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Omotic numerals
Dedicated to the memory of Andrzej Zaborski (1942–2014)

Abstract

More than 30 years ago Andrzej Zaborski (1983; 1987 {1983}) collected and analyzed all Cushitic and Omotic numerals, which were described in his time, and tried to analyze their internal structure. His two pioneering studies stimulated the present attempt to collect all available relevant data about Omotic numerals and to analyze them in both genetic (Afroasiatic) and areal (Cushitic, Ethio-Semitic and Nilo-Saharan) perspectives, all at the contemporary level of our knowledge. With respect to the long mutual interference between various groups of Cushitic and Omotic languages, it is necessary to study the numerals in both the language families together. The presented material is organized in agreement with the genetic classification of these languages. On the basis of concrete forms in individual languages the protoforms in partial groups are reconstructed, if it is possible, and these partial protoforms of numerals in the daughter protolanguages are finally compared to determine the inherited forms. The common cognates are finally compared with parallels in other Afroasiatic branches, if exist, or with counterparts in Ethio-Semitic or Nilo-Saharan languages, if they could be borrowed from or adapted into the Cushitic or Omotic languages.

Keywords

Cushitic, Omotic, Ethio-Semitic, Afroasiatic, Nilo-Saharan, etymology, borrowing.

I. North Omotic

1. Dizoid

	1	2	3	4	5	6	7	8	9	10
Dizi	k'o:j / k'òy	t'à:gŋ̃ / tà:gn	kà:dū / kàdú	k'ùbm̃ / kùbḿ	út͡ʃū / úxcú	jàkū / yàkú	tù:sū / tù:sú	ze:d / zyéd	sāgŋ̀ / sàgıl	támū / támú
Nayi	jísṇ	t'a:gṇ	kädú	kubḿ	út͡ʃ:ú	jãkù	tu:su	zìét	ságṇ	támmù
Sheko	k'òy	t'aagṇ	kàdu	kúbṃ	ùt͡ʃú	yakù	tubsu	zeed	sagṇ	təɓi

	20	30	40	50	60	70	80	90	100	1000
Dizi	t'à:gŋ̃ tàmū	kà:dū tàmū	k'ùbm̃ tàmū	út͡ʃū tàmū	jàkū tàmū	tù:sū tàmū	ze:d tàmū	sāgŋ̀ tàmū	màtū k'o:j (*màtu* < Amh.)	ʃĩ k'o:j (*ʃĩ* < Amh.)
Nayi	t'à tám	ka tám	kubḿ tám	út͡ʃ tám	jãku tám	tu:sn tám	zéd tám	ságṇ tám	bálla	wuma
Sheko	t'aagṇ tamú	kàdu tamú	kúbṃ tamú	ùt͡ʃú tamú	yakù tamú	tubsu tamú	zeed tamú	sagṇ tamú	k'oy bara / tiba k'oy	k'oy ʃĩ (*ʃĩ* < Amh.)

2. Yemsa

1	2	3	4	5	6	7	8	9	10
ʔıs:ɔ:n^{11} / ʔısa^{11}	hɛp^{h1} / ʔɛp^{h1}	ˈkʰe:z^2	ʔa^{11}ˈt͡ʃe:t͡ʃ^3	ˈʔʊ:t͡ʃ^3	ʔı'ˈsi:ʊn^1	ˈna:^{1}fʊn^1	ˈnaŋ^{2}ri:n^1	ˈʔız^{1}gın^1	ʔa^{1}sır^{L}

20	30	40	50	60	70	80	90	100	1000
hɛp^{h1}, a^{L}sır^1	ˈkʰe:z^2, a^{L}sır^{L}	ʔa^{11}t͡ʃe:t͡ʃ^3, a^{L}sır^1	ˈʔʊ:t͡ʃ^3, a^{L}sır^1	ʔı'si:ʊn^1, a^{L}sır^1	ˈna:^{1}fʊn^1, a^{L}sır^1	ˈnaŋ^{2}ri:n^1, a^{L}sır^1	ˈʔız^{1}gın^1, a^{L}sır^1	ʔı'sa^1 tʰı'ja^1	ʔı'sa^1 kʰʊ^{2}ma^2

3. Gimira

	1	2	3	4	5	6	7	8	9	10
Bench	mat'^{3}	nam^4	kaz^4	od^4	ut͡ʃ^2	sa^{2}pm^3	na^{2}pm^3	nʸar^{2}tn^3	irs^{2}tn^3	tam^5
She	mātä	nām	kāz	od	uç	sāpm̃	nāpm̃	nyārtṅ	yrstn	tām

	20	30	40	50	60	70	80	90	100	1000
Bench	nam^3tam^2	kaz^3tam^2	od^3tam^2	$ut\widehat{f}^5n^3tam^2$	$sa^5pm^3tam^2$	$na^5pm^3tam^2$	$n^yar^5tn^3tam^2$	$irs^5tn^3tam^2$	$bal^{2\text{-}3}$	nam^4 $wum^{2\text{-}3}$
She	$n\bar{a}m\text{-}t\bar{a}m$	$kas\text{-}t^em$	$ot\text{-}t\bar{a}m$	$u\varsigma en\text{-}t\bar{a}m$	$s\bar{a}p\tilde{m}\text{-}t\bar{a}m$	$n\bar{a}p\tilde{m}\text{-}t\bar{a}m$	$ny\bar{a}rtn\text{-}t\bar{a}m$	$yrstn\text{-}t\bar{a}m$	$b\bar{a}llo$	$tam\ bal$

4. Ometo

	1	2	3	4	5	6	7	8	9	10
Chara	ʔissa	nanta	keːza	obda	učča	sapma	lapma	nandirsa	bíža	tansá
Dorze	ʔissino ~ istta	nam(ʔ)á	heezá ~ heedzi	ʔoidá	ʔitʃáʃa ~ ʔitʃấtʃa	ʔusúpun ~ ʔusúɸun	láppun ~ láɸun	hóspun ~ hósɸun	ʔudúfun ~ ʔudúɸun	tám(m)i
Zala	ista	na'ā	hezzā	oiddā	iččāsā	usuffunā	lāffunā	hosfunā	udduffunā	támmā
Gofa	ʔistá	namʔʔá	heedzdzá	ʔoiddá	ʔitʃitʃáʃa	ʔusúppuna	laáppuna	hósppuna	ʔuddúfuna	támma
Malo	ista	namʔa	hedza	oydda	ičeša	usúpuna	lápuna	hospuna	uddupuna	tamma
Dache	ʔissíno / ʔistá	namʔá	heedzdzá	ʔoiddá	ʔitʃitʃátʃa	ʔusúppuna	laáppuna	hósppuna	ʔuddúpuna	támma
Gamo	ʔissio (ʔista)	namʔa	heedzdza	ʔojdda	ʔitʃitʃatʃitʃa	ʔuspuna	laappuna	hospuna	ʔuddupuna	tamma
Wolaitta₁	ʔisttá	naaʔʔá	heezzá	ʔoiddá	ʔitʃitʃáʃa	ʔusúppuna	laápuna	hósppuna	ʔuddúpuna	támma
Wolaitta₂	ʔistá / ʔisiíno	naaʔʔá	heezzá	ʔoidsá	ʔiččáʃa	ʔusúppuna	laápuna	hóspuna	ʔuddúpuna	támma
Kullo	eso	naha	esa	oïda	ičaša	ussupuno	lapuna	uspuna	udupuna	tama
Ganjule₁	bízzó	naḿmʔu	háyzzí	ʔóyddu	ʔiʃitʃitʃì	ʔizzí(u)pu	láppu	lánkutʃiʃe	tánsínde	támmu
Ganjule₂	bizu	lamʔ	haydz	oydu	išič	izúp	lap'ụ	laŋkuč	tantsınde	tɔm
Gats'ama	bizɛ́	náːmʔo	háːуӡi	ʔóːidu	ʔišíӡ	ʔəzú	láp	laŋkúč	tansint	támu
Zargulla	bizzó	námʔa	háidts	ʔoídd	ʔišíčč	ʔizíp	laáp	lakkúče	tansíne	támm
Koorete	ˈbídzːò	ˈlámʔè	ˈháᵞdzè	ˈʔòᵞdːè	ʔìˈtʃítʃề	ʔìˈzːúɸè	ˈláːpè	hàˈzːúpːè	ʔòˈdːúpːè	ˈtʰámːè
Zayse	bizzō	nam	hayts	oyt	išič	izup	lāp	lakkuč	tsingō	tām
Basketo	péttán péttí ᵐᵒᵈⁱᶠ·	nàmʔí	hàizzí	òiddí	ìʃʃín	lèhí	tàbzá	làmáhái / làmákái	sàakàlí / sàakílí	tábbá
Doko	pɛttɛni	namʔi	haydzi	oyddi	ıššínı	lıhí	tabzá	lamakay	saˑkali	tɑbba
Dollo	pēttān	nām	ayz	oyd	ĕššĕn	leh	tābezā	lāmākāy	sākäl	tāˀba
Oyda	féttó	lamʔí	haiddzí	ʔoiddí	ʔiccin	ʔizíppun	láappun	ʔóspun	ʔiddífun	tábbó
Male	pétte	lamʔó	haitsó	ʔoidó	dóngo	láhhó	lánkayi	sálli	tásuꞵa	tábbó

	20	30	40	50	60	70	80	90	100	1000
Chara	*nantansá*	*keːztansá*	*obda tansá*	*učča tansá*	*sapma tansá*	*lapma tansá*	*nandirsa tansá*	*bíža tansá*	*sʼeːta*	*ʔíssa <u>šaʔa</u>*
Dorze	*nám(ʔ)í tam(m)i ~ laátamna*	*heézí tam(m)i*	*ʔoidí tam(m)i*	*ʔitʃtʃátʃí tam(m)i*	*ʔusúpún tam(m)i*	*lápún tam(m)i*	*hóspun tam(m)i*	*ʔudúpún tam(m)i*	*(ʔíssí) tsʼeete*	*ʔíssí <u>ʃije</u> < Amh.*
Gofa	*namʔu tamma / laátamma*	*heédzdzú tamma / hástama*	*ʔoiddú tamma / ʔoítama*	*ʔitʃtʃáʃú tamma / ʔiʃátama*	*ʔusúppún tamma*	*laáppún tamma*	*hósppun tamma*	*ʔuddúfún tamma*	*tsʼeéta*	*mukúla / (ʃáʔa) <u>ʃiʔa</u> < Amh.*
Malo	*láˑtáma*	*hastama*	*oytáma*	*išɛtama*					*sʼeˑta*	
Dache	*namʔu tamma*	*heédzdzú tamma*	*ʔoiddú tamma*	*ʔitʃtʃátʃú tamma*	*ʔusúppún tamma*	*laáppún tamma*	*hóspun tamma*	*ʔuddúpún tamma*	*(ʔíssí) tsʼeéta*	*ʔíssí <u>ʃiʔa</u> < Amh.*
Gamo	*namʔu tamma (laatamma)*	*heedzdzu tamma*	*ʔojddu tamma*	*ʔitʃtʃatʃitʃfu tamma*	*ʔispun tamma*	*laappun tamma*	*hospun tamma*	*ʔuddupun tamma*	*namʔa sʼeeta*	*ʔissi <u>ʃiʔa</u> < Amh.*
Wolaitta[1]	*laátama / naáʔʔú tamma*	*hástama / heézzú tamma*	*ʔoítama / ʔoiddú tamma*	*iʃátama / ʔitʃtʃaʃú tamma*	*ʔusúppún tamma*	*laáppún tamma*	*hósppún tamma*	*ʔuddúpún támma*	*(ʔíssí) tʼeéta*	*(ʔíssí) <u>ʃáʔa</u> < Amh.*
Wolaitta[2]	*laátama*	*hástama*	*ʔoítama*	*iččátama*	*ʔusúppun támma*	*laápun támma*	*hóspun támma*	*ʔuddúpun támma*	*tʼeéta*	*<u>čáʔa</u> < Amh.*
Kullo	*latama*	*as-tama*	*oï-tama*	*iča-tama*	*ussupun-tama*	*lapun-tama*	*ospun-tama*	*udupun-tama*	*teta*	*<u>šaša</u>*
Ganjule[1]	*námmʔu támmu*	*háyzzí támmu*	*ʔóyddu támmu*	*ʔiʃitʃitʃí támmu*	*ʔizzí(u)pu támmu*	*láppu támmu*	*lánkutʃʃe támmu*	*tánsínde támmu*	*sʼeét*	*<u>ʃi</u> < Amh.*
Ganjule[2]	*lamʔu tɑm*	*haydzi tɑm*	*oydi tɑm*	*išittɑm*	*izup tɑm*	*lapᵃtɑm*	*laŋkuče tɑm*	*tantsınde tɑm*	*tsʼéˑti*	*bizi tsʼits'*
Zargulla	*namʔú támm*	*haidtsú támm*	*ʔóidd támm*	*ʔišíčč támm*	*ʔizíp támm*	*laáp támm*	*lakkúče támm*	*tansíne támm*	*sʼeét*	*<u>šíγa</u> < Amh.*
Koorete	*lám ˈtʰámːɛ̀*	*háˀdzì- ˈtʰámːɛ̀*	*ʔɔ̀ˀdì- ˈtʰámːɛ̀*	*ʔìˈtʃítʃì- tʰámːɛ̀*	*ʔìˈzːúɸ- tʰámːɛ̀/ ʔìˈzːúpp- tʰámːɛ̀*	*láːp- ˈtʰámːɛ̀*	*hàˈzːúɸ- ˈtʰámːɛ̀*	*ʔɔ̀ˈdːúɸ- ˈtʰámːɛ̀*	*ˈtsʼíːtsɛ̀*	*(ˈbídz-) <u>ˈkúmà</u> < Or. / (bídzʼ-) <u>ʃiʔɛ̀</u> < Amh.*
Zayse	*lamtam*	*haytstam*	*oyttam*	*iččaštam*	*izuptām*	*lāptam*	*lakkučtam*	*tsingtam*	*tsietā*	

	20	30	40	50	60	70	80	90	100	1000
Basketo	làmtám	hàizzí tábbá	òiddí tábbá	ìʃʃín tábbá	lèhí tábbá	tàbzá tábbá	làmáhái tábbá	sàakàlí tábbá	ts'éetà / gábbà	múkìlà / múkùlà
Doko	lɑm tɑm	aydzi tɑbba							ts'e·ta	
Dollo	lām-dāmmo	lām-tām tā'bo (2x10) +10	lāmi gābā 2x20	lāmi gābā tā'bā	oydi gābo 40+20	ŏšonās gābā 50+20	lēhē-sa gābā 60+20	tabezä-zā gab'ā 70+20	lāmākā-sā gab'ā 80+20	
Oyda	lamʔ tám	haas tám	ʔoidd tám, ʔoittám	ʔiccin tam	ʔizíppun tam	láappun tam	ʔóspun tam	ʔiddífun tam	(fĕttí) ts'eet	múkul
Male	lamá-támmi	haytsí-támmi	ʔoidí-támmi	dóngi-támmi	láhhí-támmi	lánkayi-támmi	sálli-támmi	tásubi-támmi	s'ééta	ʃìya < Amh. ʃìh

5. Gonga

	1	2	3	4	5	6	7	8	9	10
Anfillo	ikkó	guttó	kedzó	auddó	amittó	ʃirtó	ʃabattó	ʃìmittó	yiriŋgó	aʃiró
B(w)oro₁	íkka	gittá	ke:zá	áwddá	u:sá	šerita	šawáta	šimíta	ǰ/ye:riyá	tása
B(w)oro₂	íkkà	gíttà	keezá	awddà	uttsá	širrᵊtà	šawaatà	šəmmətà	jeedíyà	tattsá
B(w)oro₃	ikka	gítta	kéğa	áuda	húča	šírta	säbáta	semínta	ğéta	táča
Kafa	ʔìkkòó	gùttòó	kèèmó	áwùddò	ʔùùttʃòó	ʃìrìttòó	ʃábààttòò	ʃìmìttòó	jìt'ìjòò	ààʃìròò
Shekkacho	ikka	guttaa	keejjaa	awuddaa	uuččaa	širittaa	šabaattaa	šimittaa	yit'iyaa	aširaa

	20	30	40	50	60	70	80	90	100	1000
Anfillo	hiyó / hiʔó	ʃaʃó	aribó	amiʃó	ʃìrʃó	ʃabó	ʃinnó	yirió	(ikke-) balló	humó
B(w)oro₁	hi:yá	ša:šá	habá	ballé kása	ǰa támá	torba támá	sade:t támá	ságal támá	balla	kúmá
B(w)oro₂	hiyyá	šaašà	habbá	baal-k'atsᵊ = half-100	bel-k'atsᵊ-tattsᵉ	bel-k'atsᵊ-hiyyᵉ	bel-k'atsᵊ-šaašᵉ	bel-k'atsᵊ-habbᵊ	baallà	(íkkò-) kumá
B(w)oro₃	héwo	sääso	habbo	ballikáčo	síso	säbbo	símno	zítana	bállo	šío
Kafa	hìjòò	ʃààʃòó	ààbbòò	ààttʃòó	ʃíttʃòó	ʃàbòò	ʃìnnòó	jìt'ènòò	bállò	hùmó
Shekkacho	hiyaa	šaašaa	aabbaa	aččaa	šiččaa	šabaa	šinnaa	yit'ana	ballo	umoo

6. Mao

	1	2	3	4	5	6	7	8	9	10
Bambassi	*hiškì*	*numbo*	*teezè*	*meṣe*	*ḳwíssí*	*kyaansè*	*kúlùmbò*	*kúteezé*	*kúsméṣe*	*kúúsú*
Ganza	*ʔiškúwéén*	*mámbùʔ*	*tíízìʔ*	*máṣṣìʔ*	*ḳwíssíʔ*	*ʔiškípín*	*mámpín*	*wópʼò*	*šéléʔ*	*kónsóbààʔ*
Hozo₁ Bender / Wedekind	*ʊn:a / onna*	*dʊmbo / dombo*	*sìa:si / siyazi*	*betsí / beṭṣi*	*kʷɪtsí / ḳwitsi*	*keni: / ota-onna*	*ʔɔ:ta / ota-dombo*	*ʔɔ̀:tá / ota-siyazi*	*ʔɔ̀:tì / ota-be:tsi*	*ṗɔ́:ši / po:ši*
Hozo₂	*ʔónnà*	*dòmbó*	*sìjázì*	*bétṣì*	*kwíṭṣì*	*kwíṭṣì ʔòttá ʔónnà*	*kwíṭṣì ʔòttá dòmbó*	*kwíṭṣì ʔòttá sìjázì*	*kwíṭṣì ʔòttá bétṣì*	*ṗóšì*
Seze₁ Bender / Wedekind	*ìšìle / ıšile*	*nòmbé / no:mbɛ*	*sì:zí / si:zɛ*	*bèṣé / beṭṣe*	*ḳúsé / ḳosse*	*dʒa:j / ot-šile*	*ʔɔ:t nòmbé / ot-nombɛ*	*ʔɔ̀:t sí:zí / ota-si:zɛ*	*ʔɔ̀:t bè:ṭṣé / ota-be:ṣe*	*kó:sè / kʊ:sɛ*; cf. *kuse* hand
Seze₂	*ʔìšílè*	*nòmbé*	*sììzé*	*beṣṣé*	*ḳwíssé*	*ḳwíssé ʔòòt ʔìšílè*	*ḳwíssé ʔòòt nòmbé*	*ḳwíssé ʔòòt sììzé*	*ḳwíssé ʔòòt beṣṣé*	*kúúsé* cf. *kusɛ* hand

	20	30	40	50	60	70	80	90	100	1000
Bambassi	*numbo kuuse / esḳele* person-body	*teezè kuuse*	*meṣe kuuse*	*ḳwíssí kuuse*	*kyaansè kuuse*	*kúlùmbò kuuse*	*kúreezé kuuse*	*kúsméṣè kuuse*	*kúúsé kuuse*	*hiškì kuusan kúúsé kuusan*
Ganza	*ʔìš(k) ʔàsì ḳéwò*	*ʔìš(k) ʔàsì ḳéwò gàší kónsóbààʔ*	*mámb ʔàsì kéwò*	*mámb ʔàsì ḳéwò gàší kónsóbààʔ*	*tííz ʔàsì ḳéwòʔ*	*tííz ʔàsì ḳéwò gàší kónsóbààʔ*	*beṣṣé màà ḳwèèj*	*máṣṣ ʔàsì ḳéwò gàší kónsóbààʔ*	*ḳwíss ʔàsì ḳéwòʔ*	
Hozo₁ Wed.	*onna-mo-ḳwɛ*	*onna-mo-ḳwɛ-ɛb-poši*	*dombo mo-ḳwɛ*					*kwitsi-mo-ḳwɛ*		
Hozo₂	*móʔónnà-ḳé (ḳé = body)*	*móʔónnà-ḳé ʔottá ṗóšì*	*módòmbó-ḳé*	*módòmbó-ḳé ʔottá ṗóšì*	*mósìjázì-ḳé*	*mósìjázì-ḳé ʔottá ṗóšì*	*móbéṭṣì-ḳé*	*móbéṭṣì-ke ʔottá ṗóšì*	*mókwíṭṣi-ḳé*	*ʔónnà ʔùwwá sìjázì*
Seze₁ Wed.	*išil-ma-ḳwɛ*	*išil-ma-ḳwɛ-nɛ-ku:sɛnɛ*	*nombɛ-ma-ḳwɛ*						*ḳosse-ma-ḳwɛ*	
Seze₂	*ʔìšíl màà ḳwèèj*	*ʔìšíl màà ḳwèènè*	*nòmbé màà ḳwèèj*	*nòmbé màà ḳwèènè*	*sìízé màà ḳwèèj*	*sìízé màà ḳwèènè*	*beṣṣé màà ḳwèèj*	*beṣṣé màà ḳwèènè*	*ḳwíssé màà ḳwèèj*	

Cf. Koman numerals (Nilo-Saharan)

language	1	2	3	4	5	6	7	8	9	10
Kwama	*sóndò / sé:né / sé:ʂkìn*	*sùjá*	*twásèn*	*bé:ʂìn*	*kú:mùʈ*	*kúbà-sè:n* = takes 1	*kúbá-sùjá*= takes 2	*kúbà-twásēn* = takes 3	*kúb-bé:ʂín* = takes 4	*ḳú:zí* = fingers
Opuuo	*diʃeɗe*	*ʃuka / cuka*	*tuʃu / tusu*	*hwan / ŋwan*	*muta:-kwei* = hand	*kane-ɗe*	*kane-ʃuka*	*kane-tūʃũ*	*kane-hwān*	*muta-kweya-ʃuka-yen*
Komo[1]	*ɗɛ̃*	*sʊ*	*dìʃ*	*dɔgɔ̀n*	*bùʂ*	*káná gɪ ɗɛ̃*	*káná á sʊ*	*káná á dìʃ*	*káná á dɔgɔ̀n*	*ḳɔ́ʃ ḳɔ̀lɔ̀* = kill hand(s)
Komo[2]	*ɗɛ́ʔ*	*sʊʔ*	*dĩʃín*	*dɔ̄ɣɔ́n*	*bòs'ín*	*kà:nagĩɗɛ̃*	*kà:nàsʊʔ*	*kà:nàdɪʃ*	*ká:ndɔ̀gɔ̀n*	*ḳɔ́ʃḳɔ̀lɔ̀*
Twampa = Uduk	*ɗɛ́ʔ*	*súʔ*	*kʷārā*	*dòŋ(g)òn*	*múɗèɗ*	*múɗèɗ pé ɗɛ́ʔ*	*múɗèɗ pé súʔ*	*múɗèɗ pé(ŋ) kʷārā*	*múɗèɗ pé dòŋ(g)òn*	*ḳúmèɗ*

II. South Omotic = Aroid

language	1	2	3	4	5	6	7	8	9	10
Ari	*wól:áq*	*qast:én*	*mak:én*	*ʔoyd:í*	*dónq:*	*lá:*	*tabzá*	*qast:a:́n-tám:ers*	*wolqá:n-tám:ers*	*tám:á*
Galila	*wɑlqɑ / wɑlɑḳɑ*	*ḳastan / ḳaskan*	*mɑkkɑn*	*oyddi*	*doŋk*	*la·*	*tabza*	*lamɑkay*	*ša·kɪla*	*tɑmmɑ*
Ubamer	*wɑllɑḳɑ*	*ḳastɛn / ʔastɛn*	*mɑkkɑn*	*oyddi*	*doŋk / doŋq*	*la·*	*tabza*	*ḳastɛn tamɑrs*	*wɑlqɑn tamɑrs*	*tɑmma*
Bakko	*ellagà*	*astèn*	*makken*	*oidi*	*donkh*	*là*	*tabza*	*kastàtamez*	*alkàtamez*	*tommà*
Dime[1]	*'wɔkʰʌl*	*'ḳʌt'ɪm*	*'mʌkʰɪm*	*ʔod:ʊ*	*<u>'šɘn:ɘ</u>*	*lah(ɘ)*	*'tʰʊs:ʊm*	*'ḳʌšnaš*	*'wʌklaš*	*'tʰam:e*
Dime[2]	*wókkil*	*ḳɘstin*	*mɘkkim*	*ʔúddú*	*<u>šinní</u>*	*láxi*	*tússum*	*ḳašnášiš*	*wóklášiš*	*tɘmme*
Hamar	*kála*	*lamá*	*makkán*	*oidí*	*duŋg*	*lax*	*toḅḅá*	*lankái*	*sal*	*táḅi*
Hamar-Banna	*kʌlʌ*	*lɛma:*	*makan*	*ʔoʷìdi / ʔuʷìdi*	*duŋ*	*lʌx*	*tʌḅa / toḅa*	*lʌŋkaⁱ*	*sɘl*	*tɘḅi*
Amare Coche	*kalo*	*lama*	*makan*	*oidi*	*don*	*làh*	*tobba*	*lankai*	*sal*	*teppi*
Karo	*kallà*	*lammà*	*makàmm*	*oydì*	*dònn*	*lhā*	*tsóbà*	*lonkài*	*sall*	*tabi*

language	20	30	40	50	60	70	80	90	100	1000
Ari	*bondá* = full person / *ʔé-wól:áq -bab ʔits* person-1 father-eat	*bondéke tám:á* / *ʔé-wól:áq-bab ʔitske tám:á*	*ʔé-qast:én-ba:b ʔits*	*ʔé-qast:én-ba:b ʔitske*	*ʔé-mak:én-ba:b ʔits*	*ʔé-mak:én-ba:b ʔitske*	*ʔé-ʔoyd:í-ba:b ʔits*	*ʔé-ʔoyd:í-ba:b ʔitske*	*ʔé-dónq:-ba:b ʔits* person-5 father-eat / *máto* < Amh.	*wól:áq fíí* < Amh.
Galila	*bóndá*	*bonda ke tɑmmɑk*	*ḳaskɛn bɑ bond*	*ḳaskɛn bɑ bond ke af tɑmmɑk*	*mɑkkɑn bɑ bond*	*mɑkkɑn bɑ bond ke afi tɑmmɑ*	*oyddi bɑ bond*	*oyddi bɑ bond ke af tɑmmɑ*	*doŋkɑ bɑ bond* / *doŋkɑ la bunde*	
Ubamer	*bonda*	*bónda ka támmɑ kɛ*	*ɛḳastén ba bónd*						*mɛto* < Amh.	
Bakko									*doneh-babik*	
Dime₁	*'wajdʊ*	*tʰamti 'mʌkʰɨm*	*tʰamt ʔod:ʊ*	*tʰamta ꞎšən:ə*	*tʰamta 'lah*	*tʰamta 'tʰʊs:ʊm*	*tʰamte 'ḳʌšnaš*	*tʰamta 'wʌklaš*	*'te'ətʰ*	
Dime₂	*woidu*	*təmṭi məkkim*	*təmṭi ʔúddú*	*təmṭi šinní*	*təmṭi láxi*	*təmṭi tússum*	*təmṭi ḳašnášiš*	*təmṭi wóklášiš*	*ṣéét*	*ṣéét təmmi*
Hamar	*éedi kála kaisá* = one complete man	*éedi kála kaisá apó táḅi*	*éedi lamá kaisá*	*éedi lamá kaisá apó táḅi*	*éedi makkán kaisá*	*éedi makkán kaisá apó táḅi*	*éedi ʔoʷidi kaisá*	*ʔe:di ʔoʷidi kaisá apó táḅi*	*éedi duŋ kaisá*	*ši kála*
Hamar-Banna	*ʔe:di kʌlʌ kaⁱsa*	*ʔe:di kʌlʌ kaⁱsa ʌpo təḅi*	*ʔe:di lɛma: kaⁱsa*	*ʔe:di lɛma: kaⁱsa ʌpo təḅi*	*ʔe:di makan kaⁱsa*	*ʔe:di makan kaⁱsa*	*ʔe:di ʔoʷidi kaⁱsa*	*ʔe:di ʔoʷidi kaⁱsa ʌpo təḅi*	*ʔe:di duŋ kaⁱsa*	*ši kʌlʌ*
Amare Coche									*teppi teppi*	

Note: The underlined forms indicate recent, Ethio-semitic, borrowings.

Survey of Ometo numerals

	Čara	Ometo I	Ometo II	Ometo III	p-Ometo
1a	*ʔissa*	**ʔissi(-na)* attr. **ʔis-ta* sglt.			**ʔissi(-na)* attr. **ʔis-ta* sglt.
1b			**biʒʒo*		**biʒʒa*, cf. Čara *bíža* '9' = [10-]1
1c				**pett(an)i*	**pett(an)i*
2	*nanta*	**namʔa*	**lamʔa/i/u*	**lamʔi*	**lamʔa*
3	*keːza*	**heeʒʒa*	**hayʒʒi*	**hayʒʒi*	**kʰayʒʒa/i*
4	*obda*	**ʔoydda*	**ʔoyddu*	**ʔoyddi*	**ʔowirda* (cf. *ourtōntsā* '40' by Cerulli)
5a	*učča*	**ʔiččaša*	**ʔišičiči*	**ʔiččin*	**ʔučiss(in)a* < **ʔučča* '5' x **ʔiss(in)a* '1'
5b				Male *dongo*	< Aroid
6a	*sapma*	**ʔusuppuna*	**ʔizzi/upu*	Oyda **ʔizippun*	**ʔis(s)in-puna* '1 over'
6b				**lehi*	< Konsoid **lehi*
7a	*lapma*	**laappuna*	**lappu*	Oyda **laappun*	**lamʔa-puna* '2 over'
7b				**tabza*	
8a		**hospuna*	**hazzuppe*	Oyda **ʔospun*	**kʰayʒʒV-puna* '3 over'
8b	*nandirsa*				'2 minus'
8c			**lamkučče*	**lamakay*	cf. Dirayta *lakkušeti*
9a	*bíža*				'1 {minus}', cf. Ometo II **biʒʒo* '1'
9b		**ʔuddupuna*	**ʔodduppe*	Oyda **ʔiddipun*	**ʔowirdi-puna* '4 over'
			*tamsinde		**tam-isin-de* '10 minus 1'
				*saakali	cf. Elmolo *sáákal*, Yaaku *saakal*

	Čara	Ometo I	Ometo II	Ometo III	p-Ometo
10	*tansá*	**tamma*	**tammu*	**taḅḅa*	**tamma*
20	*nantansá*	**laatamma*	**lamʔtamm(V)*	**lamʔtam(m)*	**lamʔa-tamma*
30	*ke:ztansá*	**hastama*	**hayʒʒitamm(V)*	**hayʒʒi--taḅḅa / -tamm*	**kʰayʒʒi-tamma*
40	*obda tansá* Cerulli: *ourtōntsā*	**ʔoydtama*	**ʔoydd(V)tamm(V)*	**ʔoyddi--taḅḅa / -tamm*	**ʔowirdi-tamma*
50	*učča tansá*	**ʔičatama*	**ʔišičičitamm(V)*	**ʔiččin--taḅḅa / -tam*	**ʔučiss(in)a-tamma*
				Male *dongi-tammi*	
60a	*sapma tansá*	**ʔisuppuna tamma*	**ʔizup(V)tamm(V)*	Oyda **ʔizippun tam*	**ʔis(s)inpuna-tamma*
60b				Bask. *lèhí táḅḅá* Male *láhhí-támmi*	
70a	*lapma tansá*	**laappun tamma*	**laapp(V)tamm(V)*	Oyda **laappun tam*	**lamʔapuna-tamma*
70b				Bask. *tàbzá táḅḅá*	
80a	*nandirsa tansá*	**hospun tamma*	**hazzuptamme*	Oyda **ʔospun tam*	**kʰayʒʒVpuna-tamma*
80b			**lamkučetamm(V)*	Bask. *làmáhái táḅḅá*	
90a	*bíža tansá*				
90b		**ʔuddupun tamma*	**ʔodduptamme*	Oyda **ʔiddipun tam*	**ʔowirdipuna-tamma*
90c			**tamsinde-tamm(V)*		**tamisinde-tamma*
90d				Bask. *sàakàlí táḅḅá*	
100a	*ṣe:ta*	**ṭṣeeta*	**ṭṣeetsa*	**ṭṣeeta*	**ṭṣeeta*
100b				Bask. *gábbà*	
1000	< Amhara			Oyda *mukul* Bask. *múkìlà/múkùlà*	**mukila*

Note: Ometo I = Dorze, Zala, Gofa, Malo, Dache, Gamo, Wolaitta, Kullo/Dawro; Ometo II = Koorete, Ganjule, Zergulla, Zayse; Ometo III = Basketo (= Bask.), Doko, Dollo, Oyda, Male.

Survey of Omotic numerals

	Ometo	Gimira	Yemsa	Dizoid	Gonga	Mao	Aroid
1a	**ʔissi(-na)* attr. **ʔis-ta* sglt.		ʔɪsːɔːnˡˡ / ʔɪsaˡˡ	Nayi *yísṇ*	**ʔikka < *ʔis/š-kaʔ*	**ʔiš-kV/lV-*	
1b		**mat*			Kafa *mittoo* sole		
1c				**ḳoy*			
1d							**kal(l)a* **wakkal(V) ~* **wallaḳa*
2a	**lamʔa*	**nam*				**numbo*; cf. Bambassi *kú-lùmbò* '7'	**lamma*
2b			hɛpʰˡ / ʔɛpʰˡ				
2c				**tagn*			
2d					**gutta / *gitta*		
2e							**ḳastan*
3a	**kʰayʒʒa/i*	**kaz*	ˈkʰeːz²	**kadu*	**keeʒa*		
3b						**t/siyazi*	
3c							**makkan*
4a	**ʔowurda*	**ʔod*			**ʔawudda*		**ʔowiddi*
4b			ʔaˡˡ ˈčeːč³				
4c				**kubm*			
						*(m)beṭṣi	
5a	**ʔučiss(in)a < *ʔučča* 'hand' x **ʔiss(in)a* '1'	**ʔuč*	ʔʊːč³	**ʔuxču*	**ʔuučča*	**kwitsi < *ḳutsi*	
5b							**donḳ*
6a	**ʔis(s)in-puna*	**sapm*	ʔɪˡ ˈsiːʊnˡ				
6b				**yaku*			
6c	Ometo III **lehi*						**laxi*
7a	**lamʔa-puna*	**napm*	ˈnaːˡfʊnˡ				

	Ometo	Gimira	Yemsa	Dizoid	Gonga	Mao	Aroid
7b	Ometo III *tabza			*tubsun			*tabza Dime *tubsum
8a	*kʰayʒʒV-puna						
8b	Chara *nandirsa*	*nʸartn < *nam-ir- tam 2-10	ˈnaŋ²ri:n¹				
8c				*zyed			
8d	Ometo III *lamakay						*lamkay
8e							*ḳastan-tam-ars
9a	*ʔowurdi-puna						
9b		*irstn < *ʔis-ir- tam 1-10					
9c	Ometo III *saakali		ˈʔɪz¹gɪn¹	*sagn		Ganza *šélé?*	*sall
9d							*walḳan-tam-ars
10a	*tamma	*tam	< EthSem.	*tammu	*taNsa		*tamma
10b						*kuusV = hand(s)	
100a	*ṭṣeeta		ʔɪ¹sa¹ tʰɪ¹ja¹				
100b		*bal		Nayi *balla*	*balla		
1000a	*mukila						
1000b			ʔɪ¹sa¹ kʰo²ma²	Nayi *wuma*	*kuma		

Etymological comments

"one"

1.1. Om.: (N) *ʔis- > Ometo attributive *ʔissi(-na), singulative *ʔis-ta | Yemsa *isa* | Dizoid: Nayi *isn*; Maoid: Seze *ìšílè*, Mao *íškè*; maybe also Gonga *ʔikka*, if it is derivable from *'*is-ka* (Ehret 1995, 363, #726: NOm. + ECush. *ʔis- "self") ||| Sem. *ʕaštay- "1" ||| Chad.: (C) Mafa *sə́tá*, Magumaz *sə̀tàɗ*, Sulede *stá* (de Colombel) || (E) Mokilko *sòo* "1".

1.2. Ometo *pet(t)- id. ||| Chad.: (C) Margi *'pʰā:tū*' (JI₂, 262).

1.3. Gimira *maṭ- id.; cf. Kafa *mittoo* "sole" (Cerulli) ||| or < Cush.: (E) *mat-/*mit- "1" (Sasse 1982, 143) ||| Chad.: (W) Kirfi *modi*, Bolewa *moɗi* "1" (JI₂, 262) || (C) Mefele *məətá* "1". Takács (1996, 136–37) offers a promising hypothesis, assuming the derivation from the appellative of

the type ECush. *matḥ-* "head" (Sasse 1979, 36) || Beja *mat* "(top of) head" ||| Chad.: (C) Musgu *mada*, Vulum *măt* "head" ||| Eg. (OK) *mtj* "Vorsteher einer Priestergilde" (Wb. II, 168) ||| Sem.: Akk. *muttu* "front, forehead".

1.4. Aroid *wəl(l)aḳ* vs. Dime *wokkil* id.; cf. NOm.: Koyra *wolakko* "one of two" (Cerulli) < ECush. *wal-lakk-*?

1.5. Aroid: Hamer-Banna-Karo *kala* id. There are NS parallels of the type West Nilotic *kɛl* "1"; Central Sudanic *kala* "1"; Taman *kara* "1" etc.

"two"

2.1. Om. *lam-* id. ||| Cush.: (N) Beja -*raama* with 'augmentative' *r* in *asaraama* "7" (Reinisch) || (C) *läŋa/*laŋa* id. (CDA 141) || (E) *lam(m)-* id. (Sasse 1979, 21, 25) || Dahalo *líima* id. || (S) Asa *laam & xlam* (Fleming) id. (Dolgopolsky 165-67: Om. + N+E+SCush.; Ehret 1995, 424, #877: Om. + Cush. *la(:)m- + Sem. *ŝimaʔal* "left hand"!). Dolgopolsky (1973, 167) thought about relation to the Cushitic designation of one of "fingers": (N) Beja *lumi* "finger" (Reinisch) || (C) Damot *laŋetii*, Awngi *laŋatii* "finger" (Conti Rossini) || (E) Oromo *elema* (Tutschek), *elemtu* (Vitterbo) "forefinger". There are interesting parallels in NS: Kuliak: So *nebe-c*, Ik *le'be-ts^a* "2" (Lamberti 1988, 124).

2.2. Dizoid *ţagn* id. There are problematic parallels in Beja *tág^w & dág^w*, pl. *tagúug* "20" and Oromo (Tutschek) *digetam* = (Gragg) *digdama* "20", cf. also NS: Nara *dokuta* "2" : *doko* "1" (Blažek 1999, 49).

2.3. Aroid: Ari *ḳasten*, Dime *ḳʌţim* id. || ?(N) Gonga: Mocha *qáččo* "half", Bworo *kač*, Kafa *qat^(')o* id., cf. also Gurage Wolano *kitto* id. (Leslau 1959, 45).

2.4. Gonga *gutt-/*gitt-* id. Perhaps of Ethio-Semitic origin: Gyeto, Gogot *k^wet*, Maskat *x^wet*, Aymellel *kit*, Harari *koʔot, kōt* "2" vs. Tigre *kəlʔot* id. (Leslau 1963, 90; Lamberti 1993a, 316).

"three"

3.1. Ometo *hayz(z)-* | Gimira *kaz* | Yemsa *keez* | Gonga *keež(ž)-* | Dizoid *ka(:)du* id. (Ehret 1995, 228, #396: NOm. *x₂ayz-* + Chad. *k-n-ḍ).

3.2. ?Maoid *t/siyaz-* id. - cf. Koman (NS): Kwama *twásèn*, Opuuo *tuʃu / tusu*, Komo *dìʃ* "3", besides ECush. *šazḥ-/*šizḥ-/*šaz(z)iḥ-* "3" (Sasse 1976, 138).

3.3. Aroid *makkan ~ *makVm* id. ||| Chad. (W) South Bauchi: Jimi *mwaikan*, Geji *mekan* id. || (C) Bata *mwakən*, Bachama *mùwà:kún*, Gudu *makʌn*; Sukur *má:k^hən*; Mafa *màkâr*, Mofu *máákàr*, Gisiga *maakar* with -*r* < *-n-* , although most of the West & Central Chadic cognates are without the prefix *ma-* (JI₂, 326–27).

"four"

4.1. Ometo *ʔowurd-* | Chara *obdá* | Bench *od* | Gonga *'awudd-* id. || Aroid *ʔoydd-i* id. The form Chara *ourtōntsā* "40" (Cerulli) allows to reconstruct pOm. *ʔaβurd-* "4", compatible with Beja *fáḍig* (Roper) ~ *farig* (Reinisch), in old records *fardik* (Krockow), *ferdik* (Lucas) < *fard/ḍig* || (E) *ʔaf(f)ar- ~ *ʔaf(f)ur-* ||| Chad. *fari-du* or *faru-di* ||| Eg. *fdw* m., *fdt* f. "4", *ifd.t* "Vierheit" < *fdo3wět < *ƒida3wat < *ƒidarwat < *ƒiradwat* (Blažek 1999, 32-36: from AA *far-* "finger").

4.2. Yemsa *ačeeč* id. – isolated, maybe from Yemsa *očò* "foot, leg" (Lamberti), expressing "four legs" of animals?

4.3. Dizoid *kubm* id. – perhaps connected with ECush. *ḳub-* "finger" (Sasse 1982, 128–29) and WChad. *ḳUban-* "finger, fingernail" (Stolbova 1987, 211), cf. a use of this form in Sumray (EChad.) *kubi* "6" and *dénaa gúbii* "8" (Lukas) and Dahalo *ḳaba* (Tosco) = *ḳàβa* (Ehret) "3".

4.4. Maoid *(m)beţş-* id. – cf. Koman (NS): Kwama *bé:ṣìn* "4". The vector of borrowing is not clear.

"five"

5.1. Ometo **ʔičč-* | Chara *učá* | Bench *uč* | Gonga **ʔu(:)č(č)* | Dizoid **ʔuxču(m)* | ? Maoid **ḳutsi* id. ||| ?Eg. (NK) *qd̲.t* "hand" = **qid̲w-* > **qiwd̲-* > Coptic "P" *kiǧ*, Bohairic *ǧiǧ*, Sahidic *ciǧ* id. (Vycichl 1983, 350).

5.2. Ometo: Male *dɔŋgo* || or < Aroid **doŋḳ* id. ||| Chad.: (W) South Bauchi: Boghom *dàwnyi*, but Kir *to:n* id. indicates a probable Bantu origin.

5.3. Aroid.: Dime *šənne* id. < ECush.: Oromo *šan(i)* "5" (cf. Sasse 1975, 249–50).

5.4. Gonga: Anfillo *amitto* id. < HECush.: Burji *umútta* "5", Sidamo *onte*, Gedeo *onde*, Hadiyya & Kambatta *onto* id. (Sasse 1982, 184).

"six"

6.1. Ometo **ʔis(s)in-puna* | Gimira **sapm* | Yemsa *ʔɪˡ ˈsiːonˡ* = "1 + **puna*".

6.2. Dizoid **yaku* id.

6.3. Ometo III **lehi* || Aroid **laxi* < ECush.: Oromoid **leħi* id.

"seven"

7.1. Ometo **lamʔa-puna* | Gimira **napm*; Yemsa *ˈnaˑˡfʊnˡ* = "2 + **puna*".

7.2. Ometo III **tabza* || Aroid **tabza* < ECush.: Oromoid **tazba*.

7.3. Dizoid **tubsun* || Aroid: Dime **tubsum* < ECush.: Arbore *tuzba*.

"eight"

8.1. Ometo **kʰayʒʒV-puna* = "3 + **puna*".

8.2. Chara *nandirsa* | Gimira **nʸartn* < **nam-ir-tam* | Yemsa *ˈnaŋʔriːnˡ* "8" = "2 subtracted from 10".

8.3. Aroid **ḳastan-tam-ars* "8" = "2 subtracted from 10".

8.4. Ometo III **lamakay* || Aroid *lamkay* id. = "2 minus"?

8.5. Dizoid **zyed* < ECush.: Galaboid: Dasaneč *sièt*, cf. Somaloid **sìzyʼéèt*.

"nine"

9.1. Ometo **ʔowurdi-puna* = "4 + **puna*".

9.2. Gimira **irstn* < **ʔis-ir-tam* "1 subtracted from 10".

9.3. Aroid **walḳan-tam-ars* = "1 – 10 – minus"

9.4. Ometo III **saakali* | Yemsa *ʔɪzˡgɪnˡ* | Dizoid **sagn* < ECush. **sagal(an)-* "9".

9.5. Maoid: Ganza *šéléʔ* || Aroid **sall* < ECush.: Galaboid: Dasaneč *sall*.

"ten"

10.1. Ometo **tamma* | Gimira **tam* | Dizoid **tammu* | Gonga **taNsa* || Aroid **tamma* id. – cf. Cush.: Beja **tamin* "10" (by Reinisch also *tamún*) || Agaw **-täŋən* "-ty" (formant of tens) || ECush. **tomman-* "10" represent a Cushitic-Omotic isogloss (or a Cushitic loan in Omotic) with suggestive counterparts in NS: Nilotic (South) **tɔman* | (East) **tɔmɔn* (without Bari) | (West) Lango (Conti Rossini) *tomon* "10" (isolated within WNilotic) || SESurma (Haberland): Yidenit *tómmo*, Meqen *tommon*, Bodi *tómmo(na)*, Mursi *(a)tómmon* ||| Kuliak: Ik *tomɪnᵃ* ||| Nubian: Nobiin *dimé*, Kenzi *dimin*, Haraza *timinah*, Birgid *tummun*, Meidob *tɪmɪzɪ* ||| Bertha: Fadashi & Mayu (TB) *ma-θuma*, Fazoglo (Tutschek) *ma-doma* ||| Saharan: Zaghawa (MacMichael) *timm(i)*, all "10", besides the compounded forms attested in Koman: Fungi (MacMichael) *diman-didin* "9" = "10 – 1", cf. *didian* "1", Gule (Seligmann) *dĕmadídin* "9" : *dĕdín* "1". The Nilotic, Surmic and Kuliak forms are probable Cushitic loans with respect to presence of other Cushitic borrowings in these branches, including numerals. Koman and Bertha languages also are in contact with the

Cushitic laguages. In last two centuries the Nubian languages were at least partially (Nile Nubian) in direct contact with Beja, but earlier probably with other Cushitic branches too (Bechhaus-Gerst). The Nubian forms are derivable from two variants: **timin & *tummun*, with regard to regressive assimilation **tam(m)in & *tammun*, both forms attested in Beja dialects. The Zaghawa counterpart *timm(i)* could be mediated by Meidob.

10.2. Maoid **kuusV* = hand(s).

"hundred"

100.1. Ometo **ţşeeta* "100" | Yemsa *ʔɪ¹sa¹ tʰɪ¹ja¹* "1 x 100" – cf. ECush.: Konsoid: Ḍirayta *tseeta /ţşeeta/*, Muusiye *şeeta* "100".

100.2. Gimira **bal* | Dizoid: Nayi *balla* | Gonga **balla* < ECush. **boqol-* id.

"thousand"

1000.1. Yemsa *ʔɪ¹sa¹ kʰo²ma²* "1 x 1000" | Dizoid: Nayi *wuma* | Gonga **kuma* "1000" < ECush. **kuma*.

1000.2. Ometo **mukila* "1000".

Sources of Omotic

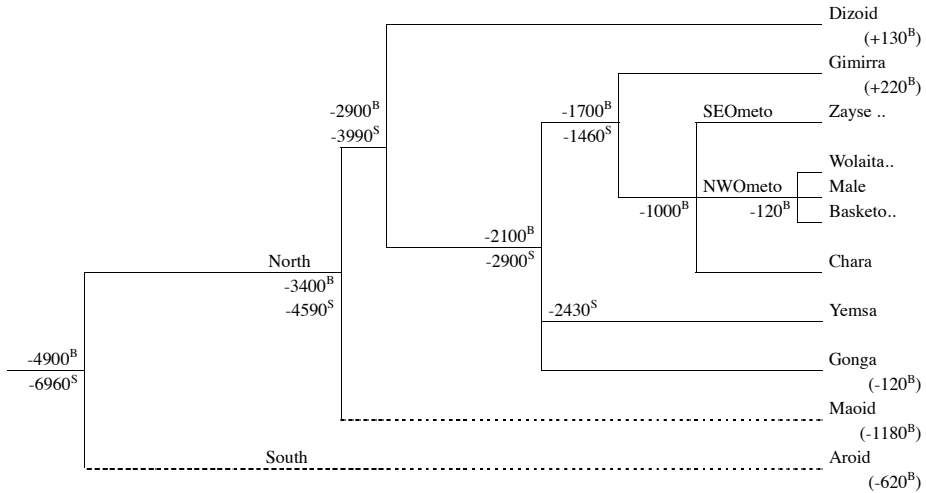(* = <https://mpi-lingweb.shh.mpg.de/numeral/Afro-Asiatic.htm>)

Anfillo = Southern Mao: Amanuel* (2012); **Bambassi = Northern Mao**: Michael Ahland* (2008); **Bakko**: de Trento (1941); **Basketo**: Yvonne Treis* (2013); **Bench**: Mary Breeze* (1995); **B(w)oro₁ = Shinasha**: Rottland* (1990); **B(w)oro₂ = Shinasha**: Lamberti* (1993), Plazikowski Brauner (1950); **B(w)oro₃ = Shinasha**: Beke apud Vinigi Grottanelli (1941); **Chara**: Aklilu Yilma* (2008); **Dache of Gamo**: Sellassie Cheru* (2012); **Dime₁**: Marvin L. Bender* (1989), Ralph Siebert* (2002); **Dime₂**: Mulugeta Seyoum Gebeyaw* (2008); **Dizi**: Marvin Beachy* (2008) / Allan (1976); **Doko**: Harold Fleming (1971); **Dollo**: Carlo Conti Rossini (1927); **Dorze**: Sellassie Cheru* (2012); **Galila**: Harold Fleming (1971); **Gamo**: Samuel Gonderie* (2012); **Ganjule₁**: Fitsum Abate* (2012); **Ganjule₂**: Harold Fleming (1971); **Ganza**: Girma Mengistu Desta* (2012); **Gats'ama = Kachama**: Ralph Siebert (1994); **Gofa**: Sellassie Cheru* (2012); **Hamar**: Sara Petrollino* (2014); **Hamar-Banna**: John Chan* (1996); **Hozo₁**: Marvin L. Bender* (1989) / Charlotte Wedekind, Klaus Wedekind & Ralph Siebert* (2002); **Hozo₂**: Getachew Kassa Bahiru* (2012); **Kafa**: Kifle Meshesha* (2012); **Karo = Kerre**: Carlo Conti Rossini (1927); **Koorete**: Lydia Hoeft* (1996, 2013); **Kullo**: Borelli (1890); **Male**: Azeb Amha* (2007); **Malo**: Harold Fleming (1971); **Nayi = Na´o**: Aklilu Yilma* (1995); **Oyda**: Bernhard Köhler* (2012); **Seze₁**: Marvin L. Bender* (1989) / Charlotte Wedekind, Klaus Wedekind & Ralph Siebert* (2002); **Seze₂**: Girma Mengistu Desta* (2012); **She**: Carlo Conti Rosini (1925); **Shekkacho = Mocha**: Tolemariam Fufa* (2007); **Sheko**: Aklilu Yilma* (1995); **Ubamer**: Harold Fleming (1971); **Wolaitta₁**: Sellassie Cheru* (2012); **Wolaitta₂**: Azeb Amha* (2007); **Yemsa**: Hans Schaumberger* (1998); **Zala**: Enrico Cerulli (1929); **Zargulla**: Azeb Amha* (2007); **Zayse**: Enrico Cerulli (1938b).
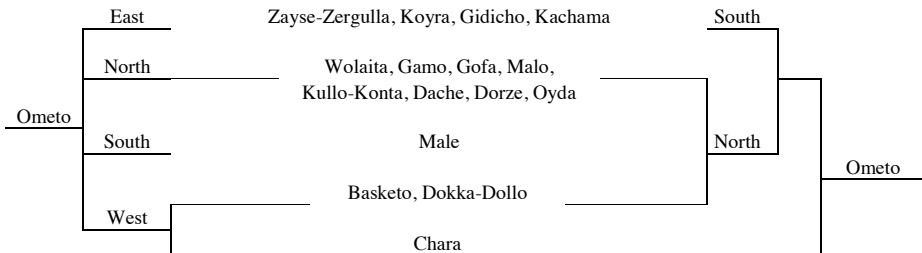
Sources of Nilo-Saharan – Koman

(* https://mpi-lingweb.shh.mpg.de/numeral/Nilo-Saharan.htm)

Komo$_1$ – Manuel Otero* (2014); **Komo$_2$** – Klaus Wedekind* (2002); **Kwama** – Andargachew Getu Gebeyehu* (2013–2014); **Opuuo** – M.Lionel Bender* (1989); **Twampa = Uduk** – Don Killian* (2012)

Omotic Classification

```
                                                                Dizoid
                                                                (+130ᴮ)
                                                                Gimirra
                                                                (+220ᴮ)
                                    -1700ᴮ          SEOmeto      Zayse ..
                                    -1460ˢ
                                                                Wolaita..
                                                    NWOmeto     Male
                     -2900ᴮ                         -1000ᴮ  -120ᴮ  Basketo..
                     -3990ˢ
                                                                Chara
              North           -2100ᴮ
              -3400ᴮ          -2900ˢ
              -4590ˢ
                                    -2430ˢ                      Yemsa
 -4900ᴮ
 -6960ˢ                                                         Gonga
                                                                (-120ᴮ)
                                                                Maoid
                                                                (-1180ᴮ)
              South                                             Aroid
                                                                (-620ᴮ)
```
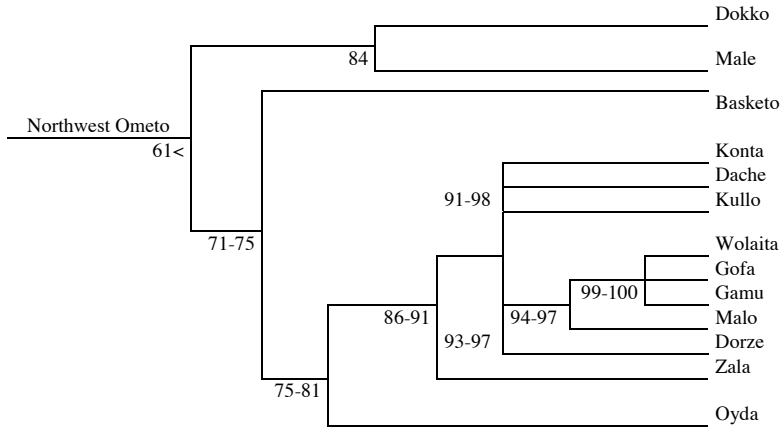
See Václav Blažek, Afroasiatic migrations. In: *The Encyclopedia of Global Human Migration* I, ed. by Immanuel Ness & Peter Bellwood. Oxford: Wiley-Blackwell, 2013, 125–132. B = Blažek; S = G. Starostin.

In the recent time there were proposed two models of the genetic classification of the Ometo dialect continuum: by Fleming (1976) and by Bender (1988) – here left and right respectively. Their results can be compared as follows (see Hayward, *OLS* xi–xii):
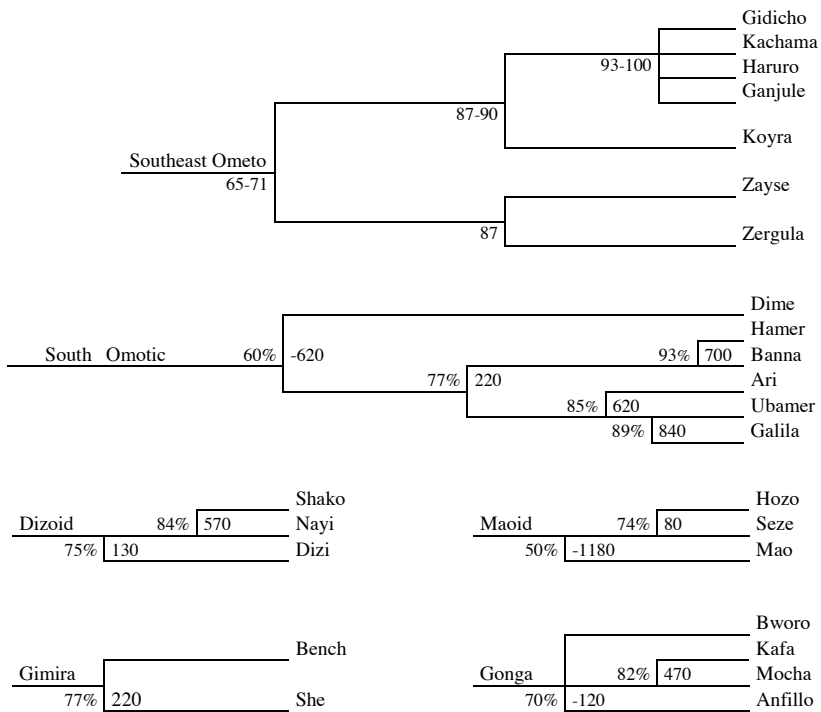
```
          East          Zayse-Zergulla, Koyra, Gidicho, Kachama      South
          North         Wolaita, Gamo, Gofa, Malo,
                        Kullo-Konta, Dache, Dorze, Oyda
 Ometo                                                               North
          South         Male                                                  Ometo
                        Basketo, Dokka-Dollo
          West
                        Chara
```

In his monograph Bender (2003) offers more exact results. He divides the Ometo cluster into three parts, Northwest, Southeast and Chara. The internal structure of the Nortwest group of Ometo can be constructed on the basis of Bender's figures as follows (p. 51; the figures represent percentages of common cognates):

The internal classification of the Southeast Ometo (pp. 79–81):

Abbreviations

Akk. Akkadian; Amh. Amhara; Arb Arbore; Bask. Basketo; Bk Bako; Bn Banna; Bu Burji;
C Central; Chad. Chadic; Cu(sh) Cushitic; D Dalpena; Dah Dahalo; Dob Dobase; E East; Eg.
Egyptian; Eth. Ethio-; Ga Gawwada; Go Gollango; Gu Gumuz; H Highland; Ha Hadiyya; Hm

Hamar; Hrs Harso; J Jinka; Kal Kalenjin; Kmb Kambatta; Ko Konso; Kr Karo; Kw. Kwegu; N North; Nil Nilotic; NS Nilo-Saharan; Nu Nuer; Nub Nubian; Om Omotic; Or Oromo; p- proto-; S South; Sem. Semitic; Sh Saharan; Shil Shilluk; Si Sidamo; Som Somali; Sw. Swahili; Te Teso; Ts Tsamay; W West.

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