to write' (from diku- 'write'), Ude wakça-na-mi 'I go to hunt', WrMc taci-ne- 'go to learn'. This N root survives as a word in several languages: Eg nfy v. 'go' (travel (somewhere), K *n- v. 'want, desire, wish', etc. (for more details see Dolgopolsky 1992).

§ 29. *čl, *čl or *čl, marker of verbal frequentativity / iterativity > IE sx. *-sk-, marker of iterativity / frequentativity (> Hittite iterative/durative sx. -sk-, Narrow IE *-sk- as a marker of the imperfective aspect ('present') (e.g. *čnō-sk-o 'I recognize, know') || Uralic: FU *-če-, suffix of frequentative verbs: F -tse, Vefsen Lappish -šr, sx. of durative verbs and verbs of state, Moksha -š>, Erxa -šç, sx. of frequentativity || Alt.: Mong. *-či-, sx. of verbal intensivity, Tung. *-či-, sx. of intensive and durative verbs. It is likely that this N particle goes back to some aux. verb (forming a construction that meant ~ 'used to, tries to...'), e.g. to the verb *čh[j] 'to carry' (> Jibbali šhy, Mehri šhav\y, Shilh asij, Izdacen asi 'carry', Middle Korean či- 'carry on the back, bear', Arbore siih- (inv. sih), Kartv. *č- Drav. *č/- *ciy- 'give').
§ 30. *[ʂ]Ew[0]V 'to want', 'to beg' (→ desiderative) > IE: NaIE *-s-, *-sy-: [1] volitive sx. *-s- 'want to' > Old Ind. *s- in šuṣṟu-ṣatē 'he wants to hear', Old Latin vīs-ō > Latin vīs-ō (*wejīs-ś-ō) 'want to see', Goth. ga-veisō 'I visit' (→ 'want to see'); [2] in several lgs. this *-s-, *-sy- changed into a marker of future: Greek -σ- in δείξω 'I shall show', λατιν 'I shall leave', Old Latin dīxō 'I shall say', faxō 'shall do', capsō 'I shall take', Lith duos 'will give', Old Church Slavonic бі̀шьте-je 'future' [Alt. sx. with voluntative or optative meaning: Mong. *-su [-] / *-sū [-] (sō-su 'let me enter!'), Turkic *-sun / *-sūn, 3 sg. optative, Tung. *su, marker of imperative (2 sg., 3 ss.) in several archaic verbs. This N etymon survives as a verb in Turkic *sūb- 'love', (?) Sem. *šūb]y 'cry for help' (for more details see Dolgopolsky 1992).

§ 31. *H[e]tV 'make' (→ causativizing morpheme) > A *etV > T *et- v. 'make' > OT et- v. 'make, create, perform, organize'; ?? HS *ʔt > Chadic *ʔta- v. 'make' (→ Daffo-Butura ta- 'build', Buchuma ḡa, Bata ta 'make'); ? Sem. *ʔty > Arabic *ʔt (pf. ḡa) 'undertake (a thing), make (it)'. This N word was grammaticalized in Uralic, Alt. and Drav. to a causativizing suffix of verbs: Ural. causativizing verbal sx. *-t-t- > F -tta-/t-tāː: istuttaa 'setzen, pflanzen' (→ istua v. 'sit, sit down'), etc.; Alt.: Turkic *-t-, causativizing and transitivizing sx.: OT -t- [Cl.] oq-t- 'make so. recite(read)' (→ [Cl.] oqt- v. 'recite\read'); D *-tt-, causativizing sx.: OTm selutt- v. 'make so. enter' (→ sel- v. 'enter').

§ 32. *SuwYV 'to push, cause' (→ 'to ask for', → causative) > IE *seqh-/p-suh- > Narrow IE *sewa- = 'set in motion' > Ol sū-: sūvati 'sets in motion, vivifies, urges', Hitite suwy- 'push, urge'; Alt.: Tung. *suh- = 'push' > Manchu subada- 'push each other', etc.; (?) Drav.: D *co[v]- > Kannada sū, sōv, sōhu 'drive off, chase away', etc. 111 This N word was grammaticalized as a marker of causativity: HS *sV- > Sem. *ʔV- prefix of causative verbs ([2]-stems), Eg. s- id., Berber *sV- id., Cush. px. *-sV- id. [following the personal pxs.] (in verbum finitum of the prefix-conjugated verbs), sx. *-sV- [preceding the sx.s. of person-gender-number] (in verbum finitum of the suffix-conjugated verbs and in some nominal forms of verbs); ? Alt.: Japanese (incl. Ryukyu ds.) *-s-causative: J noko-su(ū) 'leave behind' < noko-r(ū) 'remain'.

§ 33. *ta[w]V 'head' (→ 'oneself') > Kartvel. *taw- 'head' > Old and New G tar-, Laz ti-'head', Megrel ti-ša 'to himself, home' (lit. 'into head'); HS: Omotic: Sezo ti-ú, Chara toya 'head'; South Cushitic: Iraquw ti 'oneself', each other'. In HS and in Anatolian IE this N word turned into a reflexivizing affix: HS: Sem. prefix *t- and infix *-t- (following the first radical) with the reflexive (→ reciprocal, passive) meaning: Akk. iCtaCVC, Arabic
machen' of denominative verbs of quality ('become X'): Old Turkic *man, male') > Bohairic Coptic -\textit{man}, reflexivizing (→ passivizing) prefix of prefix-conjugated verbs (e. g. Beja present -\textit{elliw} 'burn oneself' from -\textit{taw} vt. 'burn') and the first element of the suffixal part of suffix-conjugated verbs (Sidamo as-\textit{id}- v. 'make for oneself, make oneself' <> as- v. 'make'); IE: Hieroglyphic Luwian -\textit{ti} 'sich', Luwian, Lydian -\textit{ti} (reflexive particle), Hittite -\textit{z-, -za} id. 

§ 34. *\textit{woy[\textit{f}]E} ~ *\textit{wo[\textit{f}]yE} 'power, ability' > IE *\textit{we[H]-} > NaIE *\textit{wejo-} / *\textit{woy-} 'strength, force' > Of \textit{oqas} 'energy, strength, power', Gk ἰς (with a long i) 'strength, force', L vi-s (a vim) 'force, strength, power' || HS: Sem. *\textit{w[y]y} > Arabic \textit{wawy}- 'strong beast', \textit{w[y]} (pf. \textit{wa?}, 3m ip. \textit{ya-?i}, n. act. \textit{wawy}-) 'promise, threaten' || U: FU *\textit{woye} 'be able', (?) be strong' > Finnish \textit{voi-}, Est. \textit{või-} 'be able', Finn. \textit{voi-ma}, Est. \textit{võim} 'power, might', etc. || A: Turkic *\textit{u}- or *\textit{u[y]-} > Old Turkic \textit{u}- 'be able, capable' || This pN word may be the source of the passivity / intransitivity marker in daughter-lgs.: HS *\textit{w[V]-} ~ *\textit{u[-]}: > Eg. -\textit{w}, verbal suffix of the passive form || Sem.: (1) *\textit{w}- as the additional first radical of verbs of state and quality: *\textit{w[y]b} 'be good' (> Hb., Aram., Syriac \textit{y}{\textit{b}}) - cp. *\textit{tāb-} 'good' (> HbH. \textit{ṭōb}, etc.); (2) *\textit{u} - *\textit{u}- as an apophonic prefix of passive.: Central Sem. *\textit{y-u-12a/-3} m. passive of the basic stem [> Arabic *\textit{y-u-qtal-} \textit{u} 'he is\will be killed'], *\textit{y-u-śa-12a/-3} m. pass. of the caus. 2\textit{a-stem} (> HbH. \textit{y-arasm} 'it will be completed\,restituted', Ar *\textit{y-u-slam-} \textit{u} 'he will be kept safe'), etc || U: FU *\textit{w[V]-} ( ~ *\textit{w[y]-}), passivizing and intransitivizing verbal sx.: Finn. -\textit{u/-y-} (?\textit{yk}) 'be visible' ← \textit{näke-} 'see', \textit{kau-tu-} 'fall, overturn' ← \textit{kauta}- v. 'tell'), Est. -\textit{u/-i-} (passive / intransitive: \textit{kordu-} 'repeat oneself, recur' ← \textit{korda-} vt. 'repeat'), Norw. Lappish \textit{gau} 'duu- 'be able to be found, exist' ← \textit{gau'nå-} 'find', Erzya \textit{kadovo-} 'remain' ← \textit{kado-} 'leave, desert', etc. || A: Turkic *\textit{u-}/*\textit{u-}, suffix of reflexive verbs and of denominative verbs of quality (become X): Old Turkic sās-\textit{u}- 'losmachen' ← sās- 'losen', bay-\textit{u}- 'become rich' ← bay 'rich', etc. || Tung. *\textit{bu-v}, verbal sx. of passivity (and causativity): proto-Tung. *\textit{bun-} 'be said, cause to say' > Nanay \textit{umbo-} 'be said' ← un- 'say' || Gilyak: Amur Gil. *\textit{v}, Easy Sakhalin Gil. *\textit{w-}, prefix of the reciprocal voice ḇ Illich-Svitych 1967: 364 (*\textit{w[\textit{H}]1-\textit{cila}}': IE, T, BF), Illich-Svitych 1971: 13 s. v. \textit{Пассив} \textit{вна}. 

§ 35. *\textit{mel[y]nu} 'oneself, one's own', 'body' > IE: NaIE *\textit{monov-s-}'*\textit{menuv-}'alone' > proto-Greek μονός > Greek: Attic μόνος, Ionic μόνον id. || Hittite *\textit{minu} alone || HS: Eg. *\textit{mn} 'a such and such' (\{Vc\} 'un tel?') (x N *\textit{mānu} 'man, male') > Bohairic Coptic -\textit{man} -\textit{man} in \textit{pāanman} pāpt\textit{man}, pāman pām\textit{man}, etc. a certain person \textit{\textbackslash thing} || Cush.: Dahalo mōnsi 'self', East
Cush.: Sidamo mann-imma 'body' || Berber *-mân 'soul, person' (x N *mânu' man, male') > Ahahhar imân pl. 'soul, person', imân in 'myself', Kabyle imân, Nefusi imân + ppa. 'self' (myself, himself, etc., Ghadamsi iman (reinterpreted as grammatical pl.) 'person', 'self' || A: Tung, *mên 'oneself, one's own' > Ewenki mën 'one's own', mën'kzam 'oneself', Solon m3-: id., Lamut môn 'one's own', Negidal mên id., mën + ppa. 'oneself (sich, seih)', Orochi m3ni id., mên 'one's own, to oneself', Udehe m3nji, Orok m3ni 'one's own', Udehe, Nanay m3ns, Ulica m3n(s) id., 'oneself (selbst, sam)', Manchu meni meni 'anyone, each, by oneself (всякий, каждый, сам по себе)' || Mong. *mön 'the very same, real, true' || Drav. *mêô 'body' > Tamil mâê, Malayalam mâni 'body, shape, beauty', Telugu mânu, Kolami mân, Naykri, Nayki, Parji men, Gadba mânu ~ mân, Gondi mândur, Kurukh mâd ~ mâd, Malto mëd 'body', Konda mândol 'human body' || || This N root may underly reflexive-passive formative in the IE and HS verb: IE: Narrow IE *tmen-*t-tno-, suffix of medial-passive participles > Old Ind. bàdhá-mána-ḥ 'wachsam', Greek pêô-μêô-ç 'aware', participia praesentis mediopassivi from Old Ind. bôdhr-, Greek pêô-, Latin fê-mina 'woman' (→ *sucked one'), alu-mm-us 'nursling, foster-child' (→ *'fed one'), as well as 2p passive -mini (finite verb form → participle); Slavic *-mo m., *-mu f., *-mo ntr. (OCS везамь vizo-mr, prtc. praesentis passivi 'transported'). Lith. neša-ma-s 'carried'; possibly Anatolian IE: Luwian kes-ama- 'combed', Hier. Luw. asima- 'loved' || HS: Cush. *m-, prefix of the passive-reflexive (and collaborative) form (stirp) of verbs: Saho -umuʃug- 'be buried' ← -uʃug- 'bury', -imfiteh- 'be untied' ← -ifteh- 'untie', -omkóm- 'take part in a race' ← -ukum- 'win'; in Beja it means 'do together with sb., help doing sth.' (→ reflexive): -m breakdown sth. together (with sb.) <- liw- vt. 'burn', -mdabul- 'gather together (with sb.)' <- dhul- 'gather'; in Afar this affix is a sx.: fiygâme 'be swept' ← fiye 'sweep', kâmadime 'be tied tightly' ← kamade 'tie tightly' || Berber *m-, px. of the reciprocal-reflexive-passive stirp: Rif m-zarn 'ils se sont rus' ← -zar- 'see', Twareg m3mkad 'être coupé' ← ankâd 'couper', m3kâd 'be eaten' ← -kâd 'eat', makur 'be stolen' ← akor 'steal', with the meaning of reciprocity: m3gôn 'faire halte' ('kneel together with the camels') ← âgôn 'kneel' (of camels) || Alt.: North Tung, *-mr > Ewenki -m-, verbal sx. of the passive voice: Aldan Ewenki cukca-m- 'be broken' ← cukca- 'break', Podkamennaya-Tunguska Ewenki yângu-m- 'be broken' ← yângu- 'break', Lm -mr, sx. of the passive voice; Greenberg 2000:237 mentions M sx. of reflexivity -ßen that I have not been able to find in the available literature.
D. Origin of nominal derivational affixes

§ 36. *mA, marker of nominalized syntactic constructions (= subordinate sentences), nominalizer (originally a prn.) that formed analytic equivalents of nomina actionis, nomina agentis and other derived nouns > IE *-ns, sx. of denom. and deverbal derivatives: NaIE *dô-ns 'smoke' (< *důi- 'to blow'), Hittite werite-ma 'fear' (noun) || Uralic *-ma/-mä, derivational sx. of deverbal and denom. nouns\adjs. and of prtc. (e. g. FU *ođa-ma 'sleep, dream', *surt(e)-ma 'death') || Alt.: Turkic *-m / *-m / *-um / *-i, suffix of nomina actionis (Old Turkic öl-iim 'death', ičim 'a single drink'), Mong. *-m in nomina actionis, etc. || Drav. *-ma, sx. of derived abstract nouns (Tamil poru-ma, Malayalam poru-ma 'patience, self-control', Old Kannada mudi-me 'dominance') || HS *mV-, prefix of derived (mainly deverbal) nouns > Sem. nomina actionis *ma12a3- [Arabic maðkal- 'act of eating', Hebrew maðkHAL 'food'], Sem. *mV- (a prefix of participles), Eg mV-, px. of derived (deverbal and denom.) nouns (nomina loci, instrumenti), etc. || Kartv.: *m-, *me-, prefix of participles and nomina agentis > Old Georgian m-ce 'helper', m-dgom-i 'who stands'; *m-...-e, *me-...-e and *m-...-el, circumfixes of participles. The mobility of the etymon proves its original analytic status.

§ 37. *ti, syntactic ps.: it is combined with verbs to build analytic nomina actionis > IE: NaIE *-ti, sx. of nomina actionis, e. g. *men-ti 'thought' (abstract noun) (from *men- v. 'think') > OI mati-h 'mind, intellect', Av mainis 'memory', Latin mens (gen. mentis) 'mind', Gothic ga-munds 'Andenken, Gedächtnis', OCS pa-met id., NaIE *gno-ti(s) 'knowledge' (< *gno- v. 'know') > Greek γνώσει 'knowledge, inquiry', OI pra-jā-ti-h 'knowing the way to' (n. abstr.), OHG ur-clonāt 'recognition, cognitio', OCS po-znati 'cognitio', as infinitives: OCS zna-tb, Lt. žim-ti 'to know' || HS *-t- and *tV-, suffix and prefix of nomina actionis: [1] suffix *-t- > Sem. *-at id., suffix of deverbal abstract nouns, in numerous patterns, e. g. in the pattern *1V2a 3at-: Hebrew cdât 'kâ 'righteousness', Syriac yaθr 'tâ 'knowledge', Arabic harakat- 'movement'; Eg -t [*Vt], sx. of nomina actionis (and other abstract nouns) in different nominal patterns; B nomina actionis (used also as infinitives) of the form *tV-...-Vt, where the prefix *tV- goes back to the prefixed article and therefore does not belong to the N etymon in question, but the sx. *Vt may belong here; Cush.: Bilin -At, -t, sx. of abstract nouns: bir-At 'heat, fArh-At 'joy', gAn-it 'age', Beja -ti, sx. of nomina actionis: tamiti 'act of eating'; [2] HS *V-, prefix of deverbal abstract nouns: S *tV- id.: Arabic masdar taškär-un 'to remember, das Erinnern' (< *dkr 'remember'),
§ 38. *tV, marker of passive participial constructions (verb + *tV = analytic construction with the meaning of past participle or passive verbal adjectives) > IE: NaIE *-to-, marker of passive verbal participles (mostly with passive meaning), which in some daughter lgs. were incorporated into the verbal paradigm as passive participles: NaIE *-tō-s ~ *-tω-s 'known' 
Ur.: FU *-VtV 'nomina patientis (object) [passive participle and sim.]
> *-tV 'sung', 'done', Hung. olvasott 'gesessen', etc.  
Alt.: Turkic *-t ~ *-tu*-tā ~ *-ti, sx. of deverbal adjectives with passive meaning: *ōgi-t 'ground grain', etc.; Tung *-ta / *-te, sx. of derived nouns (passive result of an action): Ewenki inīn-tā 'remainder' (i.e. 'what is left')  
HS: *tV- prefix with the original meaning of nomen objecti cannot be distinguished from metonymic usage of nomina actionis with the prefix *tV- (see above): Hebrew tağmīl 'compensation' is both a nomen objecti and a nomen actionis. Therefore the mobility criterion cannot provide decisive evidence.

ô- 'carried, getragen', за-бров-en-
ô- 'forgotten'  
HS: S px. of passive-reflexive derived participles and verbs: [1] *na-, px. of passive-reflexive participles and (in WS lgs.) of the new perfect (→ verbal adjectives) of the passive-reflexive N-pattern (Hb niph al, Ar 'infa ala, 7th form): HBH ni-š bār 'broken', niš bar pf. 'was broken', Ak naprusu [verbal adj.] 'divided'; [2] *-n- (following the personal px.) in the finite verb (Ak praet., WS new imperfective): Hb γίσσα̱ ber (-s̱ς < -*ṉs̱-) 'is \ will be broken' (new imperfective), wajgiššā ber (and) was broken', Ar ya-n-qəfilu 'is \ will be killed', Ak ipparis (pp- < -*np-) 'was divided'. In Ar the pf. form was restructured on analogy of the ipf., hence -n- in the pf.: ?in-kasara 'was broken into pieces', ?inzhama 'was beaten'  
K [K] *na-, px. of past passive participle: OG na-ban-i 'washed, gewaschen', na-guem-i 'beaten', na-kuet-i
'abgeschnitten', na-šob-i 'born'; Sv na-kwem 'getragen' (of garments), na-sduq 'geflochten' 11 A: Tg. Ew -na-ns/-no, result of an action: dukkú-na-wo 'written by me' (lit. 'my written') ← dukkú-'write' 11 T [Cl.] *-{V}n, e. g. OT [MhK] {Cl.} tevren 'threads which are twisted to make waistbands' ← tevir- v. 'twist'. The mobility criterion proves the analytic origin of the affixes in question.

§ 40. *?-VntV 'he', relative 'he who, that which' (in daughter lgs.: ← a sx. of participles and derived nomina) > IE *-ent/-*ent-, suffix of active participles 11 HS: Cush. -Anta, suffix of nomina agentis (|Fád-Anta 'seaman', jib-Anta 'seller', kúw-Anta 'murderer') 11 Uralic: Samoyed *-ntá, sx. of active participles and nomina agentis (*ilá-ntá 'living, alive') 11 Alt.: Turkic *-nti/-nti, sx. of participles or deverbal adjectives 11 Drav. *-VntV, sx. of gerund. Survives as a word in Berber *?ulinta (?) ~ *nVntia 'he, she, it' (Twareg *nta, etc.), Sem.: Gz *nta. rel. pm. f. 'who, that which' (reinterpreted as f. due to the consonant t).

§ 41. *čiča - *čiča (= *Hicčččičč?) marker of relative constructions [(in descendant lgs.: ← sx. of adjectives \ singulatives (← diminutives)] > IE: Narrow IE *-isk-, sx. of relative adjectives: Gmc *-isk-, Lt -iska, Sl *-isk- 11 HS: East Cush.: Oromo -ičča ~ -ičča, Burji -aččo, -ićčo, -čo, Sidamo -iččo, -ičča, -čo, Dasenech -(V)č, suffix of singulative 11 Uralic *-čV, qualifying suffix: F karitsa 'lamb' (cp. karja 'cattle?'), etc. 11 Alt.: Turkic *-č, suffix of diminutives and forms of endearment: Old Turkic oğučum 'mein Mütterchen' (← oğ 'mother'), Korean -čapaci [aβaži] 'Väterchen'. It is quite possible that this etymon goes back to the N noun *HicčččččččV 'father, head of a family' (> IE *h\|éssxo-s 'master', Uralic *ičč 'father'). For the semantic change compare Arabic ?abū 'father of' ← marker of quality (?abū-l-ägëbi 'extraordinary person', lit. 'father of wonder', ?abū-marrata 'Satan', lit. 'father of force').

ter, ma-šenub-el-i 'who builds', me-šeq-eɪ-i 'saying (sagend)', Megr. mačar-al-, prtc.prs. 'the writing one, writer', ma-švil-ar-i 'murderer', ma-gurap-al-i 'teacher'; [3] Svan -lā '(a person) from' [with names of villages, places]: ādīši-lā 'a person from Ādishi, ein Adischer', māšiši-lā 'ein Mästir, a person from Māšiši' || IE *-l-, sx. of adjectives: Latin -il- id. (hun-ili-is adj. 'on the ground' (← humus 'ground, earth, soil'), -il- id. (sen-il-is 'of an old man, senile'), -lo-, sx. of nomina agentis: legulus 'fruit-gatherer' ← leg-o v. 'gather'; OHG -l-, sx. of nom. agentis: tregil 'carrier' ← tragan 'to carry'; Slavic m. *-te / f. *-la / ntr. *-lo, sx. of past participles: bi-te 'who was', *nes-te 'who carried', etc.; Tocharian A -l, Toch. B -lye, sx. of deverbal adjs.; Old Ind. pēśalāḥ 'artificially formed, decorated, beautiful' < NaIE [Eul.] *pojKvi- 'verziet' ← NaIE *pojK- 'hew out, carve' (> Old Ind. prs. pinni 'at-iti id., etc.); bahūlaḥ 'thick, dense, wide, bundant', cf. Old Ind. bahūḥ 'much, abundant, great, large'; Greek -λας: ποικιλος 'many-coloured' (akin to Ol pēśalāḥ) < IE *pejK- 'hew out, carve' || Anatolian IE: Hitt. atta-la-, Hier. Luwian ūta-li- 'father’s, patrius, väterlich', Luwian ulant-aliya- 'mortal' (← ulanti 'death'), Lydian mane-li-s 'Manes’s' (← Manes) || Ural. *lē- or *le- 'be, become' > Estonian lee- 'become', Finnish lee-: 3 sg. liene 'may, perhaps is'; Norw. Lappish le-ː, lā-, lākki- 'be' (copula), 'exist, occur'; Lowland Cheremis liä- 'be, become'; Old Permian lā-, Ziryene lo-, Vptyak lu- id. 'become, occur'; Hung. lē-, dial. lē-, lő-, lőj- 'be, become', Hung. lēt 'being, existence' || proto-Yukagir [Nikolyeva] lā- 'be' > Yukagir lā- 'be (there is)', lā- 'have' (i'- is a sx. of vt.) || Ural. adjectivizing *-le- (or -l-) 'that of X, having X': FU: Finnish vetdā 'watery, wet, fluid' (← vete- 'water'), Estonian veto 'liquid, fluid, thin [of a liquid]'; Lowland Cheremis marishi 'to be' adj. 'a Cheremis' (cp. mar'ry 'Cheremis'); Permian *yumul'sweet' (< *yum 'dough made of rye-malt') > Votyak kmul yumul 'sweet, unleavened', Ziryene kmol yumol, dial. yumul id., 'not sour'; Ostyak *-lo-, e. g. > Ostyak [Collinder] sarnan-gür-gittāl ort 'a hero with golden insteps' [ynth 'instep'] [Coll. does not indicate the dialect of Os, which is crucial for the et. of the sx.], Eastern Ostyak wiŋkālī ~ wiŋkli 'hook' ([Lh.] Haken zum Auhängen) ~ wiŋtā ~ wiŋktā 'to hook, be caught on (задеть, зацепиться) || Samoyed: Nganasan smånlā 'horned' (< *smánta 'horn'), Tas Selкуп -lā, suffix of gerund (deverbal adverb, like Fr en ..., -ant): sūrīllā ilentak 'by hunting I shall live', ontalpilā lâŋkalpa 'being happy, he cried out' || ? Yukagir: -l/-uol, sx. of nomina resultati: idilwye-kįol 'what Idilwey gave, given by Idilwey', met-yanaspeyreyuol 'what I have forgotten, forgotten by me', [2] -l, sx. of nomina actionis (masdar): Tundra Yuk. sayane-l 'sitting, staying; to sit\stay', ewie-l 'doing,
to do', kel-ut-l 'coming, to come', Kolima Yuk. ayil 'shooting, a shoot', yarji-l 'bathing', ald-ut-l 'cursing, a curse' || Alt.: Turkic *-l, suffix of deverbal adjectives (and substantivized adjectives), e. g. *kIr-l 'red' (> Old Turkic qizil, Chv xépâ xeîre, etc.) ↔ *kIr- 'be red, be red hot' (> Old Turkic qiz-, etc.).

Old Turkic ükíl 'numbers' ↔ ük- 'heap up, accumulate' || Mong. *-l, suffix of deverbal adjectives (and quality-bearing nouns): Written Mong. taníl 'familiar person, an acquaintance' ↔ tání 'know, be familiar with' || Korean -l, -il, suffix of participia futuri || ? Drav.: Malto -te, sx. of past participles: tund-le 'who saw' || HS: EC: Rn lê-ate (ahe is 'be', y-ahe is 'is') 'have (some quality), be (of some kind): žíra kumurrônê lê-yahe 'Jira has wealth' = 'Jira is rich', žíra séghô lê-yahe 'Jira has lazyness' = 'Jira is lazy', Sm'l -le 'er, -or; owner\'keeper\'seller of smth.': damêr-le 'owner of a donkey', dukán-lihíi 'shopkeeper', hilib-le 'butcher' || DZO 257, PG 21O || IS II 201-1 (includes here both the formant of adjectives and the pc. with diminutive meaning [see N *JV, diminutive pc.]) The functional change from an autosemantic word to a derivational suffix may have been as follows: noun X + *[el?V] 'X-seiend, who is X' (cf. Turkic *kIr-il 'what\' who is red', Somali damêr-le 'who has a donkey, owner of a donkey', Nganasan qantâ-lâ 'having a horn, horned', Finnish vetelâ 'watery → having water'); this sx. spread also into the realm of deverbal nomina agentis (→ participles) || Illich-Svitych 1967: 332 s. v. ãîòû (be') *le. The root *V (or *IV?) is analytic, because it still remains analytic in Uralic and Renšillâ. *gil||lu 'boy, young man' > HS: Central Sem. *ý[al][V]m- 'young man, a youth' || Uralic: Finno-Ugric *ülkä 'boy, young man' (Finnish ülkä 'bridegroom', proto-Lappish *škë 'boy, son') || Drav. *ý[V] 'young, young man' || It is likely to underly the diminutive/hypocoristic suffix: Kart. *il- ~ *vl-, diminutive sx. [Pshavi Georgian mam-il-a 'daddy, Väterchen' from mama 'father', in other Georgian dialects vocative forms: mam-il-o 'daddy!', ded-il-o 'Mütterchen'; Svan din-ôl- (dim. of din 'girl') || IE: NaIE *-elV-/*-elV-, sf. of diminutives, e. g. *pork-el- (young) pig (↔ *porko- 'swine') > L porculus, OHG farhli(n), NHG Pferkel, Lt parsêlis id.; Old Ind. šišila-s 'Kindchen' (↔ *šiši- 'Kind'), Greek ἄρκτυλος 'small bear', Latin animula (hypocoristic from anima 'soul'), OHG ništîla (dim. of nift 'niece'), Lith. têtêlis (hypocoristic of tēvas 'father'), mergêlê 'girl' (↔ mergâ 'maid') || Uralic *-[i]/V- *-[J]/V-, diminutive sx. > F pyôrylā 'small circle, small ring' (↔ pyôry 'wheel'), iso-la-mpa 'a bit larger' (from iso-la 'larger'), Ziryene gop-âl 'small pit' (from gop 'pit', Vasyugan Ostyak kulâ 'a small fish' (↔ kul 'fish'), Hung. (dial.) hažînâl 'ant' (from Hg hangya id.).
§ 43a. *y[al], particle of hypocoristic (?) address (vocative) > Uralic *-y, Altaic *-ya, hypocoristic suffixes (usually in address words), Semitic: *-a-y- (diminutive-hypocoristic infix): *yulaqm-, diminutive-hypocoristic from *yalVm- 'young man', Arabic ǧumayl- (hypocoristic of ǧamāl- 'beautiful'); Arabic ya, preposition of the analytical vocative case, Kartvelian *-ia and IE *-ya/*eya- (diminutive suffixes). Evidence of the analytical origin: the etymon is represented by suffixes, by a prefix (that is, it was movable) and by a preposition.

E. Origin of gender markers: feminine

§ 44. *[ʔ]atV 'female, woman' > HS *ʔVl- > Cushitic *ʔVtV 'elder sister' > Saho atē 'elder sister' || Omotic: Janjero ētnā 'elder sister' || HS marker of the fem. sex in nouns: Sem. *-āt- in *ʔa[t]-āt- 'sister' (Hb. ?ā ʰ-āt, etc.), *ham-āt- 'mother-in-law' (Hb. hā ʰ-āt, etc.), Sem. *-at- (marker of fem.-and-inanimate gender): *bin-at- 'daughter' (Arabic bint-, Hb. bat); this sx. of fem.-&-inan. gender results from coalescence of N *[ʔ]atV and N inanimate demonstr. pronoun *tā; Cush. *-IV, fem. marker (Harari Oromo -tī, Iraqw -ri ~ -ti), Beja t- (fem. marker in the definite article: nom. tu, etc.); Berber *-V- (prefix of fem.-and-inan. gender < article), *-Vl (marker of fem.-and-inan.: Tamazight ta-funas-t 'cow') || Sem. *-ta-, Cush. *-tV-, prefix if 3 fem. (fem.-&-inanim.) sg. in verbs. The HS *-t-marker of fem.-and-inan. gender results from coalescence of N *[ʔ]atV and N inanimate demonstr. pronoun *tā || Alt.: Tungusic *atV 'female, elderly woman' > Manchu atu 'female fish', Ude atʼa buyi, atʼa maf'a 'she-bear', atʼa yam 'woman, grow-up female animal' || Drav. *aṭṭ- 'woman' > Tamil āṭṭi 'woman, wife', āṭṭaV 'woman', Kannada āḍaṅgi 'a female', Tulu āḍe 'a coward', Kui āḍi 'wife; the same N word functions as a derivational/grammatical morpheme for females: (Zv.) *oru-tti 'one female' > Tamil, Malayalam oru-tti 'one female person', etc. Evidence for the original analyticity: mobility and the existence of cognate autosemantic words.

§ 45. *ʔālyV (or *hālyV?) 'mother' (originally a nursery word) (→ 'female', marker of fem. sex or fem. gender in nouns, pronouns and [as vocative] in verbs): [I] 'mother': HS: East Cush. [Sasse] *ʔāyy-, Iraqw ayo 'mother' || IE: proto-Germanic *aйði 'mother' (Gothic aiþi, Old Norse aða) || Ural.: Samoyedic: Kamassian iyā 'mother' || D *āy 'mother, aunt' > Tamil ăy 'mother', etc. || B. marker of fem. (sex\gender): HS: Sem. *-i, fem. marker in the 2nd pers. of verbs, *k-i 'thy, thee', *tan-t-i 'thou' fem.; West Chadic *ki 'thee, thy' (fem.); HS *-i- yV, marker of f. in pronouns of
§ 47. *-ay may be discerned in the OG form igi-a(y) 'she' <> igi 'that, he' [without opposition of sexes] and possibly in G ֶdub-ֶa 'girl' <> ֶdubֶ-i 'boy' | IE: NaIE *-i, *-r, a nominal sx. of fem. (sex and gender): *wilk*-i 'she-wolf' (> Ol ֶrֶkֶi, ON ֶyֶlgr < PGMc *wuly-nî), *nept*-i-s 'niece' | | A: M {Pel.} *-ay, marker of fem. sex of nouns: WrM sutu 'emperor' <> sutay 'empress', qutugtu 'saint man' <> qutuglay 'saint woman'; front harmonic vowels of words (possibly going back to a sx. *-E) as a marker of female sex in Mong. and Manchu. Evidence of analyticity: presence of cognate autosemantic words.

§ 46. *temA 'mother' > S *tim- id., Uralic *emâ 'mother, female', T *āmā id., etc. It functions as a suffix of fem. in HS: Egyptian fem. marker -m: cm 'thou' f. <> cu m.; aut. pronouns: cmt 'thou' f. <> cut 'thou' m.; Berber) *kamm 'thou' f., *(i)-k-am 'thee' f., *-am ~ *-i-m 'thy' f. possessor; Chadic *-m (marker of f.) in *km 'thee' f. (> Ngz kim, etc.).

§ 47. *taʔV 'female' → female marker > Drav. *ā, *ay 'female (animal)' > Tm ā, āy 'female of ox \ sambur \ buffalo'. It functions as fem. marker: Drav *-a[ ]; fem. marker > Kodagu ŏbb-ā 'one woman' (<> ŏbb-ē 'one man'), mōv-ā 'daughter' (<> mōv-ē 'son') | IE: *-aH > Narrow IE *-ā, fem. marker in adjectives, nouns and pronouns > OI, Av ā, Gk D -ā, Gk A -η / -ā, L -ā, Lt -ā, PSl *-a, e. g. [a] *new-ā ~ *now-ā 'new' f. > OI 'nāvā, Gk νέα, L nova, PSl *nova, NaIE *ekw-ā 'mare' (<> *ekw-o-s 'horse'), etc. | HS: Sem: Ar ā-īu, fem. ending of adjectives: gafrāʔu 'yellow' f. (<> ḥafraru id. m.), ḥafrāʔu 'one-eyed' f. (< ḥafraru id. m.), ḥasanāʔu 'beautiful' f. (<> ḥasan- id. m.); South Cushitic *-o, fem. marker: Irq -o id.: h-oʔ 'sister' (< h-iya 'brother'), waawut-o, MQQK wawituʔu 'queen' (< wawitu 'kings'), irq-aʔo) 'Iraqw woman', Alagwa [E] -oʔ, Burunge [E] -it-oʔ id. Evidence: the existence of cognate autosemantic words.

Cfr. a Nostratic marker of the male gender:

§ 47a. *ʔa, marker of the male sex [from 'young man'?] > HS: Beja -a, suffix of masc. in verbal forms of the 2nd person sg.: ti-dir-a 'you (sg. m.)' killed; Sem. *ʔa in Arabic ʔa-CGa-Cu (masc. of adjectives): ʔašyārū 'smaller' (masc.) vs. šayrāʔu fem., etc.; Semitic *a in *tant-a 'thou' masc. versus *tant-i 'thou' fem. | | Drav. *-ay ~ *-a, marker of the masc. gender > Tamil mak-ay 'son', Malayalam mak-an 'son', Malto maq-e 'son', Malayalam tacc-an 'carpenter', Konda -a (kañ- 'blind man') | IE: one of the sources of *-of of derived adjectives: *deiw-o-s 'heavenly' ('god') derived from *djew-s 'day, sky, heaven'. Tagmemic evidence of the N analytic origin: Beja -a of masc. is separated from the person marker ti-.
§ 48. *ṭā, dem. pm. of non-active (inanimate) objects. It gave rise not only to pronouns (IE *to, etc.), but also to markers of the inanimate gender: HS *iV-*Vt, marker of the so-called "feminine gender", actually feminine and inanimate gender (see above) || IE *-d (actually *-T, archphoneme resulting from word-finale neutralization of *-d, *-t and *-dè): *-t (Latin id, etc.), *kʰ-o-T and *kʰ-i-T 'what?' || Drav. *-tu, ending of ntr. (inanimate gender) in pronouns and numerals, e. g. [a] Tm atu ~ altu 'that thing' (« a-way 'that man', a-val 'that woman'), etc. It is opposed to the dem. pronoun of active (animate) beings *sE 'he\she' in IE (*to ntr. <> *so anim. > masc.) and possibly in Uralic (*tā-mV 'this' and *tō 'that' vs. *sE 'he, she'). In HS it is opposed to the N animate *yi 'he' (e. g., Sem. *tā- 3 sg. f. <> *yi- 3m. in verbal conjugation) and (in Cushitic) to the reflex of N *k[t]ūj 'this' (Cush. *t- f. <> *k- m. in demonstrative pronouns and later in the def. articles).

§ 49. In the Narrow IE derived "thematic" adjectives and nouns (with a suffix *-o/-e) there is a new marker of fem., namely *-m (e. g. Latin novus m. <> novum fem.). It goes back to the accusative marker *-m (< N *mA id., see above) that spread to the nom. ntr. due to the lack of opposition nom. <> acc. in the neuter gender. It may be also connected with the N nominalizing pronoun *mA (marker of relative constructions, nominalizer that formed derived and abstract nouns in the daughter-languages) [see above § 36 and my paper "Origin of gender in the Nostratic languages"].

§ 50. Up to now we have dealt with those affixes of the daughter languages that have a clear (or at least discernable) meaning. About practically all of them there is evidence suggesting their analytic origin. But we cannot say the same about those elements of roots that are called "Wurzelerweiterungen", "Wurzeldeterminative", "root extentions", "élargissements", that is of those parts of roots of daughter-languages (mostly root-final consonants) that are added or alternate without clear-cut and regular change of meaning. Some of them are probably explainable by lexical interaction of roots (Reimbildungen, influences of synonymic roots, etc.) or go back to ancient compounds (from syntactic combination of two N words), but we cannot rule out the possibility that some of them reflect ancient (synthetic?) derivation. In order to elucidate this matter we need a systematic comparative investigation of all these "roots extentions" [the extant literature (Persson 1901 for Indo-European, Hurwitz 1913 and Ehret 1989 for Semitic) has not produced satisfactory results, probably because each scholar worked with one daughter-family only without broader
comparison]. Up to now the question of the origin of these determinatives remains open.

II. Nostratic syntax

§ 51. Our hypothesis of an analytic structure of Nostratic is further supported by what may be reconstructed as Nostratic syntax.

The word order in Nostratic was strict, which is typical of analytic languages. It may be described as follows:
1. All words belonged to one of the three classes: [1] autosemantic words, [2] pronouns, [3] auxiliary words. These classes differ in their syntactical functioning.
2. The predicate is the final lexical word of a sentence. It may be followed by personal and demonstrative pronouns ("ńitE mi 'I eat'), but not by other lexical words.
3. Attributive (expressed by an autosemantic word) precedes its head.
4. Direct object immediately precedes its verb. Other objects precede the verb, too.
5. Pronominal subject follows the predicate.
6. Pronominal attributive ('my', 'this') may follow the noun.
7. Case markers follow the noun.

This word order survives in Uralic, Turkic, Mong., Tung., Korean, Japanese, Dravidian, proto-Kartvelian and Cushitic as word order and in all daughter-languages as the order of morphemes within words. It was preserved in proto-IE (and its most ancient descendants) as the unmarked word-order, but when the IE words became syntactically autonomous (marking their syntactic function by their morphological form [obligatory cases, etc.]), the former rigid word order disappeared, so that the word order began functioning as a means of focalization. In Semitic, Berber, Egyptian and some branches of Cushitic the old word order was displaced by a new one (originally emphatic, e. g. attributives following their head).

To this we must add an additional detail. Besides the regular nominative structure of sentences (agens is treated as the subject of a sentence), there was an ergative- or dative-oriented structure (agens is treated as an agentive complement, while the subject of the sentence is the patiens, like mihi est side by side with habeo, mihi patet or мне видно, много видимо side by side with video). In this ergative- or dative-oriented structure the pronominal agentive pronoun preceded rather than followed the predicate. Later this structure prevailed in Kartvelian (even today Georgian is a par-
Nostatic language (and almost completely) in proto-Hamito-Semitic (albeit later it was reinterpreted as a nominative structure). Traces of this structure are preserved in IE (the Hittite -hi-conjugation, the Narrow Indo-European perfect). For more details cf. Dolgopol'sky 1984.

We can see that both morphological etymology and comparative study of syntax point to an ancient analytic structure of Nostratic.
Abbreviations

Aram = Aramaic
Av = Avestan
Blt = Baltic
Cush = Cushitic
D = Dravidian
Eg = Egyptian
Est. = Estonian
(p)FU = (Proto-)Finno-Ugric
G = Georgian
Gk = Greek
Gt = Gothic
Gz = Ge’ez
Hb = Hebrew
(p)HS = (Proto-)Hamito-Semitic
(p)IE = (Proto-)Indo-European
IIr = Indo-Iranian
J = Japanese
(p)K = (Proto-)Kartvelian
Lt = Lithuanian
Ltv = Latvian
Lz = Laz
(p)M = (Proto-)Mongolian
Mgr = Megrel
(p)N = (Proto-)Nostratic
OCS = Old Church Slavonic
OG = Old Georgian
OHG = Old High German
OI = Old Indian
OPrs = Old Persian
Phoen = Phoenician
(p)S = (Proto-)Semitic
Sl = Slavic
Sv = Svan
(p)T = (Proto-)Turkic
(p)Tg = (Proto-)Tungus-Manchu
References


