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On Personal Pronouns in the Nostratic Languages

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In the present study (which is intended to be a fragment of a tentative Nostratic comparative grammar) I am trying to reconstruct the original system of personal pronouns (in this paper Sg.1 and Sg.2 only) which underlies the later systems of personal pronouns and pronimal affixes in Semito-Hamitic (henceforth SH), Indo-European (IE), Kartvelian (K), Uralic (U), the altaic languages [Turkic (T), Mongolian (M), Tungusian (Tn), and Gilyak (Glk)], Chukchee-Kamchadal (ChK), Elamite (E), and Dravidian (D).

§1. Let us first make a synopsis of the personal pronouns and pronominal affixes of Sg.1 and Sg.2 in the daughter-languages (Table A).

The numbers in Table A refer to the following explanatory notes:

[1] IE $*e\theta H(-cm)$ /$*e\theta oH$ (or $*e\theta eH^w$) 'I' > OInd. ahám, Avestan azóm, OPersian adam, Old Lithunian eš, pSl (proto-slavic) *Jazъ, Greek ἐγό, ἐγόν, Latin egō, Gothic ik, Hittite uk. According to Szemerémyi EVS 199, the original form is $*e\theta(h)om$, which has been preserved in Indo-Iranian and Germanic, while $*e\hat{g}\bar{o}$ (represented in Greek and Latin) is a secondary variant, which is due to the influence of the verbal inflection (Sing.1) $*-\delta$. According to Burrow Sk 85, Greek ἐγό, Lat. egō < IE $*e\hat{g}oH$ (an Ablautstufe of $*e\theta H-$). On IE $*\theta H$ (> reflexes of $*\hat{g}$ in most languages, those of $*\hat{g}h$ in Indo-Iranian) see Burrow Sk ibid. IE $*t\bar{u}$ 'thou' > Avestan $t\bar{u}$, Lithunian tù, pSl $*t\bar{\imath}$, Doric Greek τú, Attic Greek σú, Latin $t\bar{u}$, Gothic þu; the Indo-Iranian form $*tuwám$ (> OInd. tvam, Avestan tvam, Opers. tuvam) goes back to IE $*t\bar{u}$ with an enlargement $*-am$ due to analogical influence of the reflex $*e\theta Hom$ 'I' (> OInd. aham, etc.). The proto-Anatolian form $*t\acute{\imath}$ 'thou' is represented by Hittite zi-k (-k due to the influence either of uk 'I' or the accusative form tuk

phic Luwian *ti* 'thou'. See Brugmann-Delbrück GVG 2.2:382-3, Brugmann KVG 410, Szemerényi EVS 195-9, YaAA 1:20.

[2] IE $*m\bar{e}$. $*me$ 'me' (accus.) > OInd. $m\bar{a}$, Greek $\mu\epsilon \sim \dot{\epsilon}\mu\dot{\epsilon}$, OIrish and Middle Welsh -m- (OIrish *ro-m-icc* 'he cured me', MWelsh *ry-m-goruc* 'he made me'), Old Polish *mie*, possibly Hittite -mu, Hier. Luwian *ámu* . -mu (*ámu* is extended to the nominative case as well). Palaic -mu. Side by side whith this monomorphemic form, there are forms with case inflection and/or with additional deictic morphemes, such as accusative $*m\breve{e}-m$ 'me' (with the accusative marker $*-m$) > Vedic *mām* and OSlavonic *mę*, dative $*mo-i$ 'to me' > OInd. $m\breve{e}$, Greek $\mu o \iota \sim \dot{\epsilon}\mu o \acute{\iota}$, OSlavonic *mi*, Olatin $m\bar{i}$. IE $*t(u)\breve{e}$ 'thee' (accus.) is preserved in OInd. *tvā*, Attic Greek $\sigma\acute{\epsilon}$ OIrish -t-, MWelsh -th-, side by side with pIE (proto-IE) forms with case endings, such as accusative form $*t(u)\breve{e}-m$ 'thee' > OInd. *tvām*, OSlavonic *tę* and Lithunian *tave* (< $*tav\varrho$). For further details see Brugmann KVG 410-1 (and the table after p. 412), Brugmann-Delbrück GVG 2.2:382-3, Szemerényi EVS 195-201, Lewis-Pedersen CCCG §336, Klingheben OPG 209, Meriggi UXIYa 268.

[3] IE$*mene$ (pronoun of Sing.1, genitive case) > Avestan *mana*, OSlavonic *mene*, OLatvian *mani(s)* and Lith.*manęs* (with the final -s by analogy with the nominal inflection), Gothic *meina* (contamination of dat. $*mei$ and genitive $*mene$). See Brugmann KVG 412, Szemerényi EVS 197, Stang 249-251.

[4] The pIE possessive nominal suffixes $*-mi$ °'my' and $*-t(i)$ 'thy' [1] have been preserved in Hittite -mi- and -ti- (e.g., in the accusative forms *xalugatallan-mi-n* 'legatum meum' and *xalugatallat-ti-n* 'legatum teum') See Friedrich HEB 1:§115.

[5] IE $*-mi$ (> Oind., Avestan, Lith, Hittite -mi, Greek $-\mu\iota$, OSlavonic $-\text{мь}$, OLat., Gothic, -m) and $*-si$ (> OInd., Avestan, Lith. -si. Hittite $-\check{s}i$, Greek $-\sigma\iota$, OLat., Gothic -s) are "primary endings", i.e. person-and-number markers of non-past tenses. IE $*-m$ (> Oind., Avestan, OLat. -m, Greek $-\nu$, Hittite -n) and $*-s$ (> OInd., Avest., OLat., Gothic -s, Hittite $-\check{s}$) are "secondary endings" (person-and-number--markers of past tenses). The origin of the difference between "primary" and "secondary" endings is not clear. In view of the external comparison of IE $*-mi/*-m$ and $*-si/*-s$ I am inclined to assume that the vowel $*i$ is an integral part of the morphemes in question, and the difference is of accentual (prosodic) origin.

[6] By LIE (Late proto-Indo-European) I mean the common ancestor of all IE daughter-languages except Anatolian. The existence of LIE as a valid branch of IE is rather obvious (to mention only such important morphological innovations as the feminine gender and the perfect tense). LIE corresponds to Sturtevant's Indo-European, while pIE is Sturtevant's Indo-Hittite. LIE $*-H^W$ is a primary ending of Sing.1 of the thematic verbs (those with stem-final $*e/o$). The thematic vowel + $*-H^W$ becomes $-\bar{o}$ (Greek $\varphi\acute{\epsilon}\rho\omega$, Latin *ferō*, Gothic *baíra* 'Iam carrying, I carry' OIrish abs. *biru* and constr. -*biur* < $*bir\bar{u}$ 'I carry', Gatha-Avestan *spasyā*, 'specto', Lith. *nešù* 'I carry, am carrying'). The LIE ending $*-H^W$ is obviously connected with Hittite -*ri* (see [7]), but the details of the development remain obscure. LIE $*-ei$ (a primary ending of Sing.2) is very tentatively reconstructible from Lithunian -*i* . -*ie-* (*neši* 'fers', reflexive -*ie-si*). Celtic $*-i$ (OIrish *biri* 'fers') and Greek $-\epsilon\iota\varsigma$ ($-\varsigma$ by analogy with the secondary ending?). See Szemerényi EVS 218-9, Watkins CV 140, Watkins GIV 163-4, 212-4, Stang VGBS 405-7, Sturtevant CGHL.

[7] The hypothesis on the pre-IE personal prefixes $*H-$ (Sing.1) and $*t_{(H)}-$[1] (Sing.2) is based on internal reconstruction. Let us consider the paradigms of the LIE perfect tense, the Hittite *ri*-conjugation and the IE medium voice: Medium voice:

PIE	LIE		OIndian		Avestan		Greek		Goth.	Hittite	
	non-past[2]	past	non-past	past	non-past	past	non-past	past	non-past	non-past	past
Sing. 1 $*-Ho$	$*-ai<*-Hoi$	$*-\vartheta<*-H$	$-\bar{a}$	$-i$	$-\bar{a}$	$-i$	$-\mu\alpha\iota$	$-\mu\bar{a}\nu$	-da	-xa(xa)t(i)	-xa(xa)t(i)
Sing. 2 $*-tHV$	$*-soi$[3]	$*-tH^\vartheta s, *-so$[3]	$-s\bar{e}$	$-th\bar{a}s$	$-s\bar{a}$	$-sa$	$-\sigma o\iota$	$-\sigma o$	-za	-ta(ti)	-tat(i)
Sing. 3 $*-to$	$*-toi$	$*-to$	$-t\bar{e}$	$-t\bar{a}$	$-t\bar{a}$	$-ta$	$-\tau o\iota$	$-\tau o$	-da	-ta(ri)	-tat(i)

PIE stative > LIE perfect tense:

	PIE stative	LIE perfect >	OInd. perfect	Greek perfect	Gothic perf.
Sing. 1	*-He	*-Ha [5], e.g. *woid-Ha 'I know'	vēda	Foĩδα	wait
Sing. 2	*-tHe	*-tHa, e.g. *woid-tHa 'you know'	vēttha	Foĩσθα	waist
Sing. 3	*-e	*-e, e.g. *woid-e 'knows'	vēda	Foĩδε	wait

Now we may compare the pIE medium, the pIE stative (→ LIE perfect) and the Hittite *xi*-conjugation:

	PIE medium	PIE stative	Hittite *xi*-conjugation present)
Sing.1	*-Ho	*-He	-xi
Sing.2	*-tHV	*-tHe	-ti < *-tHi[6]
Sing.3	*-to	*-e	-i

In the paradigms the suffix of person precedes that of tense/aspect and voice. How are we to explain this rather unusual order of suffixes? From typology of languages of the world we learn that suffix-conjugated tenses usually go back to periphrastic (analytic) constructions of three different types:

(a) Nomen verbale (i.e. verbal noun or verbal adjective) + a suffix-conjugated auxiliary verb. Examples: The future in French, Spanish and Italian (*cantare habeo* > French *chanterai*), the past tense in Polish (pSl *xsъpalъ jesmь* > Polish *spatem* 'I slept').

(b) Nomen verbale + pronouns. Examples: the West Semitic perfect and the Akkadian permansive (WSem. *xwašinta* 'dormis' < *xwašinV* 'asleep' + *xta* 'thou', Akkadian *šalmāku* 'valeo' < *xšalimV* 'valens' + *x'āku* 'I').

(c) Nomen verbale + a prefix-conjugated auxiliary verb. An Example: the Awngi (Central Cushitic) definite past tense: Sing. 1 *žepúyà* 'I bought' Sg.2 *žewtúyu à*, Sg. 3 m. *xžewúya*, Sg.3 f. *xžewtúyà*, Pl.1 *Bzewnúyà* < Sg. 1 *xžeb ' -uya*, Sg.2 *xžeb t-uya*, Sg.3 m. *xžeb y-uya*, Sg.3 f. *xžeb t-uya*, etc. See Hetzron VSSA 12 ff.

The verbal paradigms with the person-maker in the world-final position go back to analytical constructions (a)

tense-or-voice marker are most likely to go back to a construction of the type (c), i.e. Nomen verbale + a prefix-conjugated auxiliary verb. Hence, the IE medium, the LIE perfect tense and the Hittite *xi*-conjugation point to underlying constructions with prefix-conjugated auxiliaries. Thus we come to the conclusion about the prefix *xH-* for Sg.1 and *xt(H)-* for Sg.2 (while the forms of Sg.3 have either no prefix or a prefix *xt-*, going back to a demonstrative pronoun).

[8] The SH disjunct pronoun ("Nennform") *´ani* 'I' has been preseved:

(a) in Semitic as a self-standing Nennform-pronoun *x'ani* (> Hebrew '[a]nī) with a secondary variant *x'anā* (> Arab. *´anā*, Ethiopian *´ana* etc., probably due to analogy with Sg.2 m. *x'anta* 'thou'), as well as an enclitic object pronoun *xni* 'me' (>Hebrew, Arabic, Aramaic, Ethiopian *-ni*, Akkadian *-ni*),

(b) in Cushitic as a self-standing pronoun: Bedawye *ani*, *áne*, Bilin *´an*, Awngi *án*, Somali *aní-ga*, *aní-gi*, Galla *ána*, Saho *anú* (-u from the nominal inflection), Sidamo *ane*, pSCush. *x'áni* (Ehret SCP 283), as well as a subject pronoun: Somali *ān*, Galla *ání*. See Dolgopolsky SF 210-1.

The SH pronoun *x'anāku* 'I' has been preserved as a self-standing pronoun in Semitic *x'anāku* (>Akkad. *anāku*, Hebrew *´ānŏkī*, Phoenician *´nk ~ ´nky*, Ugaritic *ánVkV*, Ya'udic Aramaic *'nk*), in Eg. *ink* > Coptic ANOK and in pBerber *enakk[w]* 'I' (Prasse MGT I-III:179).

The SH independent pronoun *x'ant/(i)* 'thou' is represented in Cush.: Bilin *'antí*, Awngi *entó*, Somali *adí-ga*, *adí-gi*, Galla *átí*, Saho *atú* (-u from the nominal inflection), Sidamo *ate*, pCush *x'áta* (Ehret SCP 282), etc (see Dolgopolsky SF 133-4). In Semitic there is a gender differentiation between *x'ant-a* 'thou' m. (> Akkad. *atta*, Hebrew *'attā*, Arabic *'anta*, etc.) and *x'ant-i* 'thou' f (> Akkad. *attí*, Hebrew *'atte*, Arabic *'antí*, etc.), which is either a pSemitic innovation, probably due to the influence if the pronouns *xka* 'thee, thy' (m.) and *xki* 'thee, thy' (f.), or a SH archaism: *x'anta* m. < *x'ant/(i)-a* (with the masculine particle *x-a*, see [10], preserved in pS *x'anta* 'thou' m. and in pCush. *xáta* 'thou' (a former masculine form, which has lost its gender meaning)

special series of pronominal suffixes

[9] In SH there is a special series of pronominal affixes

used as subjects following nominal predicates. This construction (→ predicative form of nomina) has been preserved in Akkadian: Sg.1 gašr-āku 'I am strong', gašr-āta 'you (sg.m.) are strong', gašr-āti 'you (sg.f.) are strong'. In other languages this construction (→ predicative form of nomina) has joined the verbal paradigm as a tense. This is the case with the WSemitic stative → perfect, with the OEg. conjugation of the "pseudo-participle" and with the proto-Berber "parfait qualificatif":

A. WS stative → perfect: Sg.1 stem + *-ku (*mawít-ku 'I am dead' → 'I hafe died' > Eth. mōtkū), Sg.2 m.: stem + *-ta (*mawít-ta 'mortuus es' > Hebrew mattā, Arab. mitta), Sg.2 f.: stem + *-ti (*mawít-ti 'mortua es' > Hebrew matte, Arab. mitti);

B. OEg. conjugation of the "pseudo-participle": Sg.1: stem + kw ~ kj (irx.kw ~ irx.kj 'I know'), Sg.2: stem + tj (irx.tj 'you know');

C. Proto-Berber "parfait qualificatif": Sg.1 stem + *-ay (> Kabyle stem + -əy, e.g. məlliləy 'I am white', Tahaggart stem + -äγ), Sg.2: stem + *-ad (> Kabyle stem + -əḍ, e.g. məlluləḍ 'you are white', Tahaggart stem + -äḍ or t- + stem + -äd with the facultative t- by analogy with the regular prefix-conjugation of verbs). See Djakonoff SHL 85-7, Edel ÄAG 269-287, Cohen SVS 22-3, Klingenheben PSK 230-1. Hanoteau EGT 195, Stumme HSchT 55, cp. Prasse MHT VI-VII:10-1, 193.[7]

The SH pronominal affixes in question may be reconstructed as *-āku for Sg.1 (> Akkadian -āku, pWSem. *-ku with lost of *ā by analogy with the forms of other persons, Eg. -kw ~ -kj, proto-Berber *-ay), *-t/i\ for Sg.2 (> Eg. -tj, pB *-ad, pS *-ta m. and *-ti f.); the gender distinction in Semitic is either an innovation (due to analogy with *ka 'thee, thy' m. and *ki 'thee, thy' f.) or an archaic feature with *-ta preserving the SH masculine-marker *-a (discussed in [10])

The fact that these pronominal affixes (← pronouns) are found within SH compound pronouns *'an-āku 'I' and *'an-t/i\ 'thou' (see above [8], which are not predicates, suggests that originally *-āku and *-t/i\ could accompany a nomen (noun, adjective etc.), no matter the syntactic function of the latter, i.e. originally they function as an apposition to a nomen: *'an-āku and *'an-t/i\ may have originally meant 'self I' and 'self thou' (cp. Italian proprio io and proprio tu or French moi-même; see below §2.6), and pS *šalim-āku (> Akkadian šalmāku 'valeo, I am all right') may have the

etymological meaning 'valens ego, safe-and-sound I'. Later, when the nomen assumed the function of a predicate, its apposition (personal pronominal affix) became its subject: pS *šalim-āku 'all right am I'.

[10] SH *ya (pers.pron.Sg.1 in the oblique cases) have been preserved in Akkadian (yâ-ti 'me' accus., ana yâ-šim 'to me') in pBerb. (suffix *-i/*-y and prefix *i-/*y-, both meaning 'me') and in Cushitic (Saho yi, yo, yotte 'me', Somali i, Elmolo i- 'me', Dasenech yē, Sidamo -ē 'me', Beḍawye -ē- in the compound suffix -h-ē-b 'me'). The Eg. enclitic pronoun wj (used as object of verbs, as well as in some other functions) suggests that this *ya has resulted from reduction of earlier SH *'uya (cf. below [11]).

SH *ku 'thee' is found in Akkadian ku(w)āti (> kâti . kâta) 'thee' (accus.), (ana) ku(w)āšim > kâšim 'to thee' and in Cushitic *ku 'thee' > Saho ku, kuo, Somali ku, Elmolo ki- (preverb), Dasenech kô, Awngi -ku (verbal suffix), Iraqw kô 'thee' (analytic preverb), etc. Cp. Dolgopolsky SF 77-8, 260.

Side by side with *ku (object pronoun of Sg.2 without gender distinction) there are special pronouns for masculine and feminine: *ka 'thee' me., *ki . *kⱴm 'thee'f.

SH *k-a 'thee' m. has been preserved in pS *-ka 'thee' m. (verbal suffix), pB *-ək 'thee' m. (suffix), in Cushitic *ka 'thee'm. (> Bilin -kā and Beḍawye -hō-k(a), verbal suffixes), in Chadic *ka 'thee' m. (> Hausa ka, Bolanchi kā, Mubi ka, etc., see Dolgopolsky EPC) and possibly in Eg. kw 'thee' m. (< *kⱴ-w; *-w is a suffix, cp. Eg. čw (< *ki-w) 'thee' f., Cush. *ki 'thee' f. (> Bilin -kī, Beḍawye -hō-k(i), verbal suffixes) and by Ch. *ki 'thee' f. (>Hausa ki, Bolanchi šī, Mubi kí, etc., see Dolgopolsky EPC).

SH *k-ⱴm 'thee'f. is found in pB *-kam 'thee'f. (Prasse MGT I-III:173) and in Ch. *kⱴm id. (>Ngizim, Duway kəm, Bade gəm, Buduma -gεm).

The feminine-marker *-i in SH *k-i is identical to pS *-ī and Beḍawye -i as suffixes of fem.sg. in verbal forms of the 2nd person (imperative and indicative), e.g. Sg.2 f. imperative: Hebrew šəb-í 'sit!' (f.sg.), Arab. 'iǧlis-ī 'sit!' (f.sg.); Beḍawye dir-i 'kill!' (f.sg.). The masculine-marker *-a in the pronoun *k-a is identical to the marker of masc. sg. in the Beḍawye verbal forms of the 2nd pers.: dir-a 'sit!' (m.sg.). Some tentative conclusions on the origin of these gender-markers may be drawn from analysis of their distribution. The fact that in the prefix-conjugated verbal forms of Sg.2 (such as Beḍawye ti-hầy-a 'thou [m.] art', ti-hầy-i thou [f.] art', Hebrew ti-šməC-ī

'you [f.sg.] will hear') the gender-marker is separated from
the person-marker (← personal pronoun) suggests that the
gender-marker cannot go back to personal pronouns or their
attributes (appositions). What is important with the gender-
-markers *-ĭ (f.) and *-a (m) is (1) that they are used in
Sg.2 forms only (cp. a Beḍawye paradigm of the past tense of
the verb /dír 'to kill': Sg.1 a-dír, Sg.2 m. tí-dír-a, Sg. 2
f. tí-dír-ĭ, Sg.3 m. í-dír, Sg.3 f. tí-dír, Pl.1 ní-dír,
etc.), (2) that they are always used as suffixes only, and
(3) that they follow quite different parts of speech: verbs
(both imperative and indicative), nouns, adjectives and
pronouns. All these pecularities of distribution are easily
accounted for by an assumption that these gender-markers go
back to adress words. Feminine-markers *-ĭ and *-a may go
back to words meaning 'mother': cp. SH roots *'∇y- 'mother'
(> ECush. *'āyy- 'mother' > Rendille ay-o, Boni āy-o', Galla
āyy-o, Burju āyy-e, etc.; SCush *'āyo . *yāyo 'mother' >
Iraqw ayo, Burunge, Alagwa íyo, Asa yeyo, Dahalo ǯáǯo; Chad-
ic *'íya 'mother' > Pero [WCh.] íyà, Mubi [ECh.] íyà, Hwona
[CCh.] 'íya, WMargi [CCh.] 'íyà 'mother', etc.) and *'∇m- .
*mV̄ 'mother' (> pS *'imm- . *'umm- 'mother'; Eg. mw.t 'mo-
ther'; Berber *(m)mā 'mother' > Ait-Izdeg mma, Tahaggart,
Tawelemedden, Ghadames, Tashelhit ma, etc.; Chadic: Ngizim
mài, Kera àmá 'mother', Gwandara ama, Pa'anchi ama-tí, Kilba
àmà, etc.). Cf. Black LEC 214, Cohen DRS 1:22-3, Ebert STK
II:26, 103, Ehret SCP 317, Foucauld DTF 3:1134, Ghoubĭd
Alojaly GTF 122, Jungraithmayr-Shimizu CLR 2:185, Kraft ChW
I-III, Mercier VTAI 165, Sasse PEC 44, Schuh DN 109, Skinner
NBL 32. The gender-marker in question bear some typical
resemblance to English [s :] and [m̥], which may be regarded
as gender-markers within the utterances ['je(s)s :] (Yes,
sír) and ['jesm̥] (Yes, mam).

[11] SH *'∇ya (> *-ya/*-ĭ) 'my' has been preserved as a
suffix in Sem. *-ya/*-ĭ, pB *-ĭ/*-y 'my' (Prasse MGT I-III:
164), Eg. -j, Cush.: Iraqw -ǯ, Alagwa -í, Burunge -ayí, Si-
damo -'ya, Somali -(k/t)-ay, Galla -(k/t)-íyyà (-k- and -t-
are gender-markers of the noun), Elmolo -au, -u, as well as
in Chadic: Margi -áyù, Musgu -á, -ya, Hausa -a (for further
details and analysis of the Ch. pronouns cf. Dolgopolsky
EPC). The Sidamo morpheme -'ya 'my' suggests the recons-
truction of a morpheme with an initial laryngeal (~ *'∇ya),
cp. Eg. wj 'me, I' (presupposing *'uya see above [10]).

    SH *ka 'thy' (masc.possessoris) > Sem. -ka id. (>
Hebrew -kā 'thy' id., Arabic -ka id., etc.), Beḍawye -kᵃ
'thy'm., WCh.: Hausa -ka 'thy'm., Bolanchi -ko id., etc.

    SH *ki, 'thy' (fem.possessoris) > Sem. *-ki, Eg.-č,
Beḍawye -kⁱ, Haraso (ECush.) -āhí, Wch.: Hausa -kí, Bolanchi

-íǯ, Kulere -íky, She -íč, etc.

    SH *k∇m 'thy' (fem. possessoris) has been preserved in
Berber (pB *-əm. see Prass MGT I-III:64) and in Central
Chadic (e.g., Buduma -/g\um). Cp. *k∇m 'thee' f. '[10]).

    The gender of the SH possessive pronoun *ku is more
problematic. As can be seen from certain Cushitic and Chadic
languages preserving gender differentiation in Sg.2 possess-
ive suffixes (e.g. Haraso [ECush.] āhu 'thy' m. versus -āhí
'thy' fem. possessoris, Buduma [CCh.] -gu 'thy' m. versus
-/g\um 'thy' f.), *ku referred to the masculine gender. But
the obvious etymological identity of this possessive *ku
with the SH object pronoun *ku 'thee' (lacking gender dif-
ferentiation) suggests that the association of the possessi-
ve ku with the masuline gender is secondary: it seems to
have resulted from a semantic polarization, due to the
presence of feminine possessives *ki and *k∇m.

    Eg. -k 'thy' m. (> Coptic -K) and pB *-ək 'thy' m. may
go back both to *ka and to *ku.

[12] SH *-mi and *-ti as verbal suffixes of Sg.1 and Sg.2
have been preserved in Highland East Cushitic, e.g. in
Kambatta yom-mi 'sum', yon-ti 'es' (see Dolgopolsky PLOG
103-110, 112, cp. another opinion in Zaborski VC 106-119).
Cp. *t/i\ in SH *'an-t/i\ 'tu' and *mi 'I' probably preser-
ved in WCh. (Southern Bauchi: Lungi mi 'I', Zul àmí 'I'
[possibly from *'an-mi?], see Dolgopolsky EPC).

[13] SH *'∇- (verbal prefix of Sg.1) > Sem. *'∇-, Cush. *'t∇-
(> Beḍawye, Saho, Afar, Somali, Awngi ∇-, '∇-), pB zero-
-prefix *ø- < *a- in the form *ø-stem-āy, Sg.1 of verbs
(Prasse MGT VI-VII:16).

    SH *t∇- (verbal prefix of the 2nd person) > Sem. *t∇-,
Cush. *t∇- (> Beḍawye, Saho, Afar, Somali, Awngi t∇-), pB
*t- in the form *t-stem-ād, Sg.2 of verbs.

[14] Kartvelian *me(n) 'I, me' > OGeorgian me(n), G me,
Megrelian ma, Laz ma(n). K *mi (apophonical variant of *me)
> Svanian mi 'I'. See Klimov ÈSKYa 132, Illič-Svitič OS
1:153. The apophony *e (< *ye) / *i is a regular development
of a pre-Kartv. *i (see Gemgreliʒe-Mačavariani SSAKE 175-
-379, Illič-Svitič GM, Dolgopolsky-Dĭbo-Zaliznyak VIS 89-
-90). K *si 'thou' > Megr. si, Laz si(n), Svan. si. A vari-
ant *swen is found (according to Illič-Svitič) in the compo-
situm *š(w)en (Sg.2 poss. and genitive) < *č-swen- ; *č- is
the pK marker of possessive and genitive in pronouns. See
Klimov ÈSKYa 162-3, Illič-Svitič OS 1:6.

[15] K *m- 'me, to me' (verbal prefix) > OG, G, Svan. m-,

Megr., Laz m- (. b- . p- . p̣-). K *g- 'thee, to thee' (verbal prefix) > OG, G, Laz g-, Megr. g- . r-, Svan. ǯ-.

[16] *hw- (verbal prefix of Sg.1 agentis) > OG w- (. xw-?[8]), G v-, Megr. w- (before vowels), b-, p- and p̣- (befre consonants), Laz w-, b-, p-, p̣-, Svan. xw-, w-. See Mačavariani SKKS 71-73 (reconstruction of the pK phoneme *h), Deeters KhV 25-27, cp. Klimov ĖSKYa 258 (his reconstruction of the Sg.1 prefix is *xw-, since he does not distinguish between *x and *h).

K *h- (agential prefix of Sg.2) > OG x- (in one dialect) and h- (in another one), G ∅- . (rare) x-,(in dialects) x-, h-, Megr. .., Laz ∅-, Svan. x-, ∅-. See Mačavariani SKKS 71-73, Deeters KhV 28-34, Klimov ĖSKYa 257.

[17] In Uralic the original forms of the nominative case of the pronouns are *mᴱ[9] 'I' (> proto-Permian mę > Ziryene, Yaźva Komi me; proto-Ostyak *mä; proto-Vogul äm < ä-mᴱ) and *tᴱ[9] 'thou' (> proto-Permian *tę, Hungarian tᴱ). In the oblique cases stems with a *n-suffix were used: Sg.1 *min- . *mun-, Sg.2 *tin- . *tun- . *tün-. This distinction between stems has been preserved in a few languages only: Ziryene and Yaźva-Komi (nom. me, oblique cases men-, nom. te, oblique cases ten-), EOstyak (e.g. Vakh nom. mä, obl .cases män-), Nostyak (e.g. Obdorsk mȧ, mȧn-), Vogul (e.g. in the Konda dialect nom. åm, obl. åmn-, Tavda nom. ɛm, obl.ɛmä`n . ɛnä`m). But usually the stems with *-n- were generalized and extended to the nominative case as well: 1) *min∇ > Finnish minä, Cheremis W mъń 'I', 2) *mun₍∇₎ 'I' > proto-Lapp *mŏn, Mordvin mon, proto-Samoyed *mъn, 3) *tin∇ . *tün∇ 'thou' > Finnish sinä, Cheremis W tъń, proto-Ostyak *nŏŋ . *nöŋ (*t > *n by assimilation), proto-Vogul *näŋ" (> Tavda näw, nüw, Lower Konda and Upper Konda näŋ, NVogul naŋ, etc.), 4) *tun₍∇₎ 'thou' > proto-Lapp *tŏn, Mordvin ton, proto-Samoyed tъn[10].

The variation of vowels in the stems suggests levelling processes, probably an analogical influence of Sg.1 pronoun upon Sg.2 pronoun and/or viceversa. A plausible hypothesis is that the original form of the stems was *mi for Sg.1 and *tü for Sg.2. The stems of oblique cases go back to the forms of genitive (*mi-nu and *tü-nu, cp. Mong. Sg.1 genitive minu and Sg.2 genitive cinu < *tinu), which were later generalized as stems for all oblique cases. The variant *tin∇ (with *i for the original *ü) is due to analogy with *min∇. The variant *tun∇ (from *tünü due to vowel harmony) influenced the Sg.1 pronoun, hence the stem *mun₍∇₎. Another factor responsible for the change *i > *u in *mun₍∇₎ is the labializing influence of *m. Ostyak has preserved (in its *ŏ in nŏŋ 'thou' > Vakh, Vasyugan nŏŋ, Tremyugan nŏŋ) the *ü of

the stem *tün₍∇₎.

The original suffix vowel *u of the genitive case forms *minu . *munu and *tinu . *tunu, comparable to that of Mong. minu and cinu, can be possibly found in the genitive forms of Finnish (minu-n, sinu-n), Estonian (minu, sinu) and Lapp (pL *mŏn₍ŏ₎ > Kola Lapp monə, munə, monᵃ ~ pL *mū > Nlapp mü, mu, SLapp muw, pL *tŏn₍ŏ₎ . *tū)[11].

See Collinder CG 308-10, Honti GOV 167, Illič-Svitič OS 2:64-5, Itkonen OLV 17-18, Janhunen SW 86, 147, Janhunen UKS 14-5, Liimola WPP 20, MSzFE 3:621-2, Sammallahti LMS 32, 38, Szinnyei FUS 95, Vértes OP 191-215, 235-9, Wiklund EUL 280-4.

The Mordvin suffixes -m- 'me', -t- 'thee' and the Hung. suffix -l- 'thou' in the verbal forms of the so-called "objective conjugation" are not mentioned here as markers of pronominal object, since they cannot be traced back to pU as object pronouns. To my mind, the verbal forms in question may go back to periphrastic constructions of verbal nouns with pronominal possessive suffixes + auxiliary verbs, hence the pronominal morphemes in question go back to possessive pronominal suffixes. See Kövesi OK 96-106, Szinnyei FUS 131-3.

[18] According to P.Hajdú, the pU possessive suffixes are *-me 'my' and *-te 'thy' (Hajdú BUNy 69). The reconstruction of the vowel *e here is open to discussion, hence I write it with half-brackets ⌐ ⌐ (half-brackets of questionable reconstruction).

Proto-Uralic *-m⌐e⌐ > OFinnish -mi (poikase-mi 'mein Söhnchen'), Finnish (Iitti dial.), -m (< -mi, pLapp *-mᴣ (> NLapp, Lule, ELapp -m, SLapp -mə, -mɛ), Mordvin (Erźä) -m, Cheremis -m . -em, pPermian (after Litkin) *-m∇, Ostyak -m, Vogul -əm . -um, Hung. -m∇, pSam. (Künnap) *-m∇. PU *-t⌐e⌐ > Finnish -si (OFinnish also -ti), pLapp *-tᴣ, Mordvin, Cheremis -t, pPerm. -t∇, pSam. (after Künnap) *-ẟ∇ . *-t∇. Cp. J.Mark's reconstruction of 1929: *-m∇ (. *-ᴡ∇) for the 1st person, *-t∇(. *-ẟ∇) for the 2nd person. See Collinder CG 299-301, Korhonen JLKH 236-7, 267-70, Künnap SUKF I:156-82, Mark PSUS (the whole paper), Mark SPUS 50-62, Szinnyei FUS 97-103, Teplyašina-Litkin PYa 149-50.

[19] PU *-m₍∇₎ (verbal suffix(es) or postverbal subject pronoun(s)[12] of Sg.1) > Finnish -n, pLapp *-ᴡ (> Lapp N -ᴡ), Mordvin -n, Cheremis -m, Votyak -m, Ostyak, Vogul -m, Hung. -m, pSam. (after Künnap) *-m∇, *-m. PU *-t₍∇₎/*ẟ₍∇₎ (verbal suffix(es) or postverbal pronoun(s)[12] of Sg.2) > Finnish -t, Mordvin, Cheremis -t, Hung. -l (< *-ẟ∇), pSam. *-t∇, *-t[13]. The pLapp suffix of Sg.2 *-k (> -k, -h, -∅ in dialects of Lapp) goes back, according to Collinder, to *-k-ti (*-k-ta ~

suffix of present). See Collinder CG 308-9, Hajdú BUNy 140--4, Kerhonen JLKH 267-71, 285-7, Künnap SUKF II:11-84, Szin-nyei FUS 128-9.

[20] PTurk *bí 'I' and *sí 'thou' have been preserved in Chuvash: eBe 'I' and eze 'thou'. The initial element e- pro-bably goes back to an interjection, since it does nor follow the regular sound laws: there is no pT vowel to become init-ial e in Chuvash (all words with initial e are either loan-words or interjections). In CT (= Common Turkic, the ances-tor of all Turkic languages other than Bulghar and Chuvash) there was a levelling of stems within the declension para-digm, and the stems of oblique classes *mǎn Sg.1 and *sǎn Sg.2 were extended to the nominative case as well.

[21] PTurk. *mǎn- (. *bǎn?)[14], the stem of oblique cases of the pronoun for Sg.1 > Chuvash man- id., CT *mǎn (. *bǎn?) 'I' (the generalized stem for all cases) > Old Turkic (8th cent. AD) mǎn, mǎn- or men, men-[15] (in the inscriptions of Kül Tegin and Bilgě Qayan) . bǎn, bǎn- or ben, ben-[15] (in the inscription of Toñuquq), OTurkic (9-12 cent. mǎn, mǎn- (men,men-) . bǎn,bǎn- (ben,ben-), Azerbaijani, Eastern Tur-ki mǎn,mǎn-, Türkmen, Kazakh men,men-, Kazan Tatar min, mín-,Turkish ben,ben-.

PTurk. *sǎn-[15], stem of oblique cases of the pronoun of Sg.2 > Chuvash san- id., CT *sǎn, sǎn- > OTurkic sǎn, sǎn- . sen, sen- (generalized stem both for most oblique cases and for the nominative), Azerbaijani, ETurki sǎn, sǎn-, Türkmen, Turkish, Kazakh sen, sen- etc.

The vowel of these stems was not stable in OTurkic, the dative case having the form maŋa . baŋa 'to me', saŋa 'to you' (an obvious case of regressive vowel assimilation under the influence of the case ending *-qa). According to the reading of Gabain, Tekin, Teczan and Malov, the accusative forms in the Toñuquq inscription are to be read biní 'me' and síní 'thee'.[16] If this reading is reliable, we may see here still another grade of vowel alternation. The question of priority might even arise: which of the two vowels - ǎ (e) or í - is primary, and which is due to the influence of some case ending(s)? Cp. A.von Gabain's opinion about the primarity of í in the pers.pronouns.

See Clauson ED 346, 831, Gabain ATG 91, Gabain PSK 132, Kononov GYaTRP 164-6, Malov PDP 61, Ščerbak OSM(I) 124-7, Tekin GOT 138-9, Tezcan UIS 92.

[22] Proto-Turkic *-m/*-Ім 'my' > Chuvash -m/-em/-ьm 'my', OTurkic -m (after vowels), -ím / -ím/-üm/-um (after con-sonants) and similar suffixes in other medieval and modern Turkish languages. The symbol I stands here for a high vo-wel, alternating according to the rules of vowel harmony.

Proto-Turkic *-uγ/*-üg, (after vowels) *-γ/*-g 'thy'> Chuvash -u/-ü, Old Turkic -uγ/-üg/-íγ/íg, (after vowels) -γ/-g, Azerbaijani (dialects) -uγ, -γ, -uш, -ш (gőz-uγ-un 'oculi tui', baba-γ-ín 'avi tui', at-uш-í 'equus tuum') Chuvash -u/-ü may go back only to rounded allomorphs *-uγ/*-üg, hence I am inclined to assume that the Old Tur-kish unrounded allomorphs -íγ/-íg are secondary. They are due to labial harmony of vowels, which is a rather recent morphophonemic rule: according to T.Tekin, "in Orkhon Turkic the labial harmony is at its first stage of development" (Tekin GOT 63). Side by side with *-(u)γ / -(ü)g, a nasali-zed variant *-(u/ü)ŋ (. *-(í/í)ŋ? exists. In Old Turkish we find both variants, in most other languages of the CT branch the *-(∇)ŋ-suffix is the only one in use. According to J. Benzing (Benzing T 726-7), the nasalized variant is repre-sented by the Chuvash optional allomorph -ьn-, used in the oblique cases side by side with the regular -u (-ü): geni-tive -ьn-ьn 'of thy ...' side by side with the regular -u-n. If it is true, it suggests that Chuvash reflects the pT dis-tribution: the *-(∇)ŋ-suffix was originally used in the oblique cases only, and it may be conjectured that it resul-ted from nasalization of the suffix *-(u)γ/*-(ü)g by the adjacent genitive ending *-n. See Caferoǧlu-Doerfer A 302, Kononov GYaTRP 148, Levitskaya IFČYa (on the Chuvash ref-lexes of pT vowels and on the origin of Chuvash u and ü), Levitskaya IMČYa 14-15, Ščerbak OSM(I) 73, Širaliev VL 44-5, Tekin GOT 122-4.

[23] Proto-Turkic Sg.1 *-m (> Chuvash -n, Old Turkic -m, as well as -m in Middle Turkic and New Turkic languages) and Sg.2 *-ŋ ~ γ/g, Turkish, Azerbaijani, Karaim -n, Türkmen, Qazaq, Kazan Tatar, Qumíq, Altai Turkic, Tuva, Yakut -ŋ) are used as verbal suffixes with the -dí/-tí-Perfect (Old Turkic ala-dí-m 'I took', ala-dí-ŋ 'you took'), as well as with some other verbal forms, such as the Conditional (ala-sa-m 'I should take')[17].

The sentence-final pronouns *mǎn 'I' and *sǎn 'thou' are used in the languages of CT origin with nominal predi-cates and with several verbal tenses (going back to nomina verbalia). In Old Turkic, some Middle Turkic languages (Ka-rakhanid, Chagatay, Old Osman-Turkish, etc.) and in Tuva these pronouns still remain separate words (e.g. OTurkic qíryíz oylí mǎn Ian descendant of Qíryízes' bǎn anča ter mǎn 'I say as follows', lit. 'ego sic dicens ego', öltǎči sǎn 'you will die', lit. 'moriturus tu', Tuva ažílčín men' 'I am a worker', ažílčín sen 'you are a worker', ažíldǎr kiží men 'I work', lit. 'working man I', nomčǎn men 'I read', nomčǎn sen 'you read', nomčup tur men 'I read', nomčup olur men 'I

am reading', etc.), while in most New Turkic languages these
pronouns have become suffixes agglutinated to the predicate
nomen or verb, e.g. Qazaq *muɣallïm-min* 'I am a teacher',
bala-sïn 'you are a child', *ala-mïn* 'I am taking', *ala-sïn*
'you (sg.) are taking', etc. In some New Turkic languages
the suffix *-mVn* has been reduced to *-(V)m* (probably under
the influence of the verbal personal suffix *-Vm*): Turkish
rum-um 'I am Greek', *oɣlun-um* 'I am your son', *evdey-im* 'I
am at home', *gidiyor-um* 'I am going away', Crimea Tatar
oʒa-m 'I am a teacher', *ala-m* 'I am taking', Kazan Tatar
ala-m 'I am taking' (cp. *ala-sïn* 'you are taking'). As
should be expected, the sentence-final pronouns *män, *sän
and their reflexes are found in the languages of the CT
branch only. These pronouns can be traced to CT, but not to
pT, since in pT the nominative forms *män and *sän did not
exist yet (see [20]). Instead, we should expect pT nomina-
tives *bi and *si in this function in pT. Indeed, traces of
this usage are found in Chuvash, namely in verbal forms go-
ing back to participial and gerundial constructions (parti-
ciple + pronoun and gerund + pronouns as nominal predi-
cates), such as future *pïrъ-p* Ishall go', *pelə-p* 'I shall
say' from participium necessitatis (futuri) with *-ɣu/*-gü(>
-ъ/-ə) + pronoun *bi (> -p)[18]. See Benzing T 740, 747, Isxa-
kov-Pal'mbax FTYa 351-4, Kononov GYaTRP 169-70, Levitskaya
IMČYa 64-5, Pritsak HTF 153, Ščerbak OSM(G) 24-40, Tekin GOT
138-9, 187-97.

[24] Proto-Mongolian *bi 'I' > MM (= Middle Mongolian), WrM
(= Written Mongolian) Khalka, Moghol *bi*, Monguor *bu*, Dagur
bi.
     Prae-Mong. *ti > pM (= proto-Mong.) *ǯi* 'thou' > MM,
Kalkha. Monguor *ǯi*, WrM *ci*, Dagur *śi*.

[25] PM *mĭnu (genitive of the pronoun of Sg.1) > MM *minu* .
mini, WrM *minu*, Dagur *m̂ĭni*, Monguor *muni*, Khalkha *minī*,
Kalmuck *minъ* . *minē*.
     Pre-M *tinu > pM *činu* (genitive of the pronoun of Sg.2)
> WrM *cinu*, MM *činu* . *čini*, Dagur *šiňi*, Monguor *čini*,
Khalkha *činī*, Kalmuck *činъ*.

[26] Proto-Mong. accusative *nama-yï 'me' (> MM *namai* .
namayi, WrM *namayi*, Dagur *namăi*, Moghol *namei*. Buryat
namā̆(yi), etc.) is formed with the regular nominal accusa-
tive ending *-yï from *nama- , which is a Mongolian stem for
oblique cases of 'I' (ablative pM *nama-ča, Instrumentalis
*nama-βar, etc., see Poppe IMCS 212). In MM ("Muqaddimat-al-
-'Adab", 14th cent.) a form *mina-yi* 'me' (accus.) is attes-
ted.
     PM *čima-yï 'thee' (> MM *čima(y)i*, WrM *cimayi*, Dagur

šamai, Monguor *čimi*, Buryat *šamā̆(yi)*. etc.) is formed with
the nominal accusative-marker *-yï from *čima-, which is a
pM stem for oblique cases (cp. ablative *čima-ča, instrumen-
talis *čima-βar).
     In view of external comparison, we suggest that *čima-
as a stem for oblique cases is a generalization of an accu-
sative form *čima < *tĭma < *ti + ma (*ti 'thou' + accusative
marker *ma). In the oblique stem *nama- we may see a genera-
lization of an accusative form *na-ma. The origin of *na- is
not clear. According to Ramstedt UMP 7 and Poppe IMCS 21,
*nama is from *nima < *mima, i.e. the original pronominal
stem was *mi-. Another possible hypothesis is that *na- goes
back to the pronoun *nV 'we' (1 pl. excl.), comparable to
Gilyak *ńə-*ŋ . *ni-n* 'we' excl. (ŋ . -n is a plural marker),
Kartvelian *n- 'we' excl., SH *n- (1 pl. exl.). IE *n- (1
pl.), as well as possibly to Dravidian *nām 'we' incl. (*-m
is pl. marker).
     MM *minayi* 'me' (acc.) is formed with *-yi (accusative
ending) from the stem *min-* (going back to the pM genitive
form *mĭnu, see [25]).

[27] In Old Mongolian (unattested language underlying the
tradition of WrM) and in MM there is a construction Noun +
Genitive of Personal Pronouns: *aqa minu 'my elder brother',
lit. 'frater mei', *aqa činu 'thy elder brother'. In most
modern Mongolian languages such postnominal pronouns "lost
their stress, became enclitics, and ultimately became end-
ings" (Poppe IMCS 221): Dagur *-miń* . *-mńi* 'my', *-šin* . *-ši̭*
ni 'thy', Moghol *-mini* . *-min* . *-mni* . *-mi* 'my', *-čini* .
-či 'thy', Khalkha *mъn* 'my', *-čъn* 'thy', Kalmuck *-me* . *-m*
'my', *-čn* 'thy'.

[28] The pM pronouns (nominative case *mi 'I' and *či 'thou'
can be used in sentence-final (post-predicative) position as
subjects of verbal and nominal predicates: MM ("Secret His-
tory of the Mongols") *oyisulaqda'a bi* 'ich bin umgebraucht
worden', *okteküi mortei či* 'you (sg.) must obtain'. In some
modern Mongolian languages these pronouns have become perso-
nal endings of predicates: Kalmuck Sg.1 *-ʋ*, Sg.2 *-č(ъ)* (*bi
yowna-ʋ* 'I am going', *bi kommunistъ* 'I am communist', *bi
end-ʋ* 'I am here', *či yowna-č* 'you are going', *či kommunis-
t-č* 'you are a communist', *či gert-č* 'you are at home'),
Buryat Sg.1 *-b*, Sg.2 *-š*, Moghol Sg.1 *-bi*, Sg.2 *-či*, Dagur
Sg.1 *bi*, Sg.2 *-ši*. See Poppe BS 113-4, Poppe MM 101, Posch K
223-4, Sanžeev GKYa 83-4, 99-100, Sanžeev SGMYa(G) 82-93,
WeiersSM 124, cp. Poppe IMCS 250-1.

[29] Proto-Tungusian *bi 'I' > Ewenki, Negidal, Solon, Oro-
chi, Ude, Ulcha, Manchu *bi*, Lamut *bi* . *bī*, Gold *mi (m-

instead of *b-* under the influence of *min-*, the stem of the
oblique cases, see [30]).

PTn *sí 'thou' > Ewenki, Negidal, Orochi, Ude, Ulcha,
Gold, Manchu sí, Solon ší, Lamut hí . hī.

See Benzing TS 107, Cincius SF 259, 270-1, SSTMYa 1:79,
2:72-3.

[30] The stems of the oblique cases in pTn are *min-* for
Sg.1 (> min- in all Tungusian languages) and *sin-* for Sg.2
(> Ewenki, Negidal, Orochi, Ude, Ulcha, Gold, Manchu sin-,
Solon šin-, Lamut hín-). This is obviously a generalization
based on the genitive forms *mini)(> Solon and Ussuri Gold
míní 'my', Negidal, Ulcha, Orok, Lamut E min 'my', Manchu
míní 'my', gen. of 'I') and *síní (> Solon šíní, Ussuri Gold
síní 'thy', Negidal, Ulcha, Orok sin 'thy', Lamut E hín
'thy', Manchu síní 'thy', gen. of 'thou'[19] See Benzing TS
109, Boycova KLÈYa 83-7, Cincius SF 259, 270-1, Cincius
OGÈYa 129-43, Kolesnikova-Konstantinova NYa 116, Novikova
ÈYa 92-5, Paškov MYa 30-1, Petrova OYa 180-1, Petrova YaO
66-7, Sem BD 56, Sunik NYa 133-8, Sunik OlYa 159-60.

[31] In most Tungusian languages the postnominal pronouns
*mí 'my' and *sí 'thy' have become suffixes. Their phonetic
shape in these languages depends on the stem-final phoneme.
PTung. *mí 'my' has yielded Ewenki -w . -f . wí . fí,
Solon -bí, Negidal -w . -bí, Lamut -w . -u . -bu, Orochi
-yí . -wí . -bí, Ude -í . -bí, Ulcha and Gold -í . -bí;
final *-n of the noun + *bí have yielded Ewenki -mí . -m,
Negidal m-, Orochi -mí, Ude -í . -mí, Ulcha and Gold -mbí.
PTn *sí 'thy' > Ewenki -s . š . -tí -rí . (after stem-
final n) -ní, Solon -ší . -š . -čí, Negidal -s(í), Orochi
-sí . -hí, Ude -hí, Ulcha -sí . -tí, Gold -sí. See Benzing
TS 110-1, Cincius SF 273-3.

[32] In individual Tungusian languages the postpredicative
subject pronouns *mí 'I' and *sí 'thou' have become personal
endings. Their phonetic shape depends on the final phoneme
of the tense suffix. Thus, after a vowel pTn *mí 'I' >
Ewenki, Negidal -w, Solon -wí, Lamut -ū, Ude -ī, Ulcha -í,
Gold -wa, pTn *sí 'thou' > Ewenki, Negidal, Lamut -s, Solon
-š, Orochi, Ulcha, Gold -sí, Ude -hí, while *-n bí (*-n of
the tense suffix + *bí) yields Ewenki, Negidal, Lamut -m,
Solon, Ude -ni, Gold -mbí, and *-n sí (*-n of the tense suf-
fix + *sí) > Ewenki -nní, Solon -ndí, Lamut -nrí, Ude -hí,
Orochi -cí, Gold -cí. In Manchu the verb has no person-mark-
ers, although some traces of them (such as Sg.3 genembí-ní
'goes') are attested in Manchu texts. See Benzing TS 129-42,
Cincius SF 276-82.

[33] The absolute forms of the Gilyak pronouns of Sg.1 and
Sg.2 are ńí 'I' and íʰí 'thou'. They are used in different
syntactic functions, including that of a subject.

The pronominal prefixes (ń- and íʰ-) of a noun have the
meaning of possessive pronouns: Amur Gilyak ń-zaqo 'my
knife', íʰ-saqo 'thy knife'. If a similar prefix precedes
the verb, it is direct object: Amur Gilyak íʰí ń-zad 'tu me
cecidisti', ńí íʰ-sad 'ego te cecidí'. Traces of genitive
forms ńín (genitive of 'I') and íʰín (genitive of 'thou')
appear to be found in constructions with postpositions
(former nouns): Amur Gilyak ńín tʰxə 'on me' (← *'my sur-
face'), íʰín tʰxə 'on thee'. See Austerlitz GP 102-9, Krey-
novič NYa 204-7, Panfilov GNYa 1:222-237, Savel'ev LM 223-
244.

[34] PChK (proto-Chukchee-Kamchadal) *gə-m . *gəm-HV 'I'
(disjunct pronoun) > WKamchadal (Napana subdialect) kəmma,
(Sedankino subdialect) kma, EKamchadal *kəmmV (recorded as
kymma, kümma, кин, куне[20]) ~ *kəmhV (recorded as kymha[21]),
SKamchadal *kəm (кин) . *kəmma (kymma, kemma, кəмма .
*kəmxV (koncha), pChKor. (= proto-Chukchee-Koryak) *yəm .
*yəm-(ŋ\V (> *yəmmV) > Chukchee yəm, Chawchuwen (Standard
Koryak) yəmmo, Alyutor yəmma, Kerek -um, umŋu.

PChK *gə-6 . *gə-(6-H\V (*(6H\ > pChKor. *tt?) 'thou'
(disjunct pronoun) > WKamchadal (Napana) kəzza, (Sedankino)
kza, EKamchadal *kəžžV (recorded as кыхе, киз-, kyschscha,
küshsha[21]) ~ *kəžhV (kyschha), SKamch. *kəž (кыш, киз,
kysch) ~ kəžžV (kyschscha), pChKor.. yəttV . (?) *yə6 >
Chukchee yət, yər[22], Chawchuwen yəčči, Alyutor yətta.

See Sjören K, Sjören SK, Bogoraz Ch 719-723, Bogoraz
LRS 42, Golovastikov-Dolgopolsky RČKK 27-28, Krašeninnikov
OZK, Moll SD 209-210, Radliński SNKL II, III, Skorik ČKYa
238, Skorik ČYa 260, Skorik KYa 320, Stebnicky IYa 88,
Volodin IYa 169-170, Žukova AYa 300-301, Žukova GKYa 188-
189.

It is obvious that in the disjunct pronoun *gə-m(-HV)
'I' and *gə-6(-HV) 'thou' the first element *gə- is a marker
of Sg. (cp. *gə-m 'I' and *muôV 'we'. *gə-6 'thou' and *tuôV
'ye') and probably of "disjunctness", while the persons are
marked by *m (1 pers.) and *6 (2 pers.). The suffix *-HV
[which is very tentatively reconstructed on the evidence of
Kamchadal (E,S) *-HV . -xV (recorded as -ha, -cha), Kerek
-ŋu (< *-HV by assimilation with the preceding m) and the
gemination of the preceding consonant in Chawchuwen, Alyutor
and Kamchadal] appears to be a marker of the absolute case,
since it is not present in the oblique cases of the
pronouns.

Pronominal stems without *gə- are found in WKamch.:
-mín 'me' (verbal suffix: ančp-mín 'you taught me', see

Volodin IYa 223-237), as well as seemingly in B.Dybowski's records of SKamch. (на 'to me', сн 'thee, to thee') and EKamch. (туэ 'thou'). But since Dybowski was not a professional linguist and had no practical knowledge of Kamchadal (according to Volodin IYa 13), his records (unless confirmed by other sources) are to be approached with extreme caution. WKamch. -miɳ 'me' /and Dybowski's SKamch. на 'to me') may be compared to pChK *m(ə)-, prefix of Sg.1 /subject) of the cohortative mood: Chukchee mə-čəyv-ək 'let me go!, Chawchuwen mə-lə-k 'let me go!', Alyutor mə-witat-ək 'let me work!', Kerek mə-čihya-k 'let me sleep!', WKamch. m-nukičən 'let me eat!'. See Bogoraz Ch 738-740, Skorik ČYa 262-4, Skorik KYa 323, 327-9, Volodin IYa 220, 232-4, Žukova AYa 302-4, Žukova GKYa 240-6, Radliński SNLK II, III.

[35] The possessive pronouns (← the genetive case of the personal pronouns) of Sg.1 and Sg.2 are pChK *gə-mn-∇n 'my' [> Chukchee, Chawchuwen, Alyutor yəmnin, Kerek umni, WKamch. (Napana) kəmman, (Sedankino) kəman] and pChK *gə-n-∇n (from *gə-δn-∇n?) 'thy' [> Chukchee, Chawchuwen yənin, Alyutor yəninna, Kerek hənina-, WKamch (Napana) knin, (Sedankino) knən (see Moll SD 210), EKamch. (Dybowski) книн, SKamch. kniɳ (Krašeninnikov: книгн]. It is interesting to note that other oblique cases of the personal pronouns are often formed by adding case endings to the stem of the genitive *gəmn- (Sg.1) or *gən- (Sg.2): Chukchee instrumental-ergative yəmn-an 'by me', yən-an 'by thee', locative yən-, ək 'in thee', dative yan-əkə 'to thee', WKamch. (Napana) locative kn-ink 'in thee', dative-directive kn-ankə 'to thee', etc.

[36] In the Elamite texts (from the Middle Elamite (=ME) and Late Elamite (=LE) periods) the independent pronouns of Sg.1 and Sg.2 are u 'I' and nu 'thou'. According to I.Djykonoff, u 'I' < *hu. The reconstruction *hu is based on comparison with the verbal subject suffix ME -h 'I' (> LE -∅), as well as on the existence of a regular phonetic change h > ∅ in the history of Elamite. In the postnominal position the pronoun assumes the function of a possessive ('my'): takki-me u-me 'my life', att-u-re 'my father', petur-u-ri 'my enemy' (-me, re and -ri are class markers of the corresponding nomina possessa). See Reiner EL 89-90, 102-3, Djakonoff YaDPA 105, Paper RAE 93-7.

[37] On the forms un (< *hun) 'me' and nun 'thee' see Reiner EL 89, Djakonoff YaDPA 106.

[38] The postnominal suffixes -k 'I' and -t 'thou' have the meaning of an apposition (→ subject of a subordinate predi-

cate): sunki-k 'I the king', hutta-k 'faciens ego' → 'me faciente', hutta-t 'te faciente', halpin-t 'when tou art dead' ('mortuus tu' → 'te mortuo'). If the nomen (noun, adjective, participle, etc.) functions as predicate, its pronominal suffix becomes its subject: u ... sunki-k 'I am king', hutta-k 'I made' (literally 'сделавший я'), hutta-t 'you (sg.) made'. See Reiner EL 77, 84-5, 94-5, 99-105, Djakonoff YaDPA 100-5.

[39] ME -h LE (Royal Achaemenid Elamite) -∅ 'I' and MB, LB -t(i) 'thou' are used as subject-markers of verbs and participles. See Reiner EL 75-6, 94, 98-9, 104-5, Djakonoff YaDPA 100-5, Paper RAE 41-4. According to Djakonoff YaDPA, ME -h is from *hu.

[40] PD (= proto-Dravidian) *yān 'I' (stem of the oblique cases *yan-) > Old Tamil yān / en-, Malayam ńān (. nān) / en-, Old Kannada ān / en-, Tulu yānu . yěnu / en-, Telugu ěnu, Kolami, Parji ān / an-, Kurux, Malto ěn / eng-. PD *nī 'nʼ (abs. case) / *nim- (oblique cases) 'thou' > OTamil nī / nin-, Malayam nī / nin-, OKannada nīn / nin-, Kolami nīv / in-, Parji īn / in-, kurux, Malto nīn / ning-. The alternation of long and short vowels results from morphophonemic rules in pD. See Zvelebil CDM 1:40-4, Zvelebil CDPh 35-6, 128, Andronov DL 68-74, Burrow-Emeneau DED 247 (no. 3051), 353 (no. 4234), Shanmugam DN 176-80, 186-8, Andronov SGDYa 250-60.

[41] In Dravidian there are grammatical forms called "pronominal nouns" or "personal nouns", i.e. nomina (nouns, adjectives, etc.) with suffixed pronominal appositions: Tamil nall-ēn 'bonus ego', nall-āy 'bonus tu', nall-ēm 'boni nos', Classical Kannada olló-en 'bonus ego', olló-ay 'bonus tu', Malto max-en 'child I' max-e 'child thou', max-em 'children we (excl.)' (cp. a similar construction in E). If in Early Dravidian a nomen was used as predicate, its pronominal suffix was reinterpreted as its subject, and if in addition the nomen was a verbal noun or verbal adjective (→ participle, gerund), the whole construction became a finite verbal form: Malto baʒ-in 'I am beating' (← caedens ego'), baʒ-im 'we are beating' (← 'caedentes nos'). Therefore verbs have personal endings, which are etymologically identical to the pronominal suffixes of the "pronominalized nouns".

The suffix of Sg.1 is *-ěn/*-en > Old Tamil -ěn, Old Kannada -en, Parji -en, Gondi -ōnā, Konda -a, Pengo -a, Kui -enu, Kurux -an, Malto -en. I am almost sure about its etymological identity with *yān 'I' (see [40]).

The suffix of Sg.2 is *-ī (as reconstructed by Andro-

nov) or *-āy . *-i (as reconstructed by Subrahmanyam) > Old Tamil -∇y . -i, Old Kannada -ay, Gondi -ī, Pengo -ay, Kui -i, Kurux -ay, Malto -e. In Parji and Gadaba (Central Dravidian) there is another suffix of Sg.2: Parji -∇ṭ (used both in "pronominalized nouns" and in verbs), Gadaba -∇ṭ (only in verbs). The suffix -∇t . -∇ṭ (having no clear pD etymology) bears a striking resemblance (both in its phonetic shape and in its very peculiar syntactic use) to Elamite -t (see [38]).

In Brahui the verbal ending of Sg.2 subiecti is -s(a). J.Bloch's hypothesis about the borrowing of this ending from Indo-Aryan (Bloch GSDL 53) cannot be accepted for typological reasons: borrowing of personal endings of verbs is practically unknown in the languages of the world. Neither can I accept Andronov's etymology (Brahu -s < *-yi, see Andronov SGDYa 352), since it is not supported by known laws of Dravidian historical phonology. I am much more disposed do accept an alternative hypothesis formulated by Andronov: "... The possibility is not excluded that at least some of these endings [Brahui verbal endings -r of Sg.1, -s of Sg.2 and -k of Sg.3] are traces of an ancient system of personal endings of the Dravidian verb, which preceded the development of the modern system" (Andronov YaB 107).

See Andronov SGDYy 283-4, 346-9, 351-3, 362-4, Subrahmanyam DVM 397-400, 405-6, 409-10, Zvelebil CDM 1:47-52, Zvelebil CDP 71-2 (on the development of pD *-ay).

§2. The forms of the daughter-languages enumerated in §1 (and summarized in Table A) may be explained as going back to a number of proto-nostratic (pN) pronouns and non-pronominal words:

1. *mi 'I', 'me, 'my' > IE *-mi/ *-m (verbal suffixes) 'I', *mē . +me 'me', *-mi (nominal suffix) 'my' / K *mi, *me(n) 'I', *m- (verbal prefix) 'me, to me' / U mE 'I' *-m₍∇₎ (verbal suffix) 'I', *-m'e\ (nominal suffix) 'my' / pT *bi (or *-bi) 'I', *-m (verbal suffix) 'I', *-m (nominal suffix) 'my' / pT *bi (or *-bi) 'I', *-m (verbal suffix) 'I', *-m (nominal suffix) 'my' / M *bi 'I' (as an independant pronoun and as a postverbal subject pronoun / Tn *bi 'I' (as an independant pronoun and as a postverbal subject pronoun), postnominal *bi 'my' / ChK *gə-m, *gəmH∇ 'I' (with *gə- being a marker of independant pronouns, and the tentatively reconstructed *-H∇ being a suffix of the absolute case), *m(e)-, verbal prefix Sg.1 (agent) of the cohortative mood, WKamch. -min 'me' / Etruscan mi 'I', 'me' (see Pallotino E 359, Pfiffig ES 103-4) / probably SH *m'i\ 'I' (verbal suffix of Sg.1 in Highland East Cuchitic and independant pronoun in the Southern Bauchi subgroup of Chadic,

as well as the first component of *m-un 'we' in proto-Chadic, |*-un| being a plural-marker, see Dolgopolsky EPC).

We can see that *mi is used as an independant pronoun 'I', as a subject pronoun of Sg.1 (in a postpredictive position), as an object pronoun of Sg.1 (originally in preverbal position) and as a possessive of Sg.1 (in postnominal position).

It is used with case postpositions as well : pN *mi nu (with the genitive-marker *nu) > pM *mīnu 'mei, meus' (genitive of the pronoun 'I' / pTn *mini id. / IE *mene (genitive of 'I')/ ChK *gə-mn-∇n (genitive of 'I'). This genitive form was used as a stem for other oblique cases of the paradigma of 'I': U *min- . *mun- / pT *mān- . *man- . (?) *min- (with the vowel influenced by that of the case ending / pTn *min- / Etruscan mini 'me'. In Ct the extended stem *mān- was generalized for the whole declension paradigm (including nominative), whence CT *mān 'I'. The same process occured in the Finno-Permian and the Samoyed branches of Uralic (Finno-Permian *min∇. *mun₍∇₎ 'I', Samoyed mъn 'I'). In T, M and Tn the initial *m changed into *n, which is probably a regular phonetic change (nasal harmony of consonants): the initial *m changes to *b in monosyllabic words with a final vowel (see Illič-Svitič OS 2:65), while in the presence of another nasal consonant the initial *m is preserved, whence pT *mān- (oblique stem of the pronoun 'I'), pM mīnu 'my', pTn *mini 'my', *min- (oblique stem of the pronoun *bi 'I'). For the further details see Illič-Svitič OS 2:63-6.

2. *hoy∇ 'by me' (agent, (?) 'my' > SH *'uy∇ > Eg. wj, enclitic pronoun of Sg.1 ('me' etc.) and *ya, *-ya/*-ī 'me' in Sem., Berber, Cush, Chadic, SH *∇ya 'my' (> Highland ECush. *-'ya, Lowland ECush. *-ya, Sem. postnominal *ya > *-ya/*-ī my', Berber *-y/*-ī, Eg. -j 'my'), SH *'∇-, verbal prefix of sg.1 subject (> Sem., Cush. *'∇-, pB *ø-), the second element in SH *'an-ī 'I' / pre-IE *H-, agentive verbal prefix of Sg.1 (> *-H-, verbal presuffix of Sg.1 in the paradigms of the medium (middle voice), in those of the LIE perfect amd of the Hittite ẑi-conjugation, see §1[7]), as well as LIE *-Hʷ, verbal suffix of Sg.1 / K *hw-, agentive verbal prefix of Sg.1 / Elamite *hu > u 'I', 'my', -h (verbal subject marker of Sg.1) / pD *yān 'I', obl. cases stem *yan. The vowel of the first syllable of the pN pronoun must have been labial (hence Eg. wj, Kartvelian *hw-, Elamite *hu > u, LIE *-Hʷ); it is to be reconstructed as *o, since pN *u or *ü would have yielded pIE *u-diphtongs or *u (see Dolgopolskx PIEV). The initial consonant of the pronoun must have been laryngeal (denoted here as *H). The pronoun *Hoy∇ is restricted to the following syntactic usages:

1) Agent marker of Sg.1 of the verb (whence the prefixes K *hʷ-, SH *'-, Pre-IE *H-). I am inclined to interpret *HoyV (unlike *mi 'I') as a non-nominative (ergative ?) agens of the verb. This is suggested by the following observations:

a. K *hʷ- (in the past tenses of the transitive verbs) refers to an agens treated as ergative.

b. IE *-H- is used as a subject-marker of the perfect, which is a tense presumably going back to an impersonal construction (with a real agens in an oblique case): *woid-H-e (> *woida) 'I know' ← 'it is seen by me, видно мне (from *weid- 'to see')[23], whence Greek Ϝοῖδα, Old Indian vēda and Gothic wait 'I know'. On the prehistory of the IE perfect (← impersonal predicate of state/result) see Kuryłowicz Ap. 41-8, Kurołowicz IC 61-2 and Watkins GIV 105-6.

c. In most Nostratic languages (and hence presumably in pN) the person-markers of the verbal subject (originally pronoun as subject) follow the predicate (IE *-mi 'I', *-si 'thou', U *-m₁V₁ 'I', *-t₁V₁ 'thou', pT subject-markers, etc.) But SH *'-, K *hʷ- (and presumably Pre-IE *H-) apparently infringe upon this rule: they are prefixes rather than suffixes. In other words, they occupy the position preserved for the objects (see below §3). However, if we assume that the SM, K and Pre-IE prefixes in question go back to markers of a non-nominative agens (i.e. to a kind of indirect object), the morpheme order (← word order) will be explained.

d. Unlike *mi, *HoyV is never used as a subject-marker of a nominal predicate (as far as we cam judge on the evidence of its reflexes in the daughter-languages). This fact is easily explained if *HoyV is interpreted as a non-nominative agens (ergative or the like), since ergative and similar constructions are known to exist only with predicates of action or state (predicates of verbal meaning) and not with predicates of quality (nominal predicates).

2) Postnominal possessive pronoun ('my'), as preserved in Semito-Hamitic and Elamite. In several branches of SH (Egyptian, East and South Cushitic, the Bade-Ngizim subground of Chadic) the reflexes of *HoyV are used as object pronouns (Eg. wj, Afar yō, Sidamo -ē, Somali i, Alagwa i, Bade iyù, Ngizim iyù 'me'), but several facts and considerations prevent us from concluding that this SH usage goes back to pN: (a) this usage has no parallels outside SH (Elamite u-n and Drav. *ya-n- are not valid parallels, since they have a case-ending), (b) in no SH language has this object pronoun joined the verb as a verbal prefix (unlike the agential *HoyV), which fact suggests a comparatively recent introduction of this syntactic usage of *HoyV. (c) in Egyptian, Bade-Ngizim and in Highland East Cushitic the object pronoun in question does not precede the verb, as should have been expected if this syntactic usage had been a direct continuation of that pN (see §3). Of course, the reflexes of *HoyV + case-ending used in SH as objects (Akkadian yâ-ti, Xamir, Quara and Kemant [Central Cushitic] ya-t 'me', Saho yo-tte 'me'), as well as Elamite u-n and D *ya-n or *ya-n- + accusative-ending, give no indication of the ancient functions of *HoyV, since here the syntactic function is inherent in the case-ending rather than in the pronoun.

3. *ṭ'ü\ 'thou' > IE *tū and Anatolian *ti 'thou', IE *tǔ . *twǔ 'thee', *-tH- (subject suffix of Sg.2 in the LIE perfect and the Hittite ẖi-conjugation, going back presumably to a pre-IE verbal prefix *tH-, see §1 [7]) / SH *-t'(i\ in *'an-t'(i\ 'thou', *-t'(i\ as subject suffix for Sg.2 of nominal predicates (← nominal appositional suffix of Sg.2), verbal suffix *-t'(i\, verbal prefix *tV- (Sg.2 subjecti) / U *tE (= *tü ?) 'thou', *-tE 'thy' (nominal suffix), *-t₁V₁ 'thou' (postverbal subject-marker) / pM *ti (> ǒi) 'thou' (independant pronoun), postverbal *ti 'thou' (subject of the verb) / Gilyak t'hi 'thou', t̊h- 'thee' (preverbal) / ChK *gə-ó, *gə-ió-H\V 'thou' (*gə- being a marker of independant pronouns) and (???) Dybowski's EKamch. ты> 'thou' (as far as we can rely upon Dybowski's records) / Elamite -t, postnominal appositional marker of Sg.2 / (??) Dravidian: Parji -t, appositional marker of Sg.2 in "pronominalized nouns" and verbal suffix of Sg.2, Gadaba -ṭ, verbal suffix of Sg.2 subiecti. In several daughter-languages the initial consonant *-ṭ- has been assibilized to *s-[24] under the palatalizing influence of the next vowel: IE *-si/*-s (verbal suffix of Sg.2 subiecti) / K *si 'thou' / pT *si (or *V-si) 'thou' / Tn *si 'thou' / (??) D: Brahui -s(a), verbal suffix of Sg.2, which has no plausible pD etymology.[25] The construction *ṭ'ü\ nu (*ṭ'ü\ with the genitive-marker *nu) has been preserved in pM *tīnu (> WrM cinu, genitive-possessive form of ci 'thou'), Glk t̊hən, U *tīn- . *tun . *tün- (generalized as a common stem for all oblique cases and in most branches of U as a stem for the whole declension paradigm), pT *sän- (stem of the oblique cases) > CT *sän (generalized stem for all cases), pTn genitive *sini (whence *sin-, stem of the oblique cases), D *nī(n\/*nin- 'thou' (generalization of the genitive form as a common stem for the declension paradigm). The construction *ṭ'ü\ ma 'thee' (with the accusative marker *ma) has been

preserved in pM *tīma-yī (> címayí) 'me' and in the stem
*tīma-, generalized as a common stem for most oblique cases
of the M pronoun of Sg.2. In the combination *ṭ/ū\ nu the
initial *ṭ was nasalized to *n by assimilation with the
following *n in the prehistory of Elamo-Dravidian (D nom.
*nī'n\, oblique cases *nin; E nun 'thee', whence nom. nu),
in the Ob-Ugrian languages [EOstyak (Vakh) nŏŋ 'thou',
NVogul naŋ, SVogul näw, nüw < proto-Ugrian *nŏŋ . *nŏŋ < U
*tün-] and possibly in ChK (genitive *gə-n-∇n 'thy' with
*-n- < *-nn- < *ŏn- < *ṭü nu).

The reconstruction of the initial *ṭ in this pN is
based on sound laws established by V.Illič-Svitič: pN *ṭ- >
IE *t-, M. *t-, U *t-, SH *ṭ- and *t- (*t- being regular SH
reflex in grammatical and pronominal morphemes; see Illič-
Svitič SS 315-9, Illič-Svitič OS 1:147). The vowel of the pN
pronoun is represented in the daughter-languages as *i, *u,
*ü and their reflexes. It may be suggested that the under-
lying pN vowel was *ü, which was later delabialized (mainly
to *i) in several daughter-languages as a result of a quali-
tative reduction (i.e. of a phonemic feature) typical of
grammatical morphemes and probably by analogy with *mi 'I'.
In some daughter-languages (IE, E, several branches of U) *ü
was depalatalized to *u. In IE such depalatalization is
regular (see Illič-Svitič OS 1:152-3, 191-2, 207-8, 222-3.
236-7, 257, cp. Dolgopolsky PIEV), while in U it may be due
to vowel harmony (see above §1 [17]). A rounded palatal
vowel has been preserved in Ostyak (proto-Ostyak *nŏŋ
'thou', cf. Honti GOV 167) and in pTn *süü 'you' pl. (<
*ṭ/ü\ + *Ha, marker of collectiveness) > Manchu suwe, Gold
suэ, Solon sü etc. (see Benzing TS 107-111, SSTMYa 2:115).
Cf. Collinder FUV 74, 155, Collinder IUS 54-5, Collinder UA
15, Dolgopolsky LRC 15, Illič-Svitič OS 1:6, Illič-Svitič SS
317.

The syntactic value of pN *ṭ/ü\ may be reconstructed as
follows:

a) It fulfilled the function of a syntactically unmarked
    pronoun—"Nennform" of Sg.2 (see the first column of
    Table A); hence its used as a subject pronoun (including
    postpredicative sentence-final subject) and as a pronoun
    with case markers (genitive *ṭ/ü\ nu, accusative *ṭ/ü\
    ma).

b) It was used as a postnominal apposition (hence SH *-t/i\
    in *'an-t/i\ 'thou', SH postnominal subject suffix
    *-t/i\, E postnominal appositional -t and possibly pD
    postnominal appositional suffix of Sg.2, preserved in
    Parji-t and Gadaba -ṭ).

c) SH *t- (subject prefix of verbs) and Pre-IE *tH- > IE
    *-tH- (subject affix of Sg.2 in the LIE perfect and in
    the Hittite xi-conjugation) suggest that pN *ṭ/ü\ was
    used as a non-nominative agentive marker of Sg.2. But
    the laryngeal *H in the IE morpheme appears to point to
    the presence of some laryngeal element in pN, probably a
    case marker (of the ergative case?) *H7. If so, one may
    suggest an underlying *ṭ/ü\ H∇ 'by thee' (in preverbal
    position) > IE *-tH-, SH *t- (with loss of the laryn-
    geal) and K *h- (with loss of *ṭ in the consonant clus-
    ter *xṭH). For an alternative explanation of K *h- see
    §2.5.

As to other syntactic functions of the reflexes of
*ṭ/ü\ without case-markers (object in IE and Glk, postnomi-
nal possessive 'thy' in IE, U and Tn), they do not necessa-
rily go back to pN usage. They may well be a later (dialec-
tal) development, namely extension of a syntactically unmar-
ked form to new syntactic functions (which up to then had
been fulfilled by a special pronoun *K∇ 'thee, thy', see
below §2.4 and §4.1).

4. *K∇ (= *k∇ or *g∇) 'thee', 'thy' > K *g- 'thee' verbal
prefix) / SH *ku 'thee', *k-a 'thee' (m.), *k-i and *k-∇m
(f.), in an postnominal position *ku 'thy', *k-a 'thy'
(masc. possessoris), *k-i and *k-∇m (fem. possessoris / pT
-g/-γ 'thy' (*-g in words with front vowels, *-γ in those
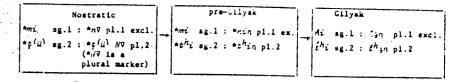with back vowels), with a CT variant *-ŋ 'thy'.

Originally this pronoun functioned as a verbal object
(as preserved in K and SH) and as a postnominal possessive
(as in SH and T).

5. ?? *Hi, a pronoun of Sg.2 with an uncertain syntactic
value > LIE *-ei (?), verbal ending of Sg.2 (> Lith. -ie-.
Old Lithunian -ai-, Celtic *-ī, Greek -ει-ς, see above
§1.5)/ K *h- verbal prefix of Sg.2 (agens) / pD *-ī . *-i,
suffix Sg.2 (postnominal appositional suffix + verbal sub-
ject). This is an alternative explanation of K*h- (for the
first explanation see above s.v. *ṭ/ü\). The hypothesis of
the existence of a pronoun *Hi is highly tentative (both
because we cannot be sure of the existence of an IE ending
-ei and because K *h- may have another explanation). IE *ei
presupposes pN *i (see Illič-Svitič OS 1:153, Dolgopolsky
PIEV).

6. *H∇kE (= *'∇kE ?) > IE *eǵ-H(om)/*eǵo-Ǝ 'I' (indepen-
dent or emphatic pronoun) / SH *-āku 'I' (postnominal sub-
ject), *'an-āku 'I' (independent or emphatic pronoun) / E -k

'I' (postnominal apposition + postnominal subject).[26] There is a rather clear-cut functional difference between *HVkE and *mi 'I': whereas *mi is syntactically unmarked (and therefore can be used in quite different syntactic functions), *HVkE functions almost exclusively as an emphatic (independent) pronoun and a postnominal apposition (+ subject of a nominal predicate). Another striking peculiarity is that IE *eĝ-H(om)/*eĝo-H shows a combination of *eĝ- (< *HVkE) with a pronoun of Sg.1 *-H or *-Hʷ (see §2.2). Both facts suggest that *HVkE is not a genuine personal pronoun, but a nominal substitute for the pronoun *mi. Like similar substitutes in other languages (Polish pan 'thou' ← `lord, master', Spanish Usted 'thou' ← Vuestra merced 'your mercy', Yurak Samoyed piśa-r 'thou' ← 'thyself' ← 'thy body', Japanese watakůśi 'I' ← 'self', Bedauye bar-ūk 'thou' ← Sg.2 possessive form of bar-, noun of unknown meaning), *HVkE is used mainly as an independant pronoun and does not penetrate the paradigms of verbal morphology. Like Yurak piśa-, Bedauye bar- and Middle Spanish merced, pN *HVkE can be combined with a genuine pronominal element, as is the case in IE *eĝ-H(om)/*eĝo-H. Therefore I cannot help agreeing with O.Szemerényi's treatment of IE *eĝ- as a substitute for *mi (Szemerényi EVS 199).

The final vowel of this pN word is to be reconstructed as palatal (symbolized as *E, i.e. *e or *ä) on the evidence of the IE palatal *ĝ (regular reresentation of pN *k before front vowels). The SH *-u in *-āku and *'an-āku may be interpreted as the SH regular case-ending of the nominative case (> Sem. *-u, Highland East Cushitic *-u, Somali nominative-marker -u within the nominative form of the definitive article -k-u, as opposed to the non-nominative -ka; cp. Djykonoff SHL 57-60, Hetzron SCCS):

7. *nV 'we' exclusive > SH *n- 'we' exclusive > Chadic *nV id. (see Dolgopolsky EPC), Sem., Berber, Cushitic *n- , marker of Pl.1, Eg. n 'we' / K *n-. Pl1 exclusive / IE *ne-/*nō-, pronoun of Pl.1 (stem of oblique cases) / Gilyak (Amur dialect) ńeŋ, (ESakhalin dialect) niŋ 'we' excl. / probably, pD *nā-m 'we' inclusive (change of function). Plural pronouns are beyond the scope of the present paper. Nevertheless, I mention the pronoun *nV her, since it appears to have influenced the pronoun of Sg.1 in Gilyak and probably in Mongolian. Gilyak ńi 'I' may be explained as resulting from a proportional analogy:

Nostratic	pre-Gilyak	Gilyak
*mi sg.1 : *nV pl.1 excl. *t⁽ʲ⁾ū sg.2 : *t⁽ʲ⁾ū NV pl.2 (*NV is a plural marker)	*mi sg.1 : *nin pl.1 ex. *tʰi sg.2 : *tʰiŋ pl.2	ńi sg.1 : ńiŋ pl.1 excl. tʰi sg.2 : tʰiŋ pl.2

A similar process in the prehistory of Mongolian may be responsible for the stem nama- . na- in the oblique cases of the M pronoun bi 'I' (-ma- going back to the pN accusative marker *ma 'I', cf. §2.9). See above §1[26] and Illič-Svitič OS.1:7.

8. *'onV (or *'oŋV)[27] 'self, the same' > U *oNe or *oNa (*N = *n or *ŋ) > proto-Samoyed ånᵻ 'self'[28], used with personal pronominal suffixes to form reflexive pronouns: Sölqup (Tim dialect) on-äk 'myself', on-änti 'thyself', on-ti 'himself, herself', etc., Nganasan ŋonənə 'myself', ŋonentə 'thyself', etc. (see Janhunen SW 18, Kuznecova-Xelimsky-Gruškina OSYa 290-3, Tereščenko NgYa 428) / Turkic: Old Uyghur onā 'precisely, exactly' (Clausen ED 170; TT V:32, Note B 80) / Mongolian: WrM önü-ki, Khalkha önöx 'the one in question', 'that very (thing or person)': WrM önüki kereg 'that very matter' / SH x'an- : Eg. ìn, subject emphasizer, i.e. a particle replacing the sentence-initial nominal predicate and thus causing inversion of the normal word order: Nominal predicate + Nominal subject + ìn + Nominal subject + Nominal predicate; SH x'an-āku 'I' (emphasized) > Eg. ìnk, pSem. *'anāku, pBerber *anəkkʷ; SH x'an-ī 'I' (emphasized or independent "Nennform") > pSem. x'anī, pCush. x'ánī, ppCush. x'an, Somali aní-ga, etc. (see §1 [8]); SH x'an-t/i\ 'thou' > Bilin enti, Somali adí-ga, pCush. x'ăta 'thou', pSem. x'an-t-a 'thou'm., x'an-t-i 'thou' f., Eg. nt-k 'thou' m. nt-t 'thou' f. The etymological identity of Eg. ìn with the initial element x'an- of the SH pronouns is suggested by the fact that in Old Egyptian the pronoun ìnk 'I' (< x'an-āku) is syntactically identical with ìn + nominal subject: "An Stelle von jn + Substantiv treten bei pronominalem Subjekt ... die nichtenklitischen Personalendungen (jnk, ...)" (Edel ÄAG 423)[29]. Eg. ìn (and hence SH x'an-)may be characterized as a nounemphasizing nomen (adjective?), something like Polish właśnie (Właśnie tego potrzebujemy 'That is just what we want') or Italian proprio (L'hai fatto proprio tu?). Just as właśnie and proprio, SH x'an- may go back to a word meaning 'one's own self'. If so, SH x'an-āku and x'an-t/i\ have an etymological meaning reminiscent of French moi-même and toi-même.

9. +ma, postpositional marker of a definitive direct object (accusative) > IE *-m accusative / U *-m(V), definiteve accusative / TN *-ba/*-bä, (after a nasal consonant) *ma/*-mä, definiteve accusative / D *-m, accusative / M *-ma-, marker of oblique cases (÷ accusative) of personal and demonstrative pronouns: WrM na-ma-yi 'me', ci-ma-yi 'thee', i-ma-yi 'him' / Old Japanese -wo, accusative > New Japanese -o. Cp. (with further details and discussion) Illič-Svitič OS 2:48-51, Menges MP 21-36, Menges JA 11, 14, Collinder IUS 21, Collinder HUV 130.

10 *nu, postpositional marker of genitive > M *-n, (after monosyllabic stems, i.e. pronouns) *-nu (*minu, gen. of *bi 'I', *cinu, gen. of *ci 'thou', *manu, gen. of *ba, 'we' excl.) / pT *-ŋ, genitive / Tn *-ŋi (< *-n-ki), marker of possessive forms)/ U *-n, genitive / D *-i(n), genitive / Old Japanese (-)nö, postpositional genitive-marker > New Japanese -no / on traces of genitive -n in Korean see Ramstedt EASF 27 / IE *-n-, marker of oblique cases in heteroclitic nouns. For further details and discussion see Illič-Svitič OS 2:78-81 and Menges MP 9-20.

§3. In order to understand the original pN system of pronouns, we must take into account the rules of pN syntax. These rules, which can be deduced fro the syntax of the daughter-languages and even more from the order of morphemes in grammatical forms, may be formulated as follows:

A. Words are classified into three groups (which differ in their syntactic behaviour):

   a) Full Words(in the sense of the Chinese traditional grammar, i.e. semantic counterparts of nouns, adjectives, adverbs and verbs of modern languages),

   b) Pronouns,

   c) Grammatical Words (e.g. case-markers).

B. Pronouns (if stressed?) can behave syntactically according to the rules of Full Words as well.

C. The predicate is the last Full Word of the sentence.

D. Any object precedes its verb (i.e. its Full Word with verbal meaning).

E. Any attribute (expressed by a Full Word) precedes its regens.

F. A pronoun (personal or demonstrative) functioning as attribute follows its regens. In this case a personal pronoun has possessive meaning.

G. A pronoun functioning as subject follows its predicate.

H. Case-markers follow the corresponding Full Word. Some

of them (genitive-marker *nu, accusative-marker *ma) follow immediately after its Full Word, while others (such as locative postpositions) can be used in a construction Full Word + *nu ÷ postposition. This accounts for *-n- preceding the case-ending in the oblique cases of the IE heteroclita, for the increment *-in-/-n- preceding the case endings of oblique cases in D, for some FU case forms (locative *-na < *nu Ha), as well as for the *-n-increment in the personal pronominal stems in the oblique cases (÷ all cases) in U, T, Tn and D (see §1 [17,21,30,40]).

A logical corrolary of the rules C - E is that the subject (if it is a Full Word) occupied the remaining place: somewhere in the initial part of the sentence.

These rules have been preserved almost entirely (either as syntactic rules of word-order or as morpheme-order in grammatical forms) in Uralic, Turkic, Mongolian, Tungusian, Gilyak, Korean, Japanese, Dravidian, Early Indo-European, Cushitic, and have determined the order of morphemes within words in the rest of the Nostratic languages. See Dolgopolsky OR 33-4. I hope to discuss the whole problem in a special paper[30].

§4. In order to explain the syntactic and morphologic distribution of the reflexes of pN pronouns in the daughter-languages (exposed in §1) we have to clarify. (a) the original system of pronouns and their syntactic features, and (b) the subsequent changes of this system which led to the systems of daughter-languages.

4.1 In our view, the original pN syntactic distribution of the pronouns in question may be reconstructed as in Table B:

	Sg.1	Sg.2
A. Syntactically unmarked pronouns (Nennform) used (a) as postpredicative subject, (b) as a Full Word functioning as subject, (c) as a Full Word with case postpositions (syntactic function being determined by the Postposition)	*mi	ṭ /i\
B. Object pronouns		*KV
C. Postnominal pronouns (possessive)	mi and/or 'HoyV	*KV
D. Preverbal agentive pronouns	*HoyV	*ṭ /i\ (HV) ,?*Hi
E. Non-pronominal word liable to replace the independant pronoun	HVkE	
F. Nomen regens following an appositional Nomen	HVkE	*ṭ /i\

rectum (→ postnominal apposition →
subject of a nominal predicate)

Examples of languages preserving the ancient syntacti-
cal use of pronouns or its traces:

Aa: IE *-m(i), *-s(i) and U *-m(∇) and *-t(∇) as verbal
endings of Sg.1 and Sg.2 subiecti, pM *bi and *ti, pTn
*bi and *si as postpredicative subject pronouns.

Ab: U *mE and *tE, pT *bi, *si, M *bi, *ti, pTn *bi, *si, K
*mi, *si as nominative of the pronouns 'I' and 'thou'.

Ac: IE genitive *mene, M genitive *mīnu, *tīnu, Tn genitive
*mini, *sini, M accusative *tīma(yi) > cimayi 'thee',
IE accusative: OIndian mằm, tvằm, Avestan mam, ϑvam,
Slavonic mę, tę.

B. K *m- 'me' (verbal prefix Sg.1 obiecti), *g- 'thee'
(prefix Sg.2 obiecti), SH *ku 'thee' (and *k-a 'thee'
m., *k-i, *k-∇m 'thee' f.) and probably IE *mš 'me' (<
Greek με, OIndian mā, Hittite enclitical -mu).

C. pN postnominal *Ho𝑦∇ > SH postnominal *'∇ya 'my', E
postnominal u- (+ class marker) 'my'; pN postnominal
*mi > Hittite -mi-, U *m'e\, pT *-m 'my'; pN *K∇ 'thy'
> SH postnominal *ku (. *k-a, *k-i, etc.) 'thy', pT
*-γ/g 'thy'; pN postnominal *ṭ'ü\ > Hittite -ti-, U
*-t'e\ and probably Tn postnominal *si 'thy'

D: SH *'- and *t- (verbal prefixes of Sg.1 and Sg.2 sub-
iecti), K *hw- and *h- (verbal prefixes of Sg.1 and
Sg.2 agentis), Pre-IE *H- and *tH- (verbal prefixes of
Sg.1 and Sg.2 with presumably agentive meaning) > IE
*-H- and *-tH- (verbal presuffixes of Sg.1 and Sg.2
subiecti).

E: IE *eĝ- in *eĝ-H(om) . *eĝ-H 'I!

F: SH *-āku and *-ti in *'an-āku and *'an-ti (originally
appositional *'an- 'self' + nomen regens *ⁱ'\āku 'I' or
*ti 'thou', cp. Russian я сам, мы сам with the personal
pronouns as nomina regentia and сам as their apposition)
and as personmarkers in nominal predicates (→ Akkadian
stative, WS perfect) going back to a postnominal apposi-
tional pronoun (like in Elamite and Dravidian "pronomin-
alized nouns") and finally a nomen regens following its
nomen rectum; E -k and -t (postnominal apposition: 'king
I', 'dead thou').

In Table B in function "Postnominal pronouns (posses-
sive)" we find two pronouns: *mi and *Ho𝑦∇. Three alterna-
tive interpretations of this fact are possible:
(a) both pronouns were used in this function,
(b) *Ho𝑦∇ is the original pronoun for this function, while
the use of *mi (as in IE, U ans pT) is more recent and
is due to an extension of the syntactically unmakred

pronoun.
(c) *mi is the original pronoun, while the use of *Ho𝑦∇
developed later in the prehistory of SH and E due to the
fact that in these languages *Ho𝑦∇ had become the syn-
tactically unmarked pronoun of Sg.1.

4.2. The historical changes leading from the original sys-
tems of the daughter-languages may be reconstructed as fol-
lows:

4.2.1. The pronoun *ṭ'ü\ underwent delabialization of its
vowel (*ṭü > *ṭi) and assimilatory palatalization (→ assi-
bilation) of its consonant (*ṭi > *si, *ṭü > sü), hence Ana-
tolian *ti 'thou', *-ti 'thy', IE *-si/*-s (verbal-ending of
Sg.2), K *si 'thou', U *ti(n∇) (side by side with *tun-),
pT *si 'thou' (and the stem of the oblique cases *sằn), M
*ti > ƀi, Tn *si. The variant *sü (with the assibilation,
but without delabialization) is preserved in the Tn plural
form *süd 'ye' < *ṭü + *Ha, pN pron. coll. (see Benzing TS
107-9). Both processes are probably due to a reduction of
phonetic features, typical of grammatical morphemes and not
accounted for by regular sound laws (like -śa > -sa in the
Russian reflexive ending -ся. These changes probably belong
to a rather early period in the history of the Nostratic
languages (period of common interdialectal developments?),
since their results are observed in many branches of N.

4.2.2. Changes from pN to IE:

A. The syntactically unmarked pronoun of Sg.2 *ṭ'ü\ ex-
tended its use to all syntactic fundtions (incl. object and
postnominal possessive pronoun).
B. Full Words are predicates + Postpredicative subject
pronouns *mi and *si → Active forms of verbum finitum (Pre-
sent with the endings *-mi for Sg.1 and *-si for Sg.2, past
tenses with the endings *-m and *-s).
C. Agentive pronouns (Sg.1 *Ho𝑦∇, Sg.2 *ṭ∇-H∇) → Predi-
cates → Pre-IE verbs (of state?) with prefix-conjugation
(resembling those of K and SH). Such verbs were later lost,
except for several auxiliary verbs which took part in peri-
phrastic constructions Nominal form of verbs (verbal noun,
adjective, etc.) + Auxiliary Verb → IE verb forms of Middle
voice (medium), LIE forms of Perfect (originally verbal
forms of state?) and Hittite forms of 𝑥i-conjugation, all of
them with *-H- and *-tH- as markers of Sg.1 and Sg.2. Pro-
bably the LIE ending *-Hʷ (Present tense of the thematic
verbs: *-e-Hʷ > *-ō > -ō in Latin and Greek) belongs here as
well.
D. Postnominal possessives *mi and *ti (< *tü) + posses-

sive endings -mi- 'my', -ti- 'thy' (preserved in Hittite).

E.   The Nennform (+ nominative) of the independant pronoun of Sg.1 was replaced by *eθH(om) — *eθoH (going back to *HVkE + *HoyV). In other cases the stem of the old pronoun *mi has been preserved.

4.2.3. Changes from pN to SH.

A.   In pre-SH (or in the pre-SH dialect of N?) *HoyV (agentive pronoun 'by me' and possibly possessive 'my') extended its syntactic use (e.g. became an object pronoun 'me' and probably ousted *mi as unmarked pronoun of Sg.1).

B.   In pre-SH different predicate forms were created:

(1) Predicate + Subject pronouns *mi, *ṭ'ü\ + active verbal forms with the endings *-mV (Sg.1), *-tV (Sg.2)- (later replaced by (2) and preserved only in the verbum substantivum in Highland East Cushitic: Kambatta yom-mi 'sum', yon-ti 'es', and in verbal forms developed from constructions with this verbum substantivum).

(2) Agentive pronouns *HoyV 'by me', *ṭ'ü\ 'by thee' + Predicative + Verbal forms with the prefixes *'V (Sg.1) and tV (Sg.2); comparison with similar K forms suggests that originally these SH verbal forms were ergative-orientated (or dative-orientated?), as can be seen, e.g., in Akkadian īšu 'mihi est' (< *'V-yšu < N *HoyV'esV mihi est'[31]) and tīšu 'tibi est' (< *tV-yšu < N *ṭV'esV or *ṭV HV'esV 'tibi est'); later the verbal forms were reinterpreted as nominative-orientated.

(3) Noun or adjective + SH enclitic pronouns *-āku 'I' and -t'i\ 'thou' (going back to N *HVkE and *ṭ'ü\) + SH forms of nominal predicate (whence Akkadian stative, WS perfect, etc.)

C.   The pronouns as "Nennform" were replaced by a construction: N *'onV (or *'oṇV) 'self' + *HVkE 'I' resp. *ṭ'ü\ 'thou' + SH *'an-āku 'I' (+ 'moi-même), *'an-t'i\ 'thou' (+ 'toi-même).

D.   SH nouns *'VyV and *'Vm(m)V (both meaning 'mother') used as address following verbal forms and pronouns of Sg.2 ('come, mother', 'thou, mother', 'thee, mother', etc.) turned into suffixes (*-ĭ and *-Vm) marking feminine gender of the addressee. They were added to verbal forms of Sg.2 (either imperative or prefix-conjugated tenses: Hebrew kiθβ-ī, Arabic 'uktub-ī 'write, oh woman!, Hebrew tixteβ-ī 'you (f.sg.) will write', Akkadian tamxaṣ-ī 'you (f.sg.) struck, have struck, Bedauye tídir-i 'you (f.sg.) killed, have killed') or to pronouns of Sg.2 (Arabic 'ant-i 'thou' f., Eg. -č 'thy' f. < *k-i, Eg. č-m 'thee' f., proto-Berber *kä-m 'thou' f.)

4.2.4. Changes from pN to K:

A.   Pronouns (in the function of agens) *HoyV 'by me' (> K *hu-) and *ṭ'ü\ HV or *Hi (> K *h-) + Predicate + pK verbal forms. These verbal forms are ergative-orientated (function as predicate of ergative sentences) in the past tenses, while in the present tense (formed from analytical constructions with verbal nouns) the verb is nominative-orientated.[31]

B.   The ancient genitive construction *mi nu (> pK *men) lost its case-meaning and became an alternative of the unmarked pronoun, side by side with the ancient pronoun *mi (> pK *mi). The function of possessive pronouns is fulfilled by new composite pronouns *čem- 'my' and *šwen- (> *č-swen, according to Illič-Svitič OS 1:6), going back to word groups: pK *čem- 'my' < N *čV 'that which'[33] + postnominal *mi 'my' (or + *mi nu 'my' with subsequent phonetic reduction of *n), pK *šwen- 'thy' < *č-swen- < N *čV 'that which' + *sü nu 'thy'.

C.   The preverbal object pronouns *mi 'me' and *KV 'thee' became verbal prefixes: K *m- 'me' and *g- 'thee'.

4.2.5. Changes from pN to U:

A.   The syntactically unmarked pN pronouns *mi for Sg.1 and *ṭ'ü\ for Sg.2 extended their use to all syntactic contexts and thus ousted other (syntactically specialized) pronouns of Sg.1 and Sg.2.

B.   The construction of predicates with non-nominative agent pronouns (*HoyV 'by me' and preverbal *ṭ'ü\ (HV) 'by thee') fell out of use.

C.   Within the paradigms of the personal pronouns most oblique case-endings were added to the genitive forms *min(u) — *mun(u) (< N *mi nu) and *tin(u) — *tun(u) — *tün(u) — (< N *ṭ'ü\ nu)[32], and thus the genitive-based stems *min-/*mun- and *tin-/*tun-/*tün- were generalized in pU as stems for all oblique cases. Later (in the separate history of different branches of U and in individual languages) these stems were generalized for the whole paradigm (including nominative).

4.2.6. Changes from pN to Turkuc:

A.   The syntactically unmarked pronoun *mi was generalized as the only marker of Sg.1. On the contrary, the pronouns of Sg.2 still preserved (partially) their ancient syntactic distribution: *ṭ'ü\ > pT *si as unmarked pronoun and *KV (> *-r*-g) as postnomina possessive 'thy'.

B.   In the function of objects only case forms of unmarked pronouns remained in use.

C.   The ancient construction of predicates with a non-no-

minative (ergative?) agentive pronouns fell out of use.

D.   The genitive forms (N *mi nu > pre-T *mᵛn- and N *ṭ'ü\
nu > pre-T *sᵛn-) were generalized as stems of all oblique
cases, and later (in CT) as the only stems of these pronouns
throughout their declension paradigm (i.e. including nomi-
native).

E.   The initial consonant *m of the pronoun *mi was dena-
salized, i.e. changed into *b (*mi > *bi) unless another
nasal consonant was present in the form (hence *mi nu >
*mᵛn- with the *m preserved), The vowel of the pronouns
*mᵛn- and *sᵛn- fluctuated, probably due to the influence of
the case-endings (e.g. Turkic dative *maŋa 'to me' < N *mi
nu K̯a with the postposition *K̯a 'to', cp. Illič-Svitič OS
1:368-9).

4.2.7. Changes from pN to Mongolian:
A.   The N unmarked pronouns *mi and ṭ'ü\ with case post-
positions became the only possible forms of pronominal ob-
ject ('me', 'thee') and possessive pronominal attribute
('my', 'thy').
B.   The "ergative"-orientated predicates (those with a non-
-nominative agential pronoun) wentout of use.
C.   As a result, the unmarked pronouns *mi and *ṭ'ü\ re-
mained the only pronouns of Sg.1 and Sg.2.
D.   In the paradigm of the Sg.2 pronoun the accusative form
(N *ṭ'ü\ ma >) *tïma > *čima was generalized as a stem for
oblique cases. In the paradigm of the Sg.1 pronoun a stem
for oblique cases *nam(a)- appeared. It may be explained
either as pN *nᵛ 'we' excl. + *ma accusative (use of 'we'
for 'I') or as a reduction of *mïnuma (an accusative based
on the genitive *mi nu). The stem *nam(a)- is used for most
oblique cases, but in the genitive the old form is preserved
(N *mi nu > pM *mïnu — *mini), and in the dative *nadur we
find the stem *na- (from N *nᵛ 'we' or from *mïnᵛ) withoput
*-ma-.
E.   The initial consonant of *mi 'I' was denasalized: *mi >
*bi, but in the genitive case *mïnu / *mini the consonant *m
has been preserved.

4.2.8. Changes from pN to Tungusian:
A.   The N unmarked pronouns *mi and *ṭ'ü\ with case post-
positions became the only possible forms of pronominal ob-
ject ('me', 'thee').
B.   The "ergative"-orientated predicates went out of use,
and the unmarked pronouns *mi and *ṭ'ü\ (> *si) remained the
only pronouns of Sg.1 and Sg.2.
C.   The genitive forms *mini (< N *mi nu) and *sini (<N
*ṭ'ü\ nu) were generalized as stems (*min-, *sin-) for all
oblique cases.

D.   The initial *m *mi 'I' (only in the direct case) was
denasalized: N *mi > pTn *bi.

4.2.9. Changes from pN to Gilyak:
A.   The pronoun *mi 'I' was transformed into *ni > ńi pro-
bably under the influence of *nᵛ 'we' (see §2.7).
B.   The unmarked pronouns *mi (> ńi) and ṭ'ü\ (>ĉʰi) spread
to all syntactic functions and ousted all other pronouns of
Sg.1 and Sg.2.
C.   The syntactic use of the pronouns was transformed by
analogy with the syntax or nouns, so that the personal
pronouns are used in Glk according to the rules D and E of
pN syntax (see §3).

4.2.10. Changes from pN to Chukchee-Kamchadal:
     The grammatical system of pChK has not been reconstruc-
ted as yet, but two points in its prehistory are clear
enough:
A.   The reflexes of the pN unmarked pronouns *mi (pChK
*-m-) and *ṭ'ü\ (> pChK -6- have been joined by a preceding
element *gə- (of unknown origin) to form pChK pronouns
*gə-m(Hᵛ) 'I' and *gə-6(Hᵛ) 'thou' (> proto-Chukchee-Koryak
ᵂrəttᵛ, WKamchadal kəzza). The etymology of these forms may
be similar to that of Yurak Samoyed pĭ6a-r 'thou' (← 'thy
body', lit. 'body thy') or to that of SH x'an-āku 'I' (←
'moi-même', lit. 'self I') and x'ant-fi\ 'thou' (←
'toi-même', self thou'). The genitive forms of Sg.1
*gə-mn-ᵛn and of Sg.2 *gə-n-ᵛn (probably from *gə-6n-ᵛn)
consist of elements *gə + *-mn- (< N *mi nu, i.e. genitive
of *mi) + *-ᵛn (< *nu, genitive marker) and gə + *-n-ᵛn (<
*-6n- < N *ṭ'ü\ nu) + *-ᵛn. The genitive ending *-ᵛn (pleo-
nastic from the etymological point of view) appearsto have
been added by analogy to nominal declension.
B.   The subject prefix of Sg.1 *mə (verbal prefix in cer-
tain tenses) goes back to N *mi 'I' (unmarked pronoun used
as a Full Word with subject function in the initial part of
the sentence, see §3).

     As far as we can rely upon B.Dybowski's unprofessional
records of EKamch and SKamch (now extinct), these dialects
appear to have preserved some other remnants of pN pronouns:
SKamch на 'to me', сн ᵐChK *6i < *ṭ'ü\) 'thee, to thee',
EKamch. туэ 'thou'.

4.2.11. Changes from pN to Elamite:
A.   In pED (proto-Elam-Dravidian) the N pronoun *Hoyᵛ 'by
me, (?) my' became the main pronoun of Sg.1, having ousted
*mi. In E the reflexes of the pronoun *Hoyᵛ are used as an
independant pronoun (Nennform, direct case) hu > u, as an

object pronoun *hu-n*, as a postnominal possessive pronoun (*u* + class markers of the nomen regens), and as a subject suffix -*h* of verbs.

B.   N *x'∇kᴱ* 'I' preserved its use in an appositional construction Nomen (noun, adjective) + *x'∇kᴱ*, but the latter element turned into a suffix: *sunki-k* 'I the king' (lit. 'king I').

C.   The pronoun *xt̪/ü* 'thou' was preserved in an appositional construction nomen + *xt̪/ü* (> Nomen + *x-t*) and as a subject suffix of verbs (-*t*, -*ti* < pN *xt̪/ü* as a postpredicative subject).

D.   In the N genitive construction *xt̪/ü\ nu* > pED *xtün* there was an assimilation *xtün* > *xnün*, whence Middle Elamite *nun* (Sg.2, genitive) and pD *xnin-*, stem of the oblique cases of 'thou' (see §4.2.12.B).

E.   In E an unmarked pronoun of Sg.2 *nu* appeared. It can be considered either a back formation from *nun* (genitive) or a transformation of *xtü* (< *xt̪/ü*) under the influence of the genitive form. Cp. a similar process in Ob-Ugrian.

4.2.12. Changes from pN to Dravidian:

A.   As mentioned above (§4.2.11, p.A), in pED the reflex of N *xᴴoy∇* became the main pronoun of Sg.1. Its genitive form *xᴴoy∇ nu* became *hu-n* in E and *xyan* in pre-Dravidian. According to the pD phonological rule of Krishnamurti (Krishnamurti HVL 237-52, Zvelebil CDP 184), *xyan* > *xyān* (before word boundary) / *xyan* (before derivational vowels). The stem *xyān/xyan* was generalized for the whole declension paradigm of the pronoun of Sg.1.

B.   PN *xt̪/ü\ nu* > pED *xnün* (see 4.2.11 D) > pD *xnīn* (before word boundary) / *nin-* (before derivational vowels). The stem was generalized for the whole declension paradigm of the pD pronoun of Sg.2.

In pre-D the postpredicative pronominal elements went out of use, and personal conjugation of verbs did not develop.

FOOTNOTES

1   In the present paper I use two types of "uncertainty brackets" The half-brackets /\ accompany a letter (or letters) if the identity of a reconstructed phoneme (phonemes) is dubious: /t\ means "t or the like". The half-brackets ₍/ are used if the very presence of any phoneme is questionable: t₍h₎ means "t or th". Capital letters are used for unspecified phonemes of a particular class: e.g. *H* stands for an unspecified laryngeal consonant, *ᴱ* denotes an unspecified front vowel. ∇

stands for an unspecified vowel. In §[4] doubts about *ᵢ (denoted as /i\) have arisen, since in this case *tᵢ failed to develop into Hittite *zi*, which is a phonetic law.

2   The formal difference of non-past and past is obviously based on the addition of the present-marker *-ᵢ (analogy with the active voice).

3   LIE *tH∇s* is the original form (cp. Hittite), while LIE *-soᵢ and *-so are innovations, based on proportional analogy with the active voice and the third person: non-past Active Sg.3 *-tᵢ : Sg2 *-sᵢ = Medium Sg.3 *-toᵢ : Sg.2 x, thus x is *-soᵢ; past Active Sg.3 *-t : Sg.2 *-s = Medium Sg.3 *-to : Sg.2 x, thus x is *-so.

4   Arcado-Cyprian Greek has preseved the dyphtong-αι, while other Greek dialects (incl. Classical Greek) have generalized -αι < -ᴴoᵢ) from Sg.1 -μαι (in which -μ- is an innovation based on analogy with the active voice forms, e.g. present μι.

5   Evidence for *H can be found in the Old Indian forms of the reduplicated perfect, such as Sg.1 *cakara* I have done' < *kʷekʷor-Ha* as against Sg.3 *cakāra* 'has done' < *kʷekʷor-e*. According to Brugman's law, in open syllables IE apophonic *o > Indo-Iranian *ā (Brugman-Delbrück GVG I 1:139), hence lack of lengthening of *a in Sg.1 points to the presence of a laryngeal following the stem-final consonant: in *kʷekʷorHa* the penultimate syllable is closed, and therefore there is no Brugman's lengthening of *a.

6   Hittite -*ti* can go back only to *-tHi, since IE *ti yields Hittite *zi*.

7   The pB reconstructions are quoted from Prasse MGT VI-VII. K.Prasse considers this construction to be a Berber innovatio: "Ces auteurs regardent le parfait qualificatif comme le pendant du parfait sémitique à suffixes, alors que dans notre pensée c'est une innovation berbère" (Prasse MGT VI-VII 10, note 4), but in view of the striking semantic and formal resemblance between the Berber "parfait qualificatif", the Akkadin stative (=permansive), the West Semitic perfect (the *faᶜala*-tense) and the Egyptian conjugation of pseudo-participles I cannot share his opinion. It is obviously a pSH heritage.

8   The variant *xw-* of the prefix is mentioned in Klimov ÈSKYa 258, but I could not find any corroboration of it in the available grammatical descriptions of OG (Imnaišvili KEIK, Marr GDGYa, Marr OT, Marr-Brière LG, Zorell GAGB, Zwolanek-Assflag AGK, etc.). Unfortunately I have been unable to consult Šani᳕e 3KEG.

9   As mentioned above (footnote 1), *ᴱ stands for unspecified front vowel. In this case the Permian and Ugrian reflexes of pU do not enable us to distinguish between *ᵢ, *e and *ü.

10 Reconstruction of proto-Lapp is after E.Itkonen, that of proto-Ostyak and proto-Vogul is based on material of Liimola WPP 20-25 and Vértes OP and on vowel correspondences established by W.Steinitz and L.Honti (Steinitz GOV, GWV, Honti GOV). The pSam reconstruction is after Janhunen SW. The symbol ъ stands for reduced back vowel (FUT ¿). For proto-Vogul L.Honti's notation is used (except for the redundant sign of vowel shortness).

11 On the form in ELapp (Kola) see Wiklund EUL 280 and Kert SYa 173. The sign ჳ for pLapp is used here according to

Korhonen's n. Kola Lapp ə of the second syllable may go back to pLapp *ð < FU *u (Korhonen JLKH 102-3). The variant *mü appears to reault from a reduction of *munu.

12 B.Collinder is right in saying: "The personal endings of the first and second persons are historically speaking pronominal stems ... It cannot be inferred with apodeictic certainty that the combination of verb stem (or base) and personal ending existed in Proto-Uralic - it may have taken place separately in different branches of Uralic" (Collinder CG 308). To this I may add that there may have been two series of subject pronouns (→ verbal suffixes of gender/number) used in different periphrastic constructions (→tenses, types of conjugation), one of the series probably being etymologically identical to the simple (unenlarged) stems *mE, *tE, and the other going back to enlarged stems *mVnV, *tVnV (see [17]). Probably this latter case is responsible for the ending -n of Sg.2 in Ziryene, Votyak, Ostyak and Vogul (< *nVnV, assimilation from *tVnV, see [17]).

13 A.Künnap reconstructs the pSam verbal personal suffix(es) of Sg.2 as *-δV ' *-δ, his *δ corresponding more or less to *-t- of J.Janhunen's and P.Sammallahti's reconstruction of pSam.

14 In pT there was no phonemic opposition of *m and *b in the word-initial position: in the absence of other nasal consonants in the same or next syllable, the original *m- (recognized as such on the evidence of external etymological comparison) became *b-, while in the presence of another nasal consonant the initial *m- was preserved (and most probably the etymological *b- became *m- as well). Hence there was no phonemic difference between two possible notations of the pT stem as *män or *bän. I prefer the notation *män for diachronic reasons: firstly, this *m/b- goes back to *m-, and secondly, it has remained *m- in most Turkic languages (but not in Anatolian Turkish). Cp.Clauson ED 291.

15 According to Clauson ED 346, 831 the vowel is ä, according to Kononov GYaTRP 164-5 it is e.

16 But Clauson 346, 831 reads the Old Turkic forms (spelt in Toñuquq 10 as bini and sini) as benī and senī. DTS mentions both readings as possible.

17 Preterit (=Perfect) with -δi-/-δï-, di-/-dï- is primary (=genuine finite) verbal form, according to Tekin GOT 187-9. Other forms (with -m Sg.1, -ŋ ' /g Sg.2) appear to go back to a construction Verbal noun + Possessive suffix (Tekin GOT 190-1)

18 In Sg.2 similar forms are not found. Instead, forms with -n are used: pïrï-n 'you will go', pelə-n 'you will say' (with -n < *-ŋ, regular verbal suffix of Sg.2). These forms are obviously due to analogy (generalization of the ending of primary forms).

19 Unlike postnominal *mi 'my' and *si 'thy', these genitive forms *mini and *sini occupy the regular position of the nominal attribute, i.e. they precede the nomen regens.

20 The Southern and Eastern (=Kamchatka-River) dialects of Kamchadal are now extinct. The only materials available are very short wordlists recorded by travellers in the 18th century (Stepan Krašeninnikov, M.Robek, K.Merk, Baxmet'ev, as well as the anonymous correspondents of

P.S.Pallas, who sent him short dialect glossaries for his *Linguarum totius orbis vocabularia comparativa)* and more extensive vocabularies of both dialects by the Polish physician Prof. B.Dybowski who recorded Kamchadal words in his exile in Kamchatka (second half of the 19th century). See Krašenninikov OZK, Pallas LTO, Radliński SNLK II-III, Sjören K, Sjören SK. The words recorded by S. Krašeninnikov and B.Dybowski are in cyrillic characters, the others are in Roman characters (reproduced here in bold type).

21 To understand the phonetic value of the unprofessional records of SKamch. and EKamch. in Roman characters, it should be kept in mind that those who recorded the words were either speakers of German of Russian-speakers with German-orientated habits of using Latin script: From their records of WKamch., Koryak and other languages known today we learn that they usually rendered ə by y, Ü,e,ž by sch or sh. In Kamchadal there is no phonemic opposition between hiss and hush sibilants (both in WKamch., and in the extinct SKamch. and EKamch.) and the phonetic realization of the voiced sibilant (tentavely reconstructed as ž) could mak an acoustic impression either of ž (x of Krašeninnikov's Russian transcription, sch ' sh of the German travellers) or of z (з of Dybowski, who was a Polish-speaker). On modern WKamch. z (half-hush) see Volodin IYa 28-9.

22 The form er is mentioned in Bogoraz CH 677, 720. In Chukchee folklore texts it occurs when the pronoun is enclitic: iam neleivútku-y- er 'Why art thou walking about?' (Bogoraz Ch 893).

23 One may suggest a morpheme-to-morpheme translation 'seen' + 'by me' + 'is' (*woid-'seen', *-H- 'by me', *-e 'is'), if we choose to translate the auxiliary verb, preserved in the ending *-e, as 'is'.

24 Cp. pN *gäti 'hand' > IE *ĝhes- - id., D *kac- id. (see Illič-Svitič OS 1:227).

25 On existing etymological hypothesis see §1 [41].

26 It is worth considering the possibility of explaining Brahui ka-n- (Sg.1 pronoun, oblique cases) as going back to pN *HVkE (Brahui -n- is from a case-marker?).

27 The signŋ stands for the cerebral (coronal) nasal consonant (ŋ of the Finno-Ugrian transcription, n of the Indologists, Collinder's and Illič-Svitić's ñ). The difference between pN *n and *ŋ has been preserved only in Ob-Ugrian (some Ostyak-dialects) and Dravidian In the root in question, for lack of Ob-Ugrian and Dravidian reflexes, the two phonemes cannot be distinguished.

28 PSam. änь presupposes pU oNe (= pU *oni in J.Janhunen's notation) or pU *oNa (= Janhunen's *onä). See Janhunen UKS 226, 235-6, 242.

29 Edel's j corresponds to the ' in the modern Egyptological (=Erman-Grapow's) transliteration.

30 In the same paper I hope t explain my conception of pN as an analytic root-isolating language. This is a work hypothesis based on certain facts (such as mobility of grammatical exponents etc.). Of course, this hypothesis has nothing to do with glottogonic theories about "rude and simple beginnings" of human speech (to quote W.D.Whitney), since Nostratic obviously has a very long prehistory and, like Old Chinese (a classical example of a root-isolating language) might well have develloped from an earlier synthetic language as well. Cf. Jes-

persen L 367-373, Karlgren PChLF.

31 On pN *'əsA 'stay' + `be' see Illič-Svitič OS 1:268-70.
*A stands for unspecified low vowel (*a or *ä).

32 The form of some oblique cases may have been inherited
from N constructions Pronoun (*mi, *ṭ/ú\ + *nu + Post-
position of case.

33 N *čV 'that of, that which' > K *č- (common base of
different possessive pronouns) SH *č- > pS *ð- > Old
Akkadian ð-u, gen. ð-i, yaa. ð-a, nota genitivi 'that
of', Hebrew ša- +gemination (in the "Song og Deborah",
Judges 5) se- +gemination 'which', Phoenician *se (sa,
sy in ancient Roman transcrition), ' 'š 'which'; a
voiced variant pS *ó- > Arab. ó-u, ó-i, ó-a, 'that of'.
Geez za id. (voicing *ó- > ó- probably under the in-
fluence of the demonstrative pS *ó-) pTn *-čü 'having X,
that of X' > Ulcha -ču id., Ewenki -či id.: hüts-ši
'having children, инеющий детей, детный, oro-č(i, suffix
of ordinal numerals and relative adjectives: Ewenki
umü-či 'first', žü-či 'second', Manchu emuči 'first',
ilači 'third', Ewenki žü-či 'of two years', etc. See
Djakonoff YaDPA 288-9 (on pS *ó- > Old Akkad. ó-, Vasi-
levic ÈRS 797.

A b b r e v i a t i o n s :
CCh = Central Chadic; Ch = Chadic; ChK = Chukchee-Kam-
chadal; CT = Common Turkic; Cush.= Cushitic; D = Dravi-
dian; E = Elamite; E... = Eastern (e.g. EOstyak = Eas-
tern Ostyak); ECh = East Chadic; ECush.= East Cushitic;
Eg.= Egyptian; FU = Finno-Ugric; G = Georgian; Glk =
Gilyak; HEC = Highland East Cushitic; IE = Indo-Euro-
pean; K = Kartvelian; Kamch.= Kamchadal; Lat.= Latin; LE
= Late Elamite; LIE = Late proto-Indo-European; Lith.=
Lithunian; LlLapp = Lule Lapp; M = Mongolian; M... =
Middle (e.g. MWelsch = Middle Welsh); ME = Middle Ela-
mite; Megr.= Megrelian; N = Nostratic; N... = Northern
(e.g. NLapp = Northern Lapp); O... = Old (e.g. OInd.=
Old Indian); OG = Old Georgian; p... = proto- (e.g.
pPerm.= proto-Permian); pB, pBerb.= proto-Berber;
pCCush.= proto-Central-Cushitic; pChK = proto-Chukchee-
Kamchadal; pChKor.= proto-Chukchee-Koryak; pD = proto-
Dravidian; pECush.= proto-East-Cushitic; pED = proto-
Elamo-Dravidian; pIE = proto-Indo-European; Pj = Parji;
pK = proto-Kartvelian; pL, pLapp = proto-Lapp; pM =
proto-Mongolian; pN = prot-Nostratic; pS, pSem.= prot-
Semitic; pSam.= proto-Samoyed; pSCush.=proto-South-Cu-
shitic; pSH = proto-South-Hamitic; pSl.= proto-Slavic;
pT = proto-Turkic; pTn = proto-Tungusian; pU = prot-
Uralic; S... = Southern (e.g. SKamch.= Southern Kamcha-
dal); SCush.= South Cushitic; Sem.= Semitic; SH = Semi-
to-Hamitic; Svan.= Svanian; T = Turkic; Tn = Tungusian;
U = Uralic; W... = Western (e.g. WKamch.= Western Kam-
chadal); WCh.= West Chadic; WrM = Written Mongolian; WS
= West Semitic.

P h o n e t i c   S y m b o l s :

ï = high back vowel
з = mid back vowel
ə = reduced vowel (if there is one); reduced front vowel.
ъ = reduced back vowel (Chuvash ă)
ʒ = voiced affricate (if there is no opposition of hiss

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and hush affricates); voiced hiss affricate (Italian
z in zelante)
ǯ = voiced hush affricate (English j)

REFERENCES

Andronov DL   = M.S.Andronov. Dravidian Languages. Moscow. 1970.
Andronov SGDYa   = M.S.Andronov. Sravnitel'naya grammatika dravidiyskix
                    yazïkov. Moscow, 1978.
Andronov YaB   = M.S.Andronov. Yazïk braui. Moskva 1971.
Austerlitz GP   = R.Austerlitz. "Gilyak pronouns". Word 15.1 (1959):
                    102-109.
Avrorin NYa   = V.A.Avrorin. "Nanayskiy yazïk".YaNSSSR V:129-148.
Benzing T   = J. Benzing. "Das Tschuwassische". PhTF I:695-751.
Benzing TS   = J. Benzing. Die tungusischen Sprachen. Wiesbaden.
                    1956.
Black LEC   = P.D.Black. Lowland East Cushitic. Subgrouping and
                    Reconstruction. Doctoral dissertation. Yale Univ.
                    1974.
Bogoraz Ch   = W.Bogoraz. "Chukchee". In: F.Boas (ed.). Handbook of
                    American Indian Languages, part 2. Washington. 1922:
                    639-903.
Bogoraz LRS   = V.G.Bogoraz. Luoravetlansko-russkiy (čukotsko-russkiy)
                    slovar'. Leningrad, 1937.
Boycova KLÉYa   = A.F.Boycova. Kategoriya lica vèvenkiyskom yazïke.
                    Leningrad-Moskva, 1940-
Brugmann KVG   = K.Brugmann. Kurze vergleichende Grammatik der indo-
                    germanischen Sprachen. Strassburg. 1904. (quoted after
                    the reprint: Berlin - Leipzig. 1922).
Brugmann-Delbrück GVG= K.Brugmann. B.Delbrück. Grundriss der verglei-
                    chenden Grammatik der indogermanischen Sprachen. I-V
                    Straßburg. 1897-1916.
Burrow Sk   = Th.Burrow. The Sanskrit Language. 2nd ed.London. 1959
                    (quoted after the Russian translation: T.Barrou. Sans-
                    krit. Moskva 1970.
Burrow-Emeneau DED = Th.Burrow, M.Emeneau. Dravidian Etymological
                    Dictionary. Oxford, 1961.
Caferoğlu-Doerfer A.= A.Caferoğlu, G.Doerfer. "Das Aserbeidschanische".
PhTF I:280-307.
Cincius OGEYa   = V.I.Cincius. Očerk grammatiki èvenskogo (lamutskogo)
                    yazïka. Leningrad, 1947.
Cincius SF   = V.I.Cincius. Sravnitel'naya fonetica tunguso-man'čžur-
                    skix yazïkov. Leningrad, 1947.
Clauson ED   = Sir G.Clauson. An Etymological Dictionary of Pre-
                    Thirteenth-Century Turkish. Ox   ford. 1972.
Cohen DRS   = D.Cohen. Dictionnaire des racines sémitiques ou
                    attestées dans les langues sémitiques. I. Paris. La
                    Haye, 1970 -.
Cohen SVS   = M.Cohen. Le système verbale sémitique et l'expression
                    du temps. Paris, 1924.
Collinder CG   = B.Collinder. Comparative Grammar of the Uralic Lan-
                    guages. Stockholm. 1960.
Collinder FUV   = B.Collinder. Fenno-Ugric Vocabulary. 2nd ed. Hamburg.
                    1977.
Collinder HUV   = B.Collinder. Hat das Uralische Verwandte? Uppsala.
                    1965.
Collinder IUS   = B. Collinder. Indo-uralisches Sprachgut. Uppsala.
                    1934. (= Uppsala Universitets Årsskrift 1934. Filo-

soft, språkvetenskap och historiska vetenskaper, I).

Collinder UA — = B.Collinder. "Uralaltaisch", *UAJ* 23.3/4 (1952):1-26.

Deeters KhV — = G.Deeters. *Das kharthvelische Verbum. Vergl.Darst. des Verbalbaus der südkaukas Sprachen*. Leipzig, 1930.

Djakonoff PPGS = I.M.D'yakonov. "Proisxoždenie praafraziyskoy glagol'noy sisteми", *KSI* 45-49.

Djakonoff SHL = I.Diakonoff. *Semito-Hamitic Languages*. Moscow, 1965.

Djakonoff YaDPA = I.M.D'akonov. *Yaziki Drevney Peredney Azii*. Moskva, 1967.

Dolgopolsky EPC = A.Dolgopolsky. "On etymology of pronouns and classification of the Chadic languages" (forthcoming).

Dolgopolsky LRC = A.Dolgopolsky. *A Long-Range Comparison of Some Languages of Northern Eurasia*. Moscow, 1964.

Dolgopolsky OR = A.B.Dolgopol'skiy. "Opit rekonstrukcii obščenostratičeskoy grammaticeskoy sistemi" *KSI* 32-34.

Dolgopolsky PIEV= A. Dolgopolsky. "Prehistory of the Indo-European Vocalism" (forthcoming).

Dolgopolsky PLOG= A.B.Dolgopol'skiy. "O proisxoždenii ličnix okončaniy glagolov v vostoč-nosidamskix i irakvskix yazikax". In: *Africana IX (= Trudi Instituta ètnografii im. N. N.Mikluxo-Maklaya*, n.s., v.100: *Afrikanskiy ètnografičeskiy sbornik)*, Leningrad, 1972, pp.103-112.

Dolgopolsky SF = A.B.Dolgopol'skiy. *Sravnitel'no-istoričeskaya fonetika kušitskix yazikov*. Moskva, 1973.

Dolgopolsky-Dibo-Zaliznyak VIS = A.B.Dolgopol'skiy, V.A.Dibo, A.A.Zaliznyak. "Vklad V.M. Illič-Svitiča v sravnitel'no-istoričeskuyu grammatiku indoevropeyskix i nostratičeskix yazikov, *Sovetskoe slavyanovedenie 5* (1973):82-91.

DTS = *Drevnetyurkiy slovar'*. Pod red. V.M. Nedelyaeva i dr. Leningrad, 1969.

Ebert STK = K.Ebert. *Sprache und Tradition der Kera (Tschad)*. Teil II: *Lexikon*.Berlin 1976

Edel AÄG = E.Edel. *Altägyptische Grammatik*. Roma, 1955/ 1964.

Ehret SCP = Chr. Ehret. *The Historical Reconstruction of Southern Cushitic Phonology and Vocabulary*. Berlin, 1980.

Foucauld DTF = Ch.Foucauld. *Dictionnaire touareg-français. Dialecte de l'Ahaggar*. I-IV. Paris, 1951-2.

Friedrich HEB = J.Friedrich. *Hettitisches Elementarbuch*. 1.Teil: *Kurzgefasste Grammatik*. Heidelberg, 1940.

Gabain ATG = A.von Gabain. *Alttürkische Grammatik*. 2.Aufl. Leipzig, 1950.

Gabain PSK = A.von Gabain. Primäre und sekundäre Kasus im Alttürkischen".In: *Studies in General and Oriental Linguistics Presented to Shirô Hattori on the Occasion of his Sixtieth Birthday*, Tokyo, 1970.

Gamqrelize-Mačavariani SSAKE = T.Gamqrelize, G.Mačavariani. *Sonantta sistema da ablauti kartvelur enebši*. Tbilisi, 1965 ("System of Sonants and Ablaut in Kartvelian Languages").

Ghoubeid Alojaly LTF = Ghoubeid Alojaly. *Dictionnaire touareg-français*. Ed. K.Prasse. Copenhague, 1980.

Golovastikov-Dolgopolsky RCKK = A.N.Golovastikov, A.B.Dolgopol'skiy. "Rekonstrukciya čukotsko-koryackix korney i nostratičeskie ètimologii", *KSI* 27-30.

Hajdú BUNy = P.Hajdú. *Bevezetes az uráli nyelvtudományba*. Budapest, 1966.

Hanoteau EGT = A.Hanoteau. *Essai de grammaire de langue tamachek'*. Paris, 1896.

Hetzron SCCS = R.Hetzron. "Suffixes casuels chamito-sémitiques" (to appear in *Comptes-rendus du Groupe linguistiques des études chamito-sémitiques*, Paris).

Hetzron VSSA — = R.Hetzron. *The Verbal System of Southern Agaw*. Berkeley - Los Angeles, 1969.

Honti GOV — = L.Honti. *Geschichte des obugrischen Vokalismus der ersten Silbe*. Budapest, 1982.

Illič-Svitič GM = V.M.Illič-Svitič. "T.M.Gamkrelidze i G. I. Mačavariani. *Sistema sonantov i ablaut v kartvel'skix yazikax* (review of Gamqrelize-Mačavariani SSAKE), *Voprosi yazikoznaniya* 1966. Nr. 4

Illič-Svitič OS I = V.M.Illič-Svitič. *Opit sravneniya nostratičeskix yazikov. Sravnitel'niy slovar'. (b-K)*. Moskva, 1971.

Illic-Svitic OS II = V.M.Illič-Svitič. *Opit sravneniya nostratičeskix yazikov. Sravnitel'niy slovar'. (l - ǯ)*. Moskva, 1976

Imnaišvili KEIK = I.Imnaišvili. *Kartuli enis istoriuli krestomatia. I. naçili II (pt.2): Enis nimoxilva da tabulebi*. Tbilisi, 1971 (Historical grammar of Georgian).

Isxakov-Pal'mbax GTYa = F.G.Isxakov, A.A.Pal'mbax. *Grammatika tuvinskogo yazika. Fonetika i morfologiya*. Moskva, 1961.

Itkonen OLV — = E.Itkonen. *Der ostlappische Vokalismus vom quantitativen Standpunkt aus*. Helsinki 1977.

Janhunen SW — = J.Janhunen. Samojedischer Wortschatz. *Gemeinsamojedische Etymologien*. Helsinki 1977.

Janhunen UKS — = J.Janhunen. "Uralilaisen kantakielen sanastosta", *JSFOu 77:219-274*.

Jespersen L — = O.Jespersen. *Language. Its Nature, Development and Origin*. L., 1922.

Jungraithmayr-Shimizu CLR = H.Jungraithmayr, K.Shimizu. *Chadic Lexical Roots. II: Tentative Reconstruction, Grading and Distribution*. Berlin, 1981.

Kammenhuber OPG = A.Kammenxuber. "Očerk palaysoy grammatiki", *DYaMA* 198-216 (a Russian translation from: A.Kammenhuber, "Esquisse de grammaire palaïte, *BSL* 54.1:18-45).

Karlgren PChLF = B.Karlgren. "Proto-chinois, langue flexionelle", *Journal asiatique* (1920): 250 ff

Kert SYa = G.M.Kert. *Saamskiy yazik*. Leningrad 1971.

Klimov ÈSKYa = G.A.Klimov. *Ètimologičeskiy slovar' kartvel'skix yazikov*. Moskva, 1964.

Klingenheben PSK= A.Klingenheben. "Die Präfix- und die Suffixkonjugationen des Hamitosemitischen. *Mitteilungen des Instituts für Orientforschung* (Berlin) 4 (1956):211-277.

Kolesnikova-Konstantinova NYa = V.D.Kolesnikova, O.A.Konstantinova. "Negidal'akiy yazik", *YaNSSSR* V:109-128.

Kononov GYaTRP = A.N.Kononov. *Grammatika yazika tyurkskix runičeskix pamyatnikov VII-IX vv*. Leningrad, 1980.

Korhonen JLKH = M.Korhonen. *Johdatus lapin kielen historiaan*. Helsinki, 1981.

Kövesi OK = M.Kövesi. "Zu den "umstrittenen" Fragen der objektiven Konjugation in den ugrischen Sprachen", *FUF* 40:96.106.

Kraft ChW = Ch. Kraft. *Chadic Wordlists*. Vol.I-III Berlin, 1980.

Krašeninnikov OZK = S.Krašeninnikov. *Opisanie zemli Kamčatki*. SPb., 1755. (English translation: S.Krasheninnikov. *Exploration of Kamchatka*. Portland, 1972).

Kreynovič NYa = E.A.Kreynovič. "Nivxskiy (gilyackiy) yazik", *YaPNS* III:181-222.

Krishnamurti HVL= Bh.Krishnamurti. "The history of vowel-length in Telugu verbal bases", *JAOS* 75: 237-252.

Künnap SUKF = A.Künnap. *System und Ursprung der kamssischen Flexionssuffixe*. I-II. Helsinki 1971-8 (= MSFOu 147, 164).

Kurylowicz Ap. = J. Kurylowicz. *L'apophonie en indo-européen*. Wroclaw, 1956.

Kurylowicz IC = J. Kurylowicz. *The Inflectional Categories of Indo-European*. Heidelberg, 1962.

Kuznecova-Xelimskiy-Gruskina OSYa = A.I.Kuznecova, E.A. Xelimskiy, E.V. Gruškina. *Očerki po sel'kupskomu yazïku*. Moskva, 1980.

Levitskaya IFČYa = L.S.Levitskaya. *Istoričeskaya fonetica čuvašskogo yazïka*. Ph.D. ("kandidat") dissertation (ms). 1966. A summary: L.S.Levitskaya. *Istoričeskaya fonetica čuvašskogo yazïka. Avtoreferat kandidatskoy dissertacii*. Moskva, 1966

Levitskaya IMCYa = L.S.Levitskaya. *Istoričeskaya morfologiya čuvašskogo yazïka*. Moskva, 1976.

Lewis-Pedersen CCCG = H.Lewis, H Pedersen. *A Concise Comparative Celtic Grammar*. Göttingen, 1937.

Liimola WPP = M. Liimola. "Zu den wogulischen Personal-Pronomina", *FUF* 28.1-3:20-56.

Mačavariani SKKS = G. Mačavariani. *Saerto-kartveluri konsunanturi sistema*. Tbilisi, 1965 ("Consonant System of Proto-Kartvelian").

Malov PDP = S.E.Malov. *Pamyatniki drevnetyurkskoy pis'mennosti*. Moskva - Leningrad, 1951.

Mark PSUS = J.Mark. *Die Possessivsuffixe in den uralischen Sprachen*. Helsinki, 1925 (=MSFOu 54).

Mark SPUS = J.Mark. "Das System der Possessivsuffixe in den uralischen Sprachen", *Öpetatud Eesti Seltsi Aastaraamat* (Tartu) 1929:50-62.

Marr GDGYa = N.Ya.Marr. *Grammatika drevneliteraturnogo gruzinskogo yazïka*. Leningrad, 1925.

Marr OT = N.Marr. *Osnovnïya tablicï k grammatikĕ drevne-gruzinskago yazïka s predvaritel'nïm soobščeniem o rodstvĕ gruzinskago yazïka s semitičeskimi*. Sankt-Peterburg, 1908.

Marr-Brière LG = N.Marr, M.Brière. *La langue géorgienne*. Paris, 1931.

Menges JA = K.Menges. *Altajische Studien. II. Japanisch und Altajisch*. Wiesbaden, 1975.

Menges MP = K.Menges. *Morphologische Probleme*. Wiesbaden, 1960.

Mercier VTAI = H.Mercier. *Vocabulaires et textes berbères dans le dialecte des Aït Izdeq*. Rabat (Maroc), 1937.

Meriggi UXIYa = P.Meridži. "Učebnik xettskogo ieroglifičeskogo yazïka", *DYaMA* 238-276 (translation from: P.Meriggi. *Manuale di eteo geroglifico. Parte1: Grammatica*. Roma, 1966).

Moll SD = T.A.Moll. "Očerk fonetiki i morfologii sedankinskogo dialekta itel'menskogo yazïka", *Učönïe zapiski Leningradskogo Gosudarstvennogo Pedakogočeskogo Instituta im. Gercena* 167 (1960): 193-222.

MSzFE = *A Magyar szókészlet finnugor elemei etimológiai szótár*. Föszerkesztö Lakó György. I-III. Budapest, 1967-78.

Novikova EYa = K.A.Novikova. =Evenkiyskiy yazïk, *YaNSSSR* V:88-108.

Pallas LTO = P.S.Pallas. *Linguarum totius orbis vocabularia comparativa Augustissimae cura collecta*. SPb., 1787-1789.

Pallotino E = M.Pallottino. *Etruskowie*. Warszawa, 1968 (Polish translation from: M.Pallottino. *Etruscologia*. Milano, 1963).

Panfilov GNYa = V.Z.Panfilov. *Grammatika nivxskogo yazïka*. I-II. Moskva - Leningrad, 1962-5.

Paper RAE = H.Paper. *The Phonology and Morphology of Royal Achaemenid Elamite*. Ann Arbor, 1955.

Paskov MYa = B.K.Paškov. *Man'čžurskiy yazïk*. Moskva, 1963.

Petrova OYa = T.I.Petrova. "Orokskiy yazïk", *YaNSSSR* V:172-190

Petrova YaO = T.I.Petrova. *Yazïk orokov (ul'ta)*. Moskva-Leningrad, 1967.

Pfiffig ES = A.J.Pfiffig. *Die etruskische Sprache*. Graz, 1969.

Poppe BS = N.Poppe. "Die burjätische Sprache", *HOM* 108-133.

Poppe IMCS = N.Poppe. *Introduction to Mongolian Comparative Studies*. Helsinki, 1955.

Poppe MM = N.Poppe. "Das Mittelmongolische", *HOM* 96-103.

Posch KVD = U.Posch. "Das Kalmückische und verwandte Dialekte", *HOM* 200-226.

Prasse MGT I-III = K.Prasse. *Manuel de grammaire touaregue (tǎhǎggart)*. I-III: Phonétique - Ecriture - Pronom. Copenhague, 1972.

Prasse MGT VI-VII = K.Prasse. *Manuel de grammaire touaregue (tǎhǎggart)*. VI-VII: *Verbe*. Copenhague, 1973.

Pritsak HTF = O.Pritsak. "Die Herkunft des tschuwassischen Futurums", *WZKM* 56 (1960).

Radlinski SNLK = *Słowniki narzeczy ludów kamczackich. Ze zbiorów Prof. B. Dybowskiego*. Wydał I. Radliński. I-IV. Kraków, 1892.

Ramstedt EASF = G.J.Ramstedt. *Einführung in die altaische Sprachwissenschaft. II :Formenlehre*. Helsinki, 1952 (= MSFOu 104:2).

Ramstedt ÜMP = G.J.Ramstedt. "Über mongolische Pronomina", *JSFOu* 23 (1906). Nr.3.

Reiner EL = E.Reiner. "The Elamite language", *AKS* 54-118.

Rössler VB = O.Rössler. "Verbalbau und Verbalflexion in den smitohamitischen Sprachen. Vorstudien zu einer vergleichenden semitohamitischen Grammatik", *ZDMG* 101 (1951):461-514.

Sammallähti LMS = P.Sammallahti. "Laut- und Frmenstruktur des Proto-Uralischen", *FUF* 43.1-3:22-66.

Šanize 3KEG = A.Šanize. *3veli kartuli enis grammatika*. Tbilisi, 1966 ("Grammar of Old Georgian").

Sanžeev GKYa = G.D.Sanžeev. *Grammatika kalmïckogo yazïka*. Moskva-Leningrad, 1940.

Sanžeev SGMYa(G) = G.D.Sanžeev. *Sravnitel'naya grammatika mongol'skix yazïkov (Glagol)*. Moskva, 1963.

Sasse PEC = H.-J.Sasse. "The consonant phonemes of Proto-East-Cushitic (PEC): A first approximation", *Afro-Asiatic Linguistics* 7.1 (1979).

Savel'eva LM = V.N.Savel'neva. "Ličnïe mestoimeniya v nivxskom (gilyackom) yazïke", *Učönïe zapiski Leningradskogo Gosudarstvennogo Pedagogičeskogo Instituta im. Gercena* 107 (1960):223-244.

Ščerbak OSM(G) = A.M.Ščerbak. *Očerki po sravnitel'noy grammatike tyurkskix yazïkov (Glagol)*. Moskva, 1981.

Ščerbak OSG(I) = A.M.Ščerbak. *Očerki sravnitel'noy grammatiki tyurkskix yazïkov (Imya)*. Leningrad, 1977.

Schuh DN = R.Schuh. *A Dictionary of Ngizim*. Berkeley-Los Angeles-London, 1981.

Sem BD = L.I.Sem. *Očerki dialektov nanayaskogo yazïka. Bikinskiy (ussuriyskiy) dialekt*. Leningrad, 1971.

Shanmugam DN = S.V.Shanmugam. *Dravidian Nouns. A Comparative Study*. Annamalainagar, 1971.

Širaliev VL = M.S.Širaliev. "Vtoroe lico kategorii prinadležnosti v skazuemom (na materiale dialektov i govorov azerbaydžanskogo yazïka), *Voprosï dialektologii tyurkskix yazïkov IV*, Baku, 1966.

Sjögren K = *Kamtschadalisch*. Ms. 14 wordlists from different places of Kamchatka, compiled by travellers. Copied probably by A.Sjögren[1].

Sjögren SK = *Sprache der Kamtschadalen*. Ms. 17 wordlists from different places of Kamchatka (partly coinciding with Sjögren K). Copied probably by A.Sjögren[1].

Skinner NBL = N.Skinner. "North Bauch Chadic languages: Common

Skorik ČKYa → = P.Ya.Skorik. "Čukotsko-kamčatskie yazíki (vvedenie)".
YaNSSSR V:235-247.

Skorik ČYa = P.Ya.Skorik. "Čukotskiy yazík", YaNSSSR V:248-270.

Skorik KYa = P.Ya.Skorik. "Kerekskiy yazík, YaNSSSR V:310-333.

SSTMYa = Sravnitel'níy slovar' tunguso-man'čžurskix yazíkov.
Materialí k ètimologičeskomu sovaryu. Otv. red. VI.
Cincius. I-II. Leningrad, 1975-1977.

Stang VGBS = Chr.Stang. Vergleichende Grammatik der baltischen
Sprachen. Oslo-Bergen-Tromsö, 1966.

Stebnickiy IYa = S.N.Stebnickiy. "Itel'menskiy yazík", YaPNS III:85-
104.

Steinitz FUV = W.Steinitz. Geschichte des finnisch-ugrischen Vokalis-
mus. Brl., 1964.

Steinitz GOV = W.Steinitz. Geschichte des ostjakischen Vokalismus.
Brl., 1955.

Steinitz GWV = W.Steinitz. Geschichte des vogulischen Vokalismus.
Brl., 1955

Stumme HSchT = H.Stumme. Handbuch des Schilschen von Tazerwalt. Lpz.,
1899.

Sturtevant CGHL = E.H.Turtevant. Comparative Grammar of the Hittite
Language. Philadelphia, 1933.

Subrahmanyam DVM = P.S.Subrahmanyam. Dravidian Verm Morphology. Anna-
malainagar, 1971.

Sunik UIYa = O.ISunik. "Ul'cskiy yazík, YaNSSSR V:149-171.

Szemerényi EVS = O.Szemerényi. Einführung in die vergleichende Sprach-
wissenschaft. Darmstadt, 1980.

Szinnyei FUS = J.Szinnyei. Finnisch-ugrische Sprachwissenschaft.
Brl-Lpz., 1922.

Tekin GOT = T.Tekin. Grammar of Orkhon Turkic. Bloomington-The
Hague, 1968.

Teplyašina-Litkin PYa = T.I.Teplyašina, V.I.Litkin. "Permskie yazíki."
In: Osnoví finno-ugorskogo yazíkoznaniniya. Mariyskiy,
permskie i ugorskie yazíki. Moskva, 1976, pp. 97-228.

Tereščenko NgYa = N.M.Tereščenko. "Nganasanskiy yazík",
YaNSSSR III:416-437.

Tezcan UIS = S.Tezcan. Das ujgurische Insadi-Sūtra. Brl., 1971.

TT V = W.Bang und A. von Gabain. "Türkische Turfantexte. V",
Sitzungsberichte der Preussischen Akademie der Wis-
senschaften 14 (1931):323.356.

Vasilevic ĒRS = G.M.Vasilevic. Ēvenkiysko-russkiy slovar'. Moskva,
1958

Vértes OP = E.Vértes. Die ostjakischen Pronomina. Budapest, 1967.

Volodin IYa = A.P.Volodin. Itel'mensiky yazík. Leningrad, 1976.

Watkins CV = C.Watkins. Indo-European Origins of the Celtic Verb.
I: The sigmatic Aorist. Dublin, 1962.

Watkins GIV = Indogermanische Grammatik. Hrsg.v.J.Kurylowicz. Bd.3:
C.Watkins. Formenslehre. 1.Teil: Geschichte der indo-
germanischen Verbalflexion. Heidelberg, 1969.

Weiers SM = M.Weiers. Die Sprache der Moghol der Provinz Herat in
Afghanistan. Opladen, 1972.

Wiklund EUL = K.B.Wiklund. Entwurf einer urlappischen Lautlehre.
Helsinki, 1896 (=MSFOu 10:1)

YaAA I = Yazíki Azii i Afriki I: Xetto-luviyskie yazíki.
Armyanskiy yazík. Indoariyskie yazíki. Moskva, 1976.

Zaborski VC = A.Zaborski. The Verb in Cushitic. Kraków, 1975.

Zorell GAGB = F.Zorell. Grammatik zur altgeorgischen Bibelüber-
setzung. Roma, 1930.

Žukova AYa = A.N.Žukova. "Alyutorskiy yazík, YaNSSSR V:294-309.

Žukova GKYa = A.N.Žukova. Grammatika koryakskogo yazíka. Leningrad,
1972.

Zvelebil CDM = K.Zvelebil. A Sketch of Comparative Dravidian Morpho-

logy. Part One. The Hague-P.-N.Y.,1977.

Zvelebil CDP = K.Zvelebil. Comparative Dravidian Phonology. The Hague
-P., 1970.

Zwolanek-Assfalg AGK = R.Zwolanek, J.Assfalg. Altgeorgische Kurzgram-
matik. Freiburg, 1976.

NOTE IN THE LIST OF REFERENCES

1 I saw one of these manuscripts in the Archives of the Academy of
Sciences (Leningrad) and the other in the Saltíkov-Ščedrin Public
Library (Leningrad) in 1969. I have no access to these manuscripts
now (except for what I managed to copy then), and I do not remember
which of the two manuscripts belongs to which institution.

ABBREVIATIONS IN THE LIST OF REFERENCES

AKS = Altkleinasiatische Sprachen. Mit Beiträgen von J.
Friedrich, E.Reiner, A.Kammenhuber, G.Neumann, A.Heubeck.
(=Handbuch der Orientalistik. 1.Abt.: Der Nahe und der
Mittlere Osten. 2.Bd.: Keilschriftforschung und alte
Geschichte Vorderasiens. 1.u.2. Abschnitt: Geschichte der
Forschung, Sprach und Literatur. Lief.2: Altkleinasiati-
sche Sprachen). Leiden-Köln, 1969.

DYaMA = Drevnie yazíki Maloy Azii. Sbornik statey. Pod.red.
I.M.D'yakonova i Vyač.Vs.Ivanova. Moskva, 1980.

HOM = Mongolistik. Mit Beiträgen v. N.Poppe, U.Posche, G.Doer-
fer u.a. (= Handbuch der Orientalistik. 1. Abt.: Der Nahe
und der Mittlere Osten. 5.Bd.: Altaistik. 2.Abschnitt:
Mongolisitk. Leiden-Köln, 1964.

KSI = Institut slavyanovedeniya i balkanistiki Akademii nauk
SSSR. Konferenciya po sravnitel'no-istoričeskoy gramma-
tike indoevropeyskix yazíkov. Predvaritel'níe materialí.
Moskva, 1972.

PhTF I = Philologiae Turcicae Fundamenta. Ediderunt J.Deny, K.
Grønbech, H.Scheel, Z.Velidi Togan. Tomus primus. Aquis
Mattiacis (=Wiesbaden), 1959.

YaNSSSR III = Yazíki narodov SSSR. III: Finno-ugorskie i samodiyskie
yazíki. Moskva, 1966.

YaNSSSR V = Yazíki narodov SSSR. V: Mongol'skie. tunguso-man'čžurskie
i paleoaziatskie yazíki. Leningrad, 1968.

YaPNS III = Yazíki i pis'mennost' narodov Severa. Pod red. Ya. A.
Al'kora. Čast' III. Moskva-Leningrad, 1934.

Table A

	Independent pronoun	Object pronoun (→ object prefix of verbs)	Pronoun in genitive	Postnominal possessive pronoun (→ suffix)	Postnominal appositional pron. (→ subject suffix)	Agentive pronoun (→ affix) Postverbal (post-predicative)	Preverbal
S i n g . 1 :							
Indo-European	$*e\hat{g}H(om)/*e\hat{g}oH$ [1]	$*m\bar{e}$ ~ $*me$, $*m\bar{e}$- ~ $*me$-[2]	$*mene$ [3]	$*-mi$ [4]		$*-mi$ / $*-m$ [5], LIE $*-H^w$ [6]	Pre-IE $*H$-[7]
Semito-Hamitic	$*'an$-$\bar{I}$, $*'an$-$\bar{a}ku$ [8]	$*ya$ (< $*'uya$?)[10]		$*'\nabla ya$ (> $*-ya$, $*-\bar{I}$)[11]	$*-\bar{a}ku$ [9]	HEC $*-mi$ [12]	$*'\nabla$-[13]
Kartvelian	$*me(n)/*mi$ [14]	$*m$- (prefix)[15]					$*hw$-[16]
Uralic	$*mE$ (= $*mi$?), $*minV$ ~ $*munV$ (→ genitive) [17]	$*minV$ ~ $*munV$ (→ genitive)[17]	$*m^(e)$ [18]			$*-m(\nabla)$ [19]	
Proto-Turkic	$*bi$ [20]	$*män$ ~ $*bän$ (→ genitive)[21]		$*-m$ [22]		$*-m$, $*bi$, CT $*män$ [23]	
Mongolian	$*bi$ [24]	accus. $*nama(-y\bar{i})$, (?) MM $mina$-yi [26]	$*m\breve{i}nu$ [25] > $*minu$	$*m\breve{i}nu$ > $*minu$ [27]		$*bi$ [28]	
Tungusian	$*bi$ [29]	$*min$- (→ gen.)[30]	$*mini$ [30]	$*bi$ [31]		$*bi$ [32]	
Gilyak	$\acute{n}i$ [33]	$\acute{n}$- (preverb)[33]	$\acute{n}$-, $*\acute{n}in$ [33]				
Chukchee-Kamchadal	$*g\partial$-m, $*g\partial m$-$H\nabla$, $*m(\partial)$- (prefix + pronoun)[34]	WKamch.-mi 'me', (?)SKamch. на 'to me'[34]	$*g\partial$-mn-∇n [35]				
Elamite	u < $*hu$ [36]	un < $*hun$ [37]		u-[36]	$-k$ [38]	$-h$ [39]	
Dravidian	$*y\bar{a}\underline{n}$ [40]	$*ya\underline{n}$- (for all obl. cases)[40]			$*-\bar{e}\underline{n}/*-e\underline{n}$ [41]	$*-\bar{e}\underline{n}/*-e\underline{n}$ [41]	
Indo-European	$*t\ddot{u}$, Anat.$*ti$ [1]	$*t(w)\bar{e}$ ~ $*t(w)e$ [2]		$*-t^(i)$ [4]		$*-si/*-s$ [5], (?) $*-ei$ [6]	Pre-IE $*tH$-[7]
Semito-Hamitic	$*'an$-$t^(i)$ [8]	$*ku$, m. $*ka$, f. $*ki$ ~ $*k\nabla m$ [10]		$*ku$, m. $*ka$ f. $*ki$ ~ $*k\nabla m$ [11]	$*-t^(i)$ [9]	HEC $*-ti$ [12]	$*t\nabla$-[13]
Kartvelian	$*si$ [14]	$*g$- (prefix)[15]	? $*swen$-[14]				$*h$-[16]
Uralic	$*tE$ (= $*t\ddot{u}$?), $*ti/u/\ddot{u}nV$ [17]	$*tin$-~$*tun$-~$*t\ddot{u}n$- (→ gen.)[17]	$*-t^(e)$ [18]			$*-t(\nabla)$ [19]	
Proto-Turkic	$*si$ [20]	$*sän$- (→ genitive)[21]		$*-g/*-\gamma$, $*-\eta$ [22]		$*-\eta$, (?)$*si$, CT $*sän$ [23]	
Mongolian	$*ti$ > $*\check{c}i$ [24]	$*t\bar{i}ma(y\bar{i})$ [26]	$*t\bar{i}nu$ [25]	$*t\bar{i}nu$ > $*\check{c}inu$ [27]		$*ti$ >$*\check{c}i$ [28]	
Tungusian	$*si$ [29]	$*sin$- (→ gen.)[30]	$*sini$ [30]	$*si$ [31]		$*si$ [32]	
Gilyak	t^h_i [33]	t^h- (preverb)[33]	t^h-, $t^h in$ [33]				
Chukchee-Kamch.	$*g\partial$-δ, $*g\partial^(\delta$-$H^)\nabla$, ?EKamch. тyз [34]	?SKamch. cи 'te', tibi'[34]	$*g\partial$-n-∇n [35]				
Elamite	nu [36]	nun [37]			$-t$ [38]	$-t(i)$ [39]	
Dravidian	$*n\bar{i}^(\underline{n}^)$ [40]	$*nin$- (for all obl. cases)[40]		$*-i/I$, Pj.-∇t [41]		$*-i/I$,Pj.-∇t; Brahui $-s$ [41]	