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Cushitic 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 Cushitic numerals and to analyze them in both genetic (Afroasiatic) and areal (Omotic, 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 they 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 Cushitic = Beja

source	1	2	3	4	5	6	7	8	9	10
Seetzen	<i>nkál</i>	<i>mallóba</i>	<i>mahhéiwa</i>	<i>phadégga</i>	<i>eíwa</i>	<i>aszagiúra</i>	<i>aszéramá</i>	<i>ezsimhajj</i>	<i>ešadiga</i>	<i>tamina</i>
Salt	<i>engat</i>	<i>máloob</i>	<i>mih</i>	<i>addig</i>	<i>ib</i>	<i>saggoor</i>	<i>seramáh</i>	<i>samhai</i>	<i>šedig</i>	<i>tammán</i>

source	1	2	3	4	5	6	7	8	9	10
Burckh.	<i>engaro</i>	<i>molobo</i>	<i>mehay</i>	<i>fadyg</i>	<i>ey-yb</i>	<i>essagour</i>	<i>essarama</i>	<i>essamhay</i>	<i>ogamhay</i>	<i>togaserama</i>
Kremer	<i>nga(t)</i>	<i>maló</i>	<i>mhai</i>	<i>fađdeg</i>	<i>aji(b)</i>	<i>assogr</i>	<i>assarama(b)</i>	<i>assemhai</i>	<i>ašodđeg</i>	<i>tamen</i>
Munzinger	<i>engar/l</i> m. <i>engat</i> f.	<i>meló(b)</i>	<i>mehèi</i>	<i>fèdig</i>	<i>ei(b)</i>	<i>esógur</i>	<i>esérema</i>	<i>esimhei</i>	<i>šedük</i>	<i>temen</i>
Krockow	<i>gaht</i>	<i>mallo</i>	<i>meih</i>	<i>fardik</i>	<i>ayi</i>	<i>assaujed</i>	<i>sarama</i>	<i>assamhei</i>	<i>šerik</i>	<i>tammen</i>
Lucas	<i>gal</i>	<i>maloo</i>	<i>maiee</i>	<i>ferdik</i>	<i>ai</i>	<i>sarger</i>	<i>saram</i>	<i>sermai</i>	<i>zerdik</i>	<i>tarme</i>
Almkvist	<i>(én)gāl</i> m. <i>(én)gāt</i> f.	<i>málo</i>	<i>máhi</i> <i>mehèi</i> <i>meháj</i>	<i>fáđig</i> <i>fèdig</i>	<i>ej(-b)</i> <i>aj</i>	<i>ásagur</i>	<i>ásaramā</i>	<i>ásimhei</i>	<i>ášedük</i>	<i>támen</i>
Watson	<i>kal</i>	<i>maluba</i>	<i>mahib</i>	<i>fadik</i>	<i>aibe</i>	<i>assakor</i>	<i>assarmab</i>	<i>asemhèi</i>	<i>ašadük</i>	<i>temin</i>
Reinisch	<i>gāl/r,</i> <i>ngāl</i> <i>engal/r</i>	<i>málo;</i> cf. <i>málho</i> Zweiheit	<i>maháy</i> <i>meháy</i> <i>emháy</i>	<i>fađig</i> BA <i>farig</i>	<i>ay, äy</i>	<i>asagür</i> <i>asagüer</i>	<i>asaráma</i>	<i>asemháy</i> <i>asumháy</i>	<i>aššađig</i> <i>ašodđeg</i>	<i>támin</i> <i>tamún</i>
Roper	<i>gāl</i> m. <i>gāt</i> f.	<i>mále</i> <i>málo-b,-t</i>	<i>mähèi</i> <i>-b,-t</i>	<i>fáđig,</i> <i>-t</i>	<i>ei</i> <i>-b,-t</i>	<i>aságwir,</i> <i>asagur,-t</i>	<i>asaráma</i> <i>-b,-t</i>	<i>asimhèi</i> <i>-b,-t</i>	<i>aššađig,</i> <i>-t</i>	<i>támin,</i> <i>-t</i>
Hudson	<i>ngaál</i>	<i>mhaloo-</i> <i>-b</i>	<i>mhày</i>	<i>fađig</i>	<i>ʔáy</i>	<i>ʔasagwír</i>	<i>ʔasaramaa-</i> <i>-b</i>	<i>ʔasamháy</i>	<i>ʔaššađig</i>	<i>tamín</i>
Thelwall	<i>gaali</i>	<i>malooba</i>	<i>mhaiba</i>	<i>fađiga</i>	<i>aiba</i>	<i>asagwira</i>	<i>asaramaaba</i>	<i>assumhaiba</i>	<i>aššađiga</i>	<i>tamina</i>
Wedekind	<i>gáal</i> <i>gáat</i>	<i>máloob</i> <i>máloot</i>	<i>mháy</i> <i>mháy</i>	<i>fađig</i> <i>fađigt</i>	<i>áy</i> <i>áyt</i>	<i>aságwir</i> <i>asagwitt</i>	<i>asarámaab</i> <i>asarámaat</i>	<i>asúmhay</i> <i>asúmhayt</i>	<i>aššađig</i> <i>aššađigt</i>	<i>támin</i> <i>támint</i>
Vanhove	<i>ga:l</i>	<i>'male</i>	<i>mhe:j</i>	<i>fađig</i>	<i>e:j</i>	<i>a'sag'wir</i>	<i>asa:'rama</i>	<i>asi'mhe:j</i>	<i>aš'šadig</i>	<i>'tamin</i>

source	20	30	40	50	60	70	80	90	100	1000
Kremer	<i>tagu</i>	<i>mhai</i> <i>tamu</i>	<i>fađdeg</i> <i>tamu</i>	<i>ajib</i> <i>tamu</i>	<i>assogr</i> <i>tamu</i>	<i>assaráma</i> <i>tamu</i>	<i>assemhai</i> <i>tamu</i>	<i>ašodđeg</i> <i>tamu</i>	<i>šeb</i>	<i>liff</i>
Lucas	<i>targou</i>	<i>maitoun</i>	<i>ferdiktoun</i>	<i>aitoun</i>	<i>saijertoun</i>				<i>šilo</i>	<i>taminah</i>
Almkvist	<i>tagúg</i>	<i>mehèi-</i> <i>tamún</i>	<i>fáđig-</i> <i>tamún</i>	<i>éj-</i> <i>tamún</i>	<i>ásagur-</i> <i>tamún</i>	<i>asáramā-</i> <i>tamún</i>	<i>ásimhei-</i> <i>tamún</i>	<i>ášedük-</i> <i>tamún</i>	<i>še (šēb,</i> <i>šēwo)</i>	<i>liff</i>
Watson	<i>tekuk</i>			<i>eitamun</i>					<i>šēb</i>	
Reinisch	<i>t/dagúg</i>	<i>meháy</i> <i>tamún</i>	<i>fađig</i> <i>tamún</i>	<i>ay</i> <i>tamún</i>	<i>ásá-gür</i> <i>tamún</i>	<i>ása-ráma</i> <i>tamún</i>	<i>as-umháy</i> <i>tamún</i>	<i>aš-šadig</i> <i>tamún</i>	<i>šē</i>	<i>tamín še</i> or <i>(el)lif</i>

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source	20	30	40	50	60	70	80	90	100	1000
Roper	<i>tágug,-t</i> <i>taggw</i>	<i>məhéi-</i> <i>tamun,-t</i>	<i>fáđig-</i> <i>tamun,-t</i>	<i>éi-</i> <i>tamun,-t</i>	<i>aságwir-</i> <i>tamun,-t</i>	<i>asaráma-</i> <i>tamun,-t</i>	<i>asimhéi-</i> <i>tamun,-t</i>	<i>aššáđig-</i> <i>tamun,-t</i>	<i>šé</i>	<i>támin šé</i> or (<i>á</i>) <i>lif</i>
Hudson ^B	<i>tagūg</i>		<i>fáđig</i> <i>tamūn</i>		<i>asagwir</i> <i>tamun</i>			<i>ašadig</i> <i>tamun</i>	<i>šeb</i>	
Thelwall	<i>taguuga</i>	<i>mhai</i> <i>tamuuni</i>	<i>fáđik</i> <i>tamuuni</i>	<i>ai</i> <i>tamuuni</i>	<i>asagwir</i> <i>tamuun</i>	<i>asarama</i> <i>tamuun</i>	<i>asumhai</i> <i>tamuun</i>	<i>aššadig</i> <i>tamuun</i>	<i>šeebi</i>	<i>alif</i>
Wede-kind	<i>tagwúugw</i> <i>tagwúugwt</i>	<i>mháy</i> <i>támun/t</i>	<i>fáđig</i> <i>támun/t</i>	<i>áy</i> <i>támun/t</i>	<i>asagwir</i> <i>támun/t</i>	<i>asaramá</i> <i>támun/t</i>	<i>asumháy</i> <i>támun/t</i>	<i>aššadig</i> <i>támun/t</i>	<i>šéeb</i>	<i>á</i> <i>lif</i>
Vanhove	<i>'taqug</i>	<i>'mhe:j-</i> <i>tamun</i>	<i>'fáđig-</i> <i>tamun</i>	<i>'e:j-</i> <i>tamun</i>	<i>a'sag'wir-</i> <i>tamun</i>	<i>asa:'rama-</i> <i>tamun</i>	<i>asi'mhe:j-</i> <i>tamun</i>	<i>aʃ'fáđig-</i> <i>tamun</i>	<i>fe:</i>	<i>'alif</i> < Arabic

Note: BA Beni Amer.

II. Central Cushitic = Agaw

source	1	2	3	4	5	6	7	8	9	10
Bilin ₁	<i>lax^w / lari</i>	<i>ləŋa</i>	<i>səx^wa</i>	<i>sədʒa</i>	<i>ʔank^wa</i>	<i>wəлта</i>	<i>ləŋəta</i>	<i>səx^wəta</i>	<i>səssa</i>	<i>ʃika</i>
Bilin ₂	<i>lah</i>	<i>lenga</i>	<i>segua</i>	<i>segia</i>	<i>amkua</i>	<i>walta</i>	<i>lengat</i>	<i>seguata</i>	<i>zissa</i>	<i>šika</i>
Xamtanga	<i>lāw / lay</i>	<i>liŋa</i>	<i>ʃáq^wa</i>	<i>síza</i>	<i>ák^wa</i>	<i>wáлта</i>	<i>láŋta</i>	<i>sówta</i>	<i>s'ájɬ'a</i>	<i>s'ík'a</i>
Xamta	<i>lowā</i>	<i>linā</i>	<i>šoqā</i>	<i>sizā</i>	<i>akuā</i>	<i>waltā</i>	<i>lantā</i>	<i>šowtā</i>	<i>šayčya</i>	<i>šeqā</i>
Qimant	<i>laya /</i> <i>läy</i>	<i>liŋa</i>	<i>siy^wa</i>	<i>sədʒa</i> <i>sájja^{Sasse}</i>	<i>ank^wa</i>	<i>wəлта</i>	<i>ləŋəta</i>	<i>səy^wəta</i>	<i>səssa</i>	<i>šika</i>
Kařliña	<i>lewa</i>	<i>liŋa</i>	<i>šek^wa</i>	<i>sāza</i>	<i>a(n)k^wa</i>	<i>walt'a</i>	<i>lāŋāt'a</i>	<i>soqāt'a</i>	<i>s'ayč'a</i>	<i>s'ək'a</i>
Qwara	<i>lawa</i>	<i>liŋa</i>	<i>sih^wa/siwa</i>	<i>zāja</i>	<i>ank^wa</i>	<i>wáлта</i>	<i>lāŋata</i>	<i>sāy^wāta</i> <i>sāwāta</i>	<i>sāssa</i>	<i>šəka</i>
Falaša ₁	<i>lāwa</i>	<i>lēgna</i>	<i>sēwa</i>	<i>sātsha</i>	<i>anqua</i>	<i>wolta</i>	<i>langeta</i>	<i>sorota</i>	<i>sesa</i>	<i>šeka</i>
Falaša ₂	<i>leog</i> (<i>kawinto</i> first)	<i>liŋa</i>	<i>šokwa</i>	<i>sedza</i>	<i>a(n)kwa</i>	<i>walta</i>	<i>liñata</i>	<i>šokwata</i>	<i>sessa</i>	<i>tsika</i>
Awngi	<i>lácú</i> <i>impil</i>	<i>lāŋa</i>	<i>ʃúga</i>	<i>sedza</i>	<i>áŋk^wa</i>	<i>wilta</i>	<i>lāŋéta</i>	<i>sócéta</i>	<i>sésta</i>	<i>tsikka</i>
Awiya of Danghela	<i>lāgú</i> <i>empèl</i>	<i>lanā</i>	<i>šó'a</i>			<i>wáltā</i>	<i>lanatā</i>	<i>so'atā</i>		<i>šeqā</i>
Kunfāl	<i>law, lahu</i>	<i>lama</i>	<i>šāwa</i>	<i>séza</i>	<i>ank^wa</i>	<i>walta</i>	<i>lanata</i>	<i>sāwata</i>	<i>sésta</i>	<i>teka</i>
p-Agaw	<i>*la-y^w m.</i> <i>*la-ti f.</i>	<i>*lāŋa /</i> <i>*laŋa</i>	<i>*sáy^wa /</i> <i>*səy^wa</i>	<i>*sāz(ʒ)a</i>	<i>*ʔank^wa</i>	<i>*wáлта</i>	<i>*lāŋā-/</i> <i>*lāŋā-tta</i>	<i>*sāy^wātta</i>	<i>*sāzta ></i> <i>*sācta</i>	<i>*cəka</i>

source	20	30	40	50	60	70	80	90	100	1000
Bilin ₁	<i>ləjərəjɪn</i>	<i>sax^wə-rəjɪn</i>	<i>sədʒə-rəjɪn</i>	<i>ʔank^{wi}-rəjɪn</i>	<i>wəlti-rəjɪn</i>	<i>ləjət-rəjɪn</i>	<i>sax^wət-rəjɪn</i>	<i>səssi-rəjɪn</i>	<i>lix</i>	<i>l̥iħ</i> < Amh.
Bilin ₂	<i>lenga-rengen</i>	<i>segua-rengen</i>							<i>lih</i>	
Xamtanga	<i>ləriɲ / lərin</i>	<i>səwi-rɪjɪn</i>	<i>árba</i> < Arab.	<i>ák^{wi}-rɪjɪn</i>	<i>waltə-rɪjɪn</i>	<i>laytə-rɪjɪn</i>	<i>səwtə-rɪjɪn</i>	<i>s'ajf'ə-rɪjɪn</i>	<i>la</i>	<i>f̥ix</i> < Amh.
Qimant	<i>ləjəjɪj</i>	<i>səj^wəjɪj</i>	<i>arba</i> < Arab.	<i>ank^{wi}jɪj</i>	<i>wəltɪjɪj</i>	<i>ləjətɪjɪj</i>	<i>səj^wətɪjɪj</i>	<i>səssiɪj</i>	<i>liɪj</i>	<i>f̥i</i> < Amh.
Kaĩliĩna										
Falaša ₂	<i>liĩniĩ</i>	<i>šokwiĩ</i>	<i>sedziĩ</i>	<i>ankwiĩ</i>	<i>waltiĩ</i>	<i>liĩnatiĩ</i>	<i>šokwatiĩ</i>	<i>sessiĩ</i>	<i>tšikiĩ</i>	<i>š̥iħ</i>
Awngi	<i>laɲárɲa</i>	<i>fúçátšká</i>	<i>sedzítšká</i>	<i>ənj^wátšká</i>	<i>wiltítšká</i>	<i>laɲítítšká</i>	<i>sógítítšká</i>	<i>sístítšká</i>	<i>leg</i>	<i>f̥áj</i> < Amh.
Kunfāl	<i>laɲareɲ</i>	<i>šewateka</i>	<i>sajátuka</i>	<i>ang^wašáka</i>	<i>waltétseka</i>	<i>laɲtašeka</i>	<i>sāwatéšeka</i>	<i>séstéšeka</i>	<i>liɲ</i>	
p-Agaw North South	<i>*ləɲā- -tāɲən</i>	<i>*sāy^wa ~ -tāɲən / *sāy^wa- -cəka</i>	<i>*sāzā- -tāɲən / -cəka</i>	<i>*ʔank^wə- -tāɲən / -cəka</i>	<i>*wāltV- -tāɲən / -cəka</i>	<i>*ləɲāttə- ~ *ləɲāttə- -tāɲən / -cəka</i>	<i>*sāy^wättV ~ *sāy^wättV- -tāɲən / -cəka</i>	<i>*sāctə- -tāɲən / -cəka</i>	<i>*liɲ ~ *lay</i>	<i>*sax-i</i>

III. East Cushitic

1. Afar-Saho

source	1	2	3	4	5	6	7	8	9	10
Afar	<i>enēki / iniki</i>	<i>nammäya</i>	<i>sidōhu / sidōhooyu</i>	<i>ferēyi / fereyēyi</i>	<i>konōyu / konooyu</i>	<i>lehēyi / leheeyi</i>	<i>malhiini</i>	<i>bahaàra</i>	<i>sagaàla</i>	<i>tàbana</i>
Saho	<i>inik</i>	<i>lam:a</i>	<i>adoh</i>	<i>afar</i>	<i>ko:n</i>	<i>lih</i>	<i>malhin</i>	<i>baħar</i>	<i>sagal</i>	<i>taman</i>

source	20	30	40	50	60	70	80	90	100	1000
Afar	<i>labaatanna</i>	<i>soddōmu / sidihā-tabana</i>	<i>moroootōmu / affarā-tabana</i>	<i>kontōmu / koonā-tabana</i>	<i>laħtāma / lihā-tabana</i>	<i>malhinā-tabana</i>	<i>bahrā-tabana</i>	<i>saglā-tabana</i>	<i>bōolu</i>	<i>āf̥i</i> < Sem.
Saho	<i>lama:tan:a</i>	<i>sod:om / saz:am</i>	<i>maro:tom</i>	<i>kontom</i>	<i>laħtam</i>	<i>malhintomon</i>	<i>boħortomon</i>	<i>sagala taman / bo:l sagal</i>	<i>bo:l</i>	<i>š̥i:ħ</i> < Amh.

2. Somaloid

source	1	2	3	4	5	6	7	8	9	10
Somali	<i>ków</i>	<i>labá</i>	<i>sáddeh</i>	<i>áfár</i>	<i>šan</i>	<i>lih</i>	<i>toddobá</i>	<i>siddèed</i>	<i>sagaal</i>	<i>toban</i>
Tunni	<i>ków</i>	<i>lámma</i>	<i>siddi?</i>	<i>áfár</i>	<i>šan</i>	<i>li?</i>	<i>toddóbo</i>	<i>siyéed</i>	<i>sagáal</i>	<i>tómon</i>
Garre	<i>kow</i>	<i>lamma</i>	<i>siddeh</i>	<i>afar</i>	<i>šan</i>	<i>li?</i>	<i>toddobe</i>	<i>siyeed</i>	<i>sagaal</i>	<i>tommon</i>
Boni	<i>kóów</i> <i>hál-ó/-só</i>	<i>lába</i>	<i>siddèh</i>	<i>áfár</i>	<i>šan</i>	<i>lih</i>	<i>toddóu</i>	<i>siyyèed</i>	<i>saagal</i>	<i>tammán</i>
Jiddu ₁	<i>kow/koo</i>	<i>lámma</i>	<i>siddi'</i> ⁹	<i>áfár</i>	<i>šay</i>	<i>lih/li'</i>	<i>tódoba</i> <i>saybe</i> ^F	<i>si'éed</i>	<i>sagáál</i>	<i>tumónj</i>
Jiddu ₂	<i>kóow</i> <i>mé'e/</i> <i>médi</i> <i>hallin</i>	<i>lammi</i>	<i>seyi</i>	<i>afár</i>	<i>šan</i>	<i>li'</i>	<i>saaybi</i>	<i>siyiid</i>	<i>sagáal</i>	<i>tamán</i>
Rendille	<i>kô:w</i>	<i>lám:a</i>	<i>séj:aḥ</i>	<i>áf:ar</i>	<i>tʃán</i>	<i>lih</i>	<i>te:bá</i>	<i>sij:ét</i>	<i>sa:gá:l</i>	<i>tomón</i>
Bayso	<i>koo m.</i> <i>too f.</i>	<i>láama</i>	<i>sédi</i>	<i>áfár</i>	<i>ken</i>	<i>le</i>	<i>todobá</i>	<i>siddéd</i>	<i>sáagaal</i>	<i>tómon</i>
p-Sam	* <i>ków</i>	* <i>lámma</i>	* <i>sizzàh</i>	* <i>áfār</i>	* <i>can</i>	* <i>lih</i>	* <i>tVzoba</i>	* <i>sizy'èèt</i>	* <i>saagal</i>	* <i>tomm'an</i>

source	20	30	40	50	60	70	80	90	100	1000
Somali	<i>labaatan</i>	<i>sóddon</i>	<i>áfartan</i>	<i>kónton</i>	<i>lihdan</i>	<i>toddobáatan</i>	<i>siddéetan</i>	<i>sagáaşan</i>	<i>boqol</i>	<i>kún</i>
Tunni	<i>labaatón</i>	<i>sóddon</i>	<i>áfartón</i>	<i>kóntón</i>	<i>lihón</i>	<i>toddobáatan</i>	<i>siyyéetan</i>	<i>sagáaşan</i>	<i>boqol</i>	<i>kún</i>
Garre	<i>labaatan</i>	<i>soddon</i>	<i>afartan</i>	<i>xontón</i>	<i>lihdin</i>	<i>toddobatan</i>	<i>siyyeetan</i>	<i>sagaaşan</i>	<i>boqol</i>	<i>kun</i>
Boni	<i>labaatán</i>	<i>sóddon</i>	<i>afartan</i>	<i>kónton</i>	<i>lihidan</i>	<i>toddobáatan</i>	<i>siddéetan</i>	<i>saagáaşan</i>	<i>bog'ól</i>	<i>bog'ól</i> <i>iyo</i> <i>tamman</i>
Jiddu ₂	<i>lawaatim</i>	<i>soddóm</i>	<i>afartém</i>	<i>kontóm</i>	<i>lihdim</i>	<i>todowaatim</i> <i>saaybin</i>	<i>siyitím</i>	<i>sagaasím</i>	<i>ba'ál</i>	<i>kún</i>
Rendille	<i>tomón</i> <i>lám:a</i>	<i>tomón</i> <i>séj:aḥ</i>	<i>tomón</i> <i>áf:ar</i>	<i>tomón</i> <i>tʃán</i>	<i>tomón</i> <i>lih</i>	<i>tomón te:bá</i>	<i>tomón</i> <i>sij:ét</i>	<i>tomón</i> <i>sa:gá:l</i>	<i>kúf /</i> <i>kúqó:</i>	<i>élif /</i> <i>élifó:</i> < Sw.
Bayso	<i>lamaatán</i>	<i>sóndom</i>	<i>afartam</i>	<i>kóntom</i>	<i>lóotom</i>	<i>todobáatan</i>	<i>siddóotam</i>	<i>saagáaltam</i>	<i>bool</i>	<i>kúma</i>
p-Sam (Heine)	* <i>lámma-</i> <i>tom</i>	* <i>sózzom</i> < * <i>sizzom</i>	* <i>áfar-</i> <i>tom</i>	* <i>kón-</i> <i>tom</i>	* <i>lih-tom</i>	* <i>tVzoba-</i> <i>tom</i>	* <i>sizy'èet-</i> <i>tom</i>	* <i>saagal-</i> <i>tom</i>	* <i>boqol</i>	

3. Galaboid

source	1	2	3	4	5	6	7	8	9	10
Arbore ₁	<i>tokkó</i> m. <i>takká</i> f.	<i>laamá</i>	<i>sezzé</i>	<i>ʔafúr</i>	<i>tjénn</i>	<i>djih</i>	<i>tuzba</i> <i>'tu:zba^w</i>	<i>suyé</i>	<i>saagald</i> <i>'sagal^w</i>	<i>tommopd</i> <i>'tɔm:ɔn^w</i>
Arbore ₂	<i>tokodu</i>	<i>sada</i>	<i>seseda</i>	<i>afura</i>	<i>šenne</i>	<i>ghee</i>	<i>tazbudda</i>	<i>suēda</i>	<i>saqal</i>	<i>tomon</i>
Elmolo	<i>t'óko</i> / <i>t'áka</i>	<i>l'áama</i>	<i>séépe</i> <i>séébe^{AHeine}</i>	<i>áfur</i>	<i>kên, cên</i>	<i>yii</i>	<i>tíipa,</i> <i>s'ápa</i>	<i>fúe</i>	<i>s'áakal</i>	<i>t'ómon</i>
Dasaneč ₁	<i>tigidi</i> adj. <i>tàqáč</i> crd. <i>ʔër</i> ord.	<i>nà:mà</i>	<i>sèqè</i>	<i>ʔàfòr</i>	<i>tjèn</i>	<i>li^h</i>	<i>ti:jè</i>	<i>sii⁷</i>	<i>sà:l</i>	<i>tòmòn</i>
Dasaneč ₂	<i>tikillé</i>	<i>namà</i>	<i>seddi</i>	<i>afur</i>	<i>čen</i>	<i>lè</i>	<i>tihia</i>	<i>sièt</i>	<i>sall</i>	<i>tommòn</i>

source	20	30	40	50	60	70	80	90	100	1000
Arbore ₁	<i>tommóm</i> <i>laama</i>	<i>tommóm</i> <i>sezze</i>	<i>tommóm</i> <i>ʔafur</i>	<i>tommóm</i> <i>tje(n)</i>	<i>tommóm</i> <i>djih</i>	<i>tommóm</i> <i>tuzba</i>	<i>tommóm</i> <i>suye</i>	<i>tommóm</i> <i>saagal(?)</i>	<i>dibbá</i> / <i>gi'b.a^w</i>	
Elmolo	<i>t'ómon</i> <i>l'áama</i>	<i>t'ómon</i> <i>séépe</i>	<i>t'ómon</i> <i>'áfur</i>	<i>kên / cên</i> <i>t'ómon</i>	<i>yii</i> <i>t'ómon</i>	<i>tíipa</i> / <i>s'ápa</i> <i>t'ómon</i>	<i>fúe</i> <i>t'ómon</i>	<i>s'áakal</i> <i>t'ómon</i>		
Dasaneč ₁	<i>tòmònà:m</i> <i>nà:mà</i>	<i>tòmònà:m</i> <i>sèqè</i>	<i>tòmònà:m</i> <i>ʔàfòr</i>	<i>tòmònà:m</i> <i>tjèn</i>	<i>tòmònà:m</i> <i>li^h</i>	<i>tòmònà:m</i> <i>ti:jè</i>	<i>tòmònà:m</i> <i>sii⁷</i>	<i>tòmònà:m</i> <i>sà:l</i>	<i>kó-ti</i> <i>tigidi</i>	<i>fi:</i> <i>tigidi</i> < Amh.

4. Oromoid

source	1	2	3	4	5	6	7	8	9	10
WCOromo	<i>tokko</i>	<i>lama</i>	<i>sadii</i>	<i>afur</i>	<i>fani</i>	<i>jaha</i>	<i>tolba</i>	<i>saddet</i>	<i>sagal</i>	<i>kuḍan</i>
Orma	<i>tokkō</i>	<i>lamā</i>	<i>sadi</i>	<i>afurī</i>	<i>fanī</i>	<i>ja</i>	<i>tolbā</i>	<i>saddeetī</i>	<i>sagalī</i>	<i>kuḍenī</i>
D'irayta ₁ m. f.	<i>fokko(ha)</i> <i>fakka(ha)</i>	<i>lakki</i>	<i>halpatta</i>	<i>afur</i>	<i>hen</i>	<i>lehi</i>	<i>tappa</i>	<i>lakkušeti</i>	<i>tsinqoota</i>	<i>hunda</i>
D'irayta ₂	<i>šokoa</i>	<i>lakke</i>	<i>halbatta</i>	<i>afure</i>	<i>hene</i>	<i>lehe</i>	<i>tappa</i>	<i>lakkusedda</i> = 'second 3'?	<i>zinkota</i>	<i>hunda</i>
Muussiyē	<i>šukkuha</i>	<i>taammu</i>	<i>halpatta</i>	<i>afurii</i>	<i>henii</i>	<i>lehi</i>	<i>seppa</i>	<i>saatteti</i>	<i>šinkoca</i>	<i>hunḍa</i>
Konso	<i>takka</i>	<i>lakki</i>	<i>sessā</i>	<i>afur</i>	<i>ken</i>	<i>lehi</i>	<i>tappa</i>	<i>sette</i>	<i>sagal</i>	<i>kuḍan</i>

source	20	30	40	50	60	70	80	90	100	1000
WCOromo	<i>digdama</i>	<i>soddoma</i>	<i>afurtama</i>	<i>fantama</i>	<i>jahatama</i>	<i>tolbatama</i>	<i>saddetama</i>	<i>sagaltama</i>	<i>ḍibba tokko</i>	<i>kuma</i>
Orma	<i>illamaanī</i>	<i>soddomā</i>	<i>afurtamā</i>	<i>fantamā</i>	<i>jaatamā</i>	<i>tolbaatamā</i>	<i>saddeetamā</i>	<i>sagaltamā</i>	<i>ḍibbā tokkō</i>	<i>alfu tokkō</i> < Sw.
D'irayta ₁	<i>hunda lakki</i>	<i>hunda halpatta</i>	<i>hunda afur</i>	<i>hunda hen</i>	<i>hunda lehi</i>	<i>hunda tappa</i>	<i>hunda lakkuṣeti</i>	<i>hunda tsinqooṭa</i>	<i>tseeta</i>	<i>kuma</i> < Or.
D'irayta ₂	<i>hunda lakke</i>	<i>hunda halbatta</i>							<i>theeta /tēta/</i>	
Konso	<i>kuḍan lakki</i>	<i>kuḍa sessa</i>	<i>kuḍa afur</i>	<i>kuḍa ken</i>	<i>kuḍa lehi</i>	<i>kuḍa tappa</i>	<i>kuḍa sette</i>	<i>kuḍa sagal</i>	<i>ḍippa (takka)</i>	<i>kuma</i>

5. Dullay

source	1	2	3	4	5	6	7	8	9	10
Tsamai	<i>do:k:o</i>	<i>la:k:i</i>	<i>ze:h</i>	<i>salaḥ</i>	<i>χobin</i>	<i>tab:en</i>	<i>tah:an</i>	<i>sez:en</i>	<i>gol:an</i>	<i>kuyko</i>
Dume	<i>dōoko</i>	<i>lahke</i>	<i>iza</i>	<i>salla</i>	<i>koubin</i>	<i>tabbe</i>	<i>tomme</i>	<i>doddin</i>	<i>gollan</i>	<i>kungo</i>
Kule	<i>doko</i>	<i>laki</i>	<i>sekh</i>	<i>salakh</i>	<i>hobin</i>	<i>tebbi</i>	<i>tahàn</i>	<i>sezze</i>	<i>golàn</i>	<i>konko</i>
Harso	<i>tóʔo</i>	<i>lakki, lam(m)e, lamay</i>	<i>ezzaḥ, siséḥ</i>	<i>salaḥ</i>	<i>xúpin</i>	<i>cappi</i>	<i>caḥḥan</i>	<i>sásse / sésse</i>	<i>kollan</i>	<i>húdd'an</i>
Dobase	<i>tóʔo</i>	<i>lakki ~ lam(m)e</i>	<i>siseḥ</i>	<i>salaḥ</i>	<i>xupin</i>	<i>cappi</i>	<i>caḥḥan</i>	<i>sásse</i>	<i>kollan</i>	<i>húddán</i>
Gowaze	<i>toon</i>	<i>lammai</i>	<i>sisé</i>	<i>salaa</i>	<i>koubin</i>	<i>čepi</i>	<i>čahanne</i>	<i>sesse</i>	<i>kollan</i>	<i>kuddan</i>
Gawwada	<i>tóʔon</i>	<i>lákke</i>	<i>izzaḥ</i>	<i>sálaḥ</i>	<i>xúpin</i>	<i>tappi</i>	<i>táʔan</i>	<i>sétten</i>	<i>kóllan</i>	<i>húddan</i>
Gollango	<i>tóʔo</i>	<i>lakki</i>	<i>izzaḥ</i>	<i>salaḥ</i>	<i>hupin</i>	<i>tappi</i>	<i>taḥḥa</i>	<i>sétte</i>	<i>kolla</i>	<i>húdda</i>

source	20	30	40	50	60	70	80	90	100	1000
Tsamai	<i>q'awko mume = man -entire</i>	<i>q'awko mume ba bago kuyko (bago = mouth)</i>	<i>q'awko lak:i / gore lak:i (gore = people)</i>	<i>q'awko lak:i ba bago kuyko</i>	<i>q'awko ze:h / gore ze:h</i>	<i>q'awko ze:h ba bago kuyko</i>	<i>q'awko salaḥ / gore salaḥ</i>	<i>q'awko salaḥ ba bago kuyko</i>	<i>q'awko xobin / gore xobin</i>	<i>ḥi do:t:e ḥi < Amharic</i>
Harso - Dobase	<i>húḍanko lákki</i>	<i>húḍanko ezzaḥ</i>	<i>húḍanko salaḥ</i>	<i>húḍanko xúpin</i>	<i>húḍanko cappi</i>	<i>húḍanko caḥḥan</i>	<i>húḍanko sásse</i>	<i>húḍanko kollan</i>	<i>ḍippá</i>	<i>ḥaa</i>
Gawwada	<i>húḍanko lákke</i>	<i>húḍanko izzaḥ</i>	<i>húḍanko sálaḥ</i>	<i>húḍanko xúpin</i>	<i>húḍanko tappi</i>	<i>húḍanko táʔan</i>	<i>húḍanko sétten</i>	<i>húḍanko kóllan</i>	<i>ḍippa</i>	<i>kúma</i>
Gollango	<i>húḍanko lákki</i>								<i>ḍippá</i>	<i>kímá</i>

6. Highland East Cushitic

source	1	2	3	4	5	6	7	8	9	10
Sidamo	<i>mite</i>	<i>lame</i>	<i>sase</i>	<i>foole</i>	<i>onte</i>	<i>lee</i>	<i>lamala</i>	<i>sette</i>	<i>honse</i>	<i>tonne</i>
Hadiyya	<i>mato</i>	<i>lamo</i>	<i>saso</i>	<i>sooro</i>	<i>onto</i>	<i>loho</i>	<i>lamara</i>	<i>sadeento</i>	<i>honso</i>	<i>tommo</i>
Libido	<i>mato</i>	<i>lamo</i>	<i>saso</i>	<i>sooro</i>	<i>?onto</i>	<i>leho</i>	<i>lamara</i>	<i>sadeento</i>	<i>honso</i>	<i>tommo</i>
Tambaro	<i>metto</i>	<i>lamo</i>	<i>sass</i>	<i>sor</i>	<i>ont</i>	<i>lo</i>	<i>lamala</i>	<i>déséto</i>	<i>ontzo</i>	<i>torduma</i>
Gedeo	<i>mitte</i>	<i>lame</i>	<i>sase</i>	<i>šoole</i>	<i>onde</i>	<i>jaane</i>	<i>torbaane</i>	<i>saddeeta</i>	<i>sallane</i>	<i>tomme</i>
Alaba	<i>matú</i>	<i>lamú</i>	<i>sasú</i>	<i>ʃɔ:lú</i>	<i>?ontú</i>	<i>lehú</i>	<i>lamalá</i>	<i>hizze:tú</i>	<i>honsú</i>	<i>tɔnnsú</i>
Kambaata	<i>máto</i>	<i>lámo</i>	<i>sáso</i>	<i>fóolo</i>	<i>ónto</i>	<i>lého</i>	<i>lamála</i>	<i>hezzéeto</i>	<i>hónso</i>	<i>tordúma</i>
Burji ₁	<i>mičča</i>	<i>lama</i>	<i>fadia</i>	<i>foola</i>	<i>umutta</i>	<i>lia</i>	<i>lamala</i>	<i>hiditta</i>	<i>wonfa</i>	<i>tanna</i>
Burji ₂	<i>mičča</i>	<i>lám(m)a</i>	<i>fádia</i>	<i>fōla</i>	<i>umútta</i>	<i>lé'a</i>	<i>lámala</i>	<i>iditta</i>	<i>uónfa</i>	<i>tám'ena</i>
Burji ₃	<i>do'inki</i>	<i>lamàm</i>	<i>fadir (!)</i>	<i>fōla</i>	<i>umütt</i>	<i>eliyà</i>	<i>lamalà</i>	<i>idittà</i>	<i>wàmfa</i>	<i>tàmma</i>

source	20	30	40	50	60	70	80	90	100	1000
Sidamo	<i>lemoo</i>	<i>sajoo</i>	<i>foylloo</i>	<i>ontaa</i>	<i>leyaa</i>	<i>lamalaa</i>	<i>settaa</i>	<i>honsaa</i>	<i>tibbee</i>	<i>kume</i>
Hadiyya	<i>lamiyye</i>	<i>sade</i>	<i>sore</i>	<i>ontayye</i>	<i>lahayye</i>	<i>lamarayye</i>	<i>sadeentayye</i>	<i>honsayye</i>	<i>tibe</i>	<i>kuma</i>
Libido	<i>lamiyeeta</i>	<i>sadeta</i>	<i>soor-aayeta</i>	<i>?ont-aayeta</i>	<i>leh-aayeta</i>	<i>lamar-aayeta</i>	<i>sadeent-aayeta</i>	<i>hons-aayeta</i>	<i>tibbeta</i>	<i>kuma</i>
Gedeo	<i>diddama</i>	<i>soddama</i>	<i>afurtama</i>	<i>šantama</i>	<i>jaatama</i> <i>iyatama</i> <i>jyyatama</i>	<i>torbaa-tama</i>	<i>sadde(n)-tama</i>	<i>sagal-tama</i>	<i>dibba</i>	<i>kuma</i>
Alaba	<i>lamɔ:-dimá</i>	<i>sadzɔzú</i>	<i>šahilú < *šali-hú</i>	<i>?ontahú</i>	<i>lehahú</i>	<i>lamalahú</i>	<i>hizzeetahú</i>	<i>honsahú</i>	<i>tebbíta</i>	<i>(matú) fihá / (matú) kumíta</i>
Kambaata	<i>lam-oo-dúma</i>	<i>sadzɔz-aa-dúma</i>	<i>fool-aa-dúma</i>	<i>ont-aa-dúma</i>	<i>leh-aa-dúma</i>	<i>lamal-aa-dúma</i>	<i>hezzeett-aa-dúma</i>	<i>hons-aa-dúma</i>	<i>tibbíta</i>	<i>kumíta</i>
Burji ₁	<i>lama-ttanna</i>	<i>fadii-ttanna</i>	<i>foola-ttanna</i>	<i>umur-ttanna</i>	<i>lia-ttanna</i>	<i>lamala-ttanna</i>	<i>hidi-ttanna</i>	<i>wonfa-ttanna</i>	<i>čibba</i>	<i>(dèkk) kuma</i>
Burji ₂									<i>čibba</i>	<i>kuma</i>
Burji ₃									<i>abba</i>	

7. Yaaku

source	1	2	3	4	5	6	7	8	9	10
Heine	<i>wɛhɛ(t)</i>	<i>c'ɛ</i>	<i>xaat</i>	<i>ɕwen</i>	<i>xoopi</i>	<i>ilɛ́</i>	<i>tisi'bo'</i>	<i>siite'</i>	<i>saakal</i>	<i>qapon</i>
Hobley	<i>wēhet</i>	<i>chei</i>	<i>hāāt</i>	<i>shuen</i>	<i>hobi</i>					<i>(k)apūn</i>

source	20	30	40	50	60	70	80	90	100	1000
Heine	<i>te'ta'</i>									
Hobley									<i>teta</i>	

ΣIIIa. East Cushitic numerals: survey of the first decade

	Afar-Saho	Somaloid	Galaboid	Oromoid	Dullay	HEC	Yaaku
1a		So <i>mid</i>		Or <i>matummanu</i> totally		* <i>matto</i> / * <i>mitto</i>	
1b		* <i>koow</i>		* <i>kaww</i> - alone			
1c			* <i>tokko</i> m. * <i>takka</i> f.	* <i>tokko</i> m. * <i>takka</i> f.	* <i>toɔakko</i> m. * <i>toɔatte</i> f. Ts <i>dookko</i> / <i>dootte</i>		
1d	* <i>ɔiniki</i>					Bu * <i>do-ɔinki</i>	
1e							<i>weheto</i>
2a	* <i>lamm-ay</i>	* <i>lamma</i>	* <i>laama</i>	Or <i>lama</i> , Ko-Ḍi * <i>lamki</i> ; Mu <i>ta:m:u</i>	Do <i>lammay</i> * <i>lakk</i>	* <i>lamo</i>	
2b							<i>ɕɛ</i>
3a	* <i>sizahu</i> / * <i>ɔasahu</i>	* <i>sizzah</i>	* <i>seezzee</i>	* <i>šezziya</i>	* <i>ɔiszaḥ</i> , Do <i>siseḥ</i>	* <i>sadziya</i>	
3b				* <i>kalabatta</i>			
3c							<i>xaat</i>
4a	* <i>ɔaffara</i> * <i>far-ey</i>	* <i>ɔafar</i>	* <i>ɔafi(f)ur</i>	* <i>ɔafur</i>			
4b					* <i>salaḥ</i>	* <i>šoole</i>	<i>ɕwen</i>
5a	* <i>koon(-oy)</i>	* <i>kani</i> > * <i>can</i>	* <i>ken</i> > * <i>cen</i>	* <i>kani</i>			
5b					* <i>xubin</i>		<i>xoopi</i>
5c						* <i>ɔomute</i>	

	Afar-Saho	Somaloid	Galaboid	Oromoid	Dullay	HEC	Yaaku
6a	*liḥ(-ey)	*liḥ	*liḥ	*leḥi		*(?e)liho Bu _{CR} eliyà	ilé
6b					*tabbi[n]		
7a	*mal(V)- ḥiin				*ta[m]ḥan	*lamala	
7b		*tizoba	*tizb[ud]a	*tozba			tisibo'
8a	*baḥaar						
8b		*sizyeet	*sizeet/*suzzet	*sezzeeti	*sezzen	*sazzeento / *hiszeento	siite'
8c				Di _j lakkusedda = 'second three'?			
9a	*sagaal	*saagal	*saagal	*sagali		Ge *saglana	saakal
9b					*gollan		
9c						*honso	
10a	*taman	*tomman	*tommon	Or -tama		*tomne	
10b		(Re kúdf 100)	(= Ds kór i' tīgidi)	*kuḍan/*kurn-	*kuḍdan		
10c							qapon

ΣIIIb. East Cushitic numerals: survey of tens, "100", "1000"

20	*lamaa- -ta[m]na	*lamma-tom		ʔOrma illamaanī < *-lama-tamaan-		
				*dige-tama		
				*kuḍan-lamki	*kuḍan-ko lamki	
30a	*sod-tomu	*soz-tom		*sod-tama		
30b				*kuḍna-kalbatta *kuḍna-	*kuḍan-ko ʔiszaḥ	
40a	*maroo-tomu					
40b		*ʔafar-tom		*ʔafur-tama		
40c				*kuḍna-ʔafur	*kuḍan-ko salaḥ	
50a	*kon-tomu	*kon-tom		*ken-tama		
50b				*kuḍna-ken	*kuḍan-ko xubin	

60a	* <i>lah-tama</i>	* <i>lih-tam</i>		* <i>leha-tama</i>		
60b				* <i>kuḍna-lehi</i>	* <i>kuḍan-ko tabbi</i>	
70a	* <i>malhin-tomon</i>					
70b		* <i>tozzoba-tam</i>		* <i>tozba-tama</i>		
70c				* <i>kuḍna-tazba</i>	* <i>kuḍan-ko taḥhan</i>	
80a	* <i>baḥar-tomon</i>					
80b		* <i>sizzeet-tam</i>		* <i>saddee[ta]-tama</i>		
80c				* <i>kuḍna-sedde</i>	* <i>kuḍan-ko sezze</i>	
90a	* <i>sagala-taman</i>	* <i>saagal-tam</i>		* <i>sagal-tama</i>		
90b				* <i>kuḍna-sagal</i>	* <i>kuḍan-ko gollan</i>	
100a	* <i>boolu</i>	* <i>boqol</i>				
100b		Re <i>kúḍ / kúqó</i> ;	Ds <i>kó-ī tigiḍi</i>			
100c				* <i>ḍibba</i>	* <i>ḍibba</i>	* <i>ḍibba</i>
1000		* <i>kum</i>		* <i>kuma</i>		* <i>kuma</i>

Abbreviations: Arb Arbore, Bu Burji, CR Conti Rossini, Do Dobase, Ds Dasaneč, Ḍi Ḍirayta, Ge Gedeo, J Jensen apud Moreno, Ko Konso, Mu Muussiyee, Or Oromo, Re Rendille, So Somali, Ts Tsamay.

IV. Dahalo

source	1	2	3	4	5	6	7	8	9	10
Tosco	<i>vattúk^{ve} m.</i> <i>vatték^{ve} f.</i>	<i>liima</i>	<i>ḳaba</i>	<i>saśála</i>	<i>dáwätte</i>	<i>ṣita</i> < Sw.	<i>saba</i> < Sw.	<i>nane</i> < Sw.	<i>kenda /</i> <i>tis(i)a</i> < Sw.	<i>kumi</i> < Sw.

source	20	30	40	50	60	70	80	90	100	1000
Tosco	<i>ishirini</i>	<i>thelathini</i>	<i>arobaini</i>	<i>hamsini</i>	<i>ṣitini</i>	<i>ṣabini</i>	<i>themaini</i>	<i>tisini</i>	<i>mia</i>	<i>elfu</i>

V. South Cushitic

source	1	2	3	4	5	6	7	8	9	10
Iraqw ₁	<i>wák</i>	<i>tsár</i>	<i>tám</i>	<i>tsiyáh</i>	<i>kooán</i>	<i>laḥóó?</i>	<i>faaŋw</i>	<i>dakaát</i>	<i>gwaleél</i>	<i>mibaaŋw</i>
Iraqw ₂	<i>wāk</i>	<i>ts'ār</i>	<i>tām</i>	<i>ts'ia</i>	<i>ko'an</i>	<i>layč</i>	<i>fānku</i>	<i>dakāt</i>	<i>gwēlel</i>	<i>miba</i>

source	1	2	3	4	5	6	7	8	9	10
Gorowa	wak	ts'ar	tám	ts'iyáh	kooʔán	lahóoʔ	fāanq'w	dakáat	gwaléel / gweléel	mibaangw
Alagwa	wák	ndʒad	tam	ts'igah	kooʔan	lahooʔ	faanq'w	dakat	gwelen	mibi
Burunge ₁	leyiy / leē	tj'ada	tami	tj'igaħa	ko:ʔani	laħaʔu	faŋq'u	dagati	gweleli	mibi
Burunge ₂	(ε)leñ	tjādā	tāmī	tjigah	kʔani	lahu				mīpi
Kw'adza ₁	beʔa		tami	haka	koʔana	tisilimba		meliko	gweli	mibi
Kw'adza ₂	itāme	mbaéa	tami	háka	kóǎně	típa	tipafānku	lakádu	wéle	mīpi
Asa	kinde	hlam	samak	hak	mut					
Ma'a ₁	we	nnu	xai	hai	kooi	matisu				ixadu
Ma'a ₂	-wē	nñ -nu	χāi	hāi -hahi	kōi	tisa matizū	mfungate < Bantu	nane < Sw.	kenda < Sw.	χad̥ʒ

Cf. Central Bantu: Lower Pokomo (Kenya)

1	2	3	4	5	6	7	8	9	10
modza	mbii	ntahu	nee	nsano	ntandahu	nfungahe	nane	kenda	kumi

Source: Jon Hampshire 1993 <<http://lingweb.eva.mpg.de/numeral/>>

Cf. Mbugwe (Tanzania)

1	2	3	4	5	6	7	8	9	10
montí	(i)veré	sató	inja	(i)sánɔ	ánsáto	fúnkáté	náná	kɛ:ndá	(i)kómi

Source: Vera Wilhelmsen 2012 <<http://lingweb.eva.mpg.de/numeral/>>

source	20	30	40	50	60	70	80	90	100	1000
Iraqw ₁	mibeeri tsár	mibeeri tám	mibeeri tsiyáh	mibeeri kooán	mibeeri lahóoʔ	mibeeri faanʔw	mibeeri dakaát	mibeeri gwaleél	tsiiru / tsiruu wák	kumu / kumuu wák
Iraqw ₂	mbits'ar								ts'iru	kuma
Gorowa	mibeeri? ts'ár	mibeeri? tám	mibeeri? tsiyáh	mibeeri? kooán	mibeeri? lahóoʔ	mibeeri? faanʔw	mibeeri? dakaát	mibeeri? gwaleél	ts'iiru	kumu / ts'iirér mibaangw
Alagwa	mibeeri ndʒad	mibeeri tam	mibeeri ts'igah	mibeeri kooʔan	mibeeri lahooʔ	mibeeri faanq'w	mibeeri dakát	mibeeri gwelen	mibeeri mib'	mibeeri mib' ʔawaa mib'

source	20	30	40	50	60	70	80	90	100	1000
Burunge	<i>mibe:ri</i> <i>tj'ada</i>	<i>mibe:ri</i> <i>tami</i>	<i>mibe:ri</i> <i>tj'igaħa</i>	<i>mibe:ri</i> <i>ko:ʔani</i>	<i>mibe:ri</i> <i>laħaʔu</i>	<i>mibe:ri</i> <i>fajq'u</i>	<i>mibe:ri</i> <i>dagati</i>	<i>mibe:ri</i> <i>gweleli</i>	<i>mibe:ri</i> <i>mibi</i> / <i>mija:</i> < Sw.	<i>ʔeli:fu leē</i> < Sw.
Kw'adza ₂	<i>mípi</i> <i>ráligo</i> <i>mbaéa</i>	<i>mípi</i> <i>ráligo</i> <i>támi</i>						<i>mípi</i> <i>ráligo</i> <i>wéle</i>		
Ma'a ₂	<i>miħadu</i> / <i>miħadema</i> <i>minu</i>	<i>miħadu</i> / <i>miħadema</i> <i>miħai</i>	<i>miħadu</i> <i>mihai</i>	<i>miħadu</i> <i>mikōši</i>	<i>miħadu</i> / <i>miħadema</i> <i>matiz̥u</i>	<i>miħadu</i> <i>mfiungate</i>	<i>miħadu</i> <i>mnane</i>	<i>miħadu</i> <i>kēnda</i>	<i>miħadu</i> <i>gānā</i>	

ΣΑ. Survey of Cushitic numerals

	Beja	Agaw	East Cushitic	Dahalo	Iraqwoid	K'wadza	Asa	Ma'a
1a	<i>*(un-)gaal</i>							
1b		<i>*la-y^w</i> m. <i>*la-ti</i> f.						
1c			<i>*mat-/*mit-</i>					
1d	<i>kwo</i> unit	<i>*kaw-</i> be first	<i>*kaww-</i>					
1e			<i>*hal-</i>					
1f			<i>*tak-kaw/-ta(y)</i>					
1g			<i>*ʔiniki</i>					
1h			Yaaku <i>weheto</i>	<i>vattúk^{we}</i> m. <i>vatték^{we}</i> f.	<i>*wakV</i>			<i>we</i>
2a	<i>*mhaloo-/</i> <i>*malho</i>	<i>*lāja</i> / <i>*laja</i>	<i>*lamma(y)</i> Muussiye <i>taammu</i> < <i>*tl-ʔ</i>	<i>liima</i>			<i>hlam</i>	
2b			Arb ^{CR} <i>sada</i> Yaaku <i>çε</i>		<i>*tsada</i>			
3a	<i>*mhay</i>							
3b		<i>*säy^wa</i> / <i>*səy^wa</i>	<i>*sizħ-/*sazħ-</i> <i>*saz(zi)ħ-</i>					
3c			?Yaaku <i>xaat</i>					<i>xai</i>
3d				<i>k'aba</i>				

	Beja	Agaw	East Cushitic	Dahalo	Iraqwoid	K`wadza	Asa	Ma`a
3e					*tami	tami		
4a	*faḍig		*ḡaf(w)ar-/ *ḡafur-					
4b			*šalah-	saṣála				
4c		*säz(ʒ)a < *sägya			*tsigaḥa			
5a	*ḡay							
5b		*ḡank`va	*kani/*koni		*kooḡani	koḡana		kooi
5c			*xubin-					
5d			*`omut-				mut	
5e				dáwátte				
6a	*ḡasa-gwiL							
6b		*wāl-ta 1 +						
6c			*(He)liḥ- < *ḡ/hali-ḥVn- or *xubin- 1 + 5		*laḥooḡu			
6d			*tabbi[n] < *tak-xubin- 1+5			típa		
7a	*ḡasa- Lamaa-	*lājā-/ *lājā-tta 2 +	*mal(V)- /*tlam-ḥVn- 2 + 5					
7b			*tizbuda- < ?Mao *tiyaz- 3 + *(m)beṭṣ- 4					
7c					*faanqu	tipafánku		
8a	*ḡasa- mhay							
8b		*säy`ä-tta 3 +	*šiz[h]ent- < *šizḥ- 3 + *ḡomut- 5					
8c			*baḥaar-					
8d			*lamku-sizzV- 2 nd three			lakádu		
8e					*dakati			

	Beja	Agaw	East Cushitic	Dahalo	Iraqwoid	K`wadza	Asa	Ma`a
9a	* <i>ʔas-fadig</i>							
9b		* <i>säʒ-ta</i> 4 +						
9c	cf. *- <i>gaaL</i> 1		* <i>saagal(an)-</i> minus 1 ?					
9c/d	cf. *- <i>gaaL</i> 1		* <i>gollan</i>		* <i>gwaleeli</i>	<i>gweli</i>		
10a	* <i>tamin</i>	*- <i>täḥən</i>	* <i>tomman-</i>					
10b		* <i>cəka</i>						
10c			* <i>kuḏdan-/*kurn-</i>					<i>ixadu</i>
10d			Yaaku <i>qapon</i>					
10e					* <i>mibaangw</i>	<i>mibi</i>		
100a	* <i>šee</i>							
100b		* <i>liy ~ *lay</i>						
100c			* <i>boqol</i>					
100d			* <i>kuḏ-</i>					
100e			* <i>ḏibba</i>					
?100f			Dirayta <i>tseeta</i>		* <i>tsiiru</i>			
1000a		* <i>šax-i</i>						
1000b			* <i>kuma</i>		* <i>kuma</i>			

Set of cognates between the Cushitic numerals in Afroasiatic context

“one”

1.1. Beja **gaaL* “1”, **ʔasa-gwiL* “6” = *“(growing 1)” || ECush.: Arbore *gʷalaata* “other” (KS), besides Dullay **gollan-* “9” = *[10] minus 1”; further ECush. **sagal(an)-* “9” || SCush.: Iraqwoid **gwaleeli*, K`wadza *gweli* “9” = *“(10] minus 1”. Cf. NOm.: Zayse (Cerulli) *gillo* “alone”, and / or Zayse (Cerulli) *gillaa* “finger” || Ari *gil’a* “finger” (Lamberti 1988, 52) || ECush.: Afar-Saho (Reinisch) *giili* “thumb”.

1.2. Agaw **la-y* m., **la-ti* f. “1” reflect the gender distinctions indicated by **ku* & **ti* respectively. The first component **la-* may be related to Khamir (Reinisch) *illaa*, *ellaa*, *iellaa* “only, alone, solitude”, Xamtanga (Appleyard) *-llá* “alone” and perhaps Awngi (Reinisch) *eliwii* m., *eliti* f., (Appleyard) *əlliw* “other” and Burunge (SCush./Iraqwoid) (*ē*)*lēñ* “1”. The loss of the first syllable can be caused by influence of the following numeral **läḥa* “2”. Perhaps the same root appears in ECush. *(*ʔ/ha*)*liḥ-* “6” and SCush. **lahooḥu* “6”. But cf. also NS: Kunama *ella*, Iilit *ella* “1” (Bender) || CSud.: Balese-Obi *eli*, Moru *əlv* etc. “1” || Maban: Maba *illek*, pl. *illi* “that one”.

1.3. ECush. **mat-/*mit-* “1”, plus Oromo *mat-ummanu* “totally” || NOm.: Kafa (Cerulli) *mittoo* “sole”; Bench *mat*³, She *mātā* “1”. Further cf. CChad.: Mefe (Colombel) *məṭā* “1” || ?WChad.: Sura *mundo*, *mindon* “1” < **mVntV* < **mVtnV*? Cf. also NS: Gumuz: Sai *metam*, Sese *metá*, Gojjam *metaa(m)*, *mítal*, Kokit *meta* “1”.

1.4. ECush. **kaww-* “1” || Beja (Roper) *kwo* “unit” || Agaw: Qwara *kaw-*, *qaw-*, Khamir *qaw-* “to be in front of, be first” (Reinisch), Falaša *kawinto* “first” || ?NOM.: Dizoid **koy-* “1”. The following forms of pronominal origin are maybe related: Eg. *kjj*, pl. *kwj* “another” || Chad.: (West) Hausa *kowa* “every one, any one” || (Central) Margi *kú* “this one”.

1.5. ECush. **tak-ku* or **-kaw m.*, **tak-ti* or **-tay f.* “1”, Dullay **tabbi[n]* < **tak-xubin-* “1+5”, perhaps also Qwadza (SCush.) *típa* “6”; Agaw **cəka* “10” < **təka-təḡən* “1 x 10” (see §10.2) || NOm.: Kafa (Cerulli) *tokki/tok* “together with” || Chad.: (West) Hausa *ḡaya tak* “only one” || (Central) Daba *təkan*, Wandala *mtáakwé*, Zeghwana *tekwé*, muktele *təkwəlá*, Mofu *ték*, Gidar *taka*, Logone *tekuu* etc. “1”. Also NS: Nera (Reinisch) *toko/doko*; Fur (Meinhof) *tək*; Maba (Barth) *tek*, Kodoi *tek*; WNíl.: Dinka (*a*)*tok* “1”.

1.6. ECush. **hal-* “1” || Dahalo *holló* “and, with” || Iraqw *halahali* “sixth finger”; Ma’a *háli* “other” (Ehret 1980, 306). The same root, maybe, formed the numeral “6”: ECush. **(?/hi)lah-/*(?/ha)lih-* “6” and SCush. **lahooḡu* “6” (cf. §1.2.).

1.7. ECush.: Afar-Saho **ḡiniki* “1” is connected with (or borrowed from) Agaw: Bilin, Khamir *inkii* “all, each, unity”. Interesting is Burji (Conti Rossini) *do’inki* “1”.

1.8. Dahalo *vattúk^e m.*, *vatték^e f.* “1” is connected with *vaatte* “other” and Asa *wataka* “all”. Any relation to Yaaku *weheto* “1” is dark (for Zaborski the Yaaku numeral “1” is an adaptation of Arabic *wāḡid*).

1.9. Iraqwoid **wakV* “1”, in Burunge “other”, and Ma’a *wé* “1” resemble Karekare (WChad.) *wáiké* “each, all” and may be of pronominal origin. Alternatively, it is thinkable to connect them with Egyptian *wš(j)-w/-t* “1”, vocalized **wišyaw m.* / **wišit f.* (Vycichl) or **wúš(j)uw m.* / **wúšjū(w)^t f.* (Loprieno).

“two”

2.1. Agaw **lāḡa* / **laḡa* || ECush. **lamma(y)* || Dahalo *liima* || Asa *hlam* “2”, with parallel counterparts in Omotic: Ometo **lamḡa*; Gimira **nam*; Mao **numbo*; cf. Bambassi *kú-lùmbò* “7”; Aroid **lamma* “2”, represent the best preserved numeral common for both Cushitic and Omotic. There is a promising internal Cushitic etymology: (East) Oromo *elema* “index-finger” (da Thiene: “dito indice”) || Agaw: Damot *layeti* “thumb” || Beja *lumi* “thumb”. The semantic difference could be caused by the habit to name the numbers according to spans, here concretely “thumb – index-finger”. But there are several remaining questions: (i) Does Muussiye (Konsoid/ECush.) *taammu* “2” belong here? If it is the case, it implies the initial **t-*, perhaps compatible with Asa *hl-*. This unique example may be supported by Dullay **taḡhan* ~ **tamman* “7”, if it reflects **tamḡhan* < **tḡam-han-* “2+5”? (ii) Does Afar-Saho **mal(V)-ḡVn-* “7” represent the same compound with metathesis of the first component **mal(V)* < **lamma(y)* “2”? (iii) Similarly, an analogous metathesis could be realized in Beja Arteiga (Hudson) *mhaloo-* “2”, cf. *málho* “Zweiheit; zwischen” (Reinisch), while the unmetathesized form might be preserved in *?asa-ramaa* “7” (but Reinisch 1894, 9 derived the second component from the Beja verb *raam-* “to follow”, similarly as Latin *secundus* from *sequor*). On the other hand, the sequence *m...l* is also more widely attested: Qwadza *meliko* “8”, Asa *milek* “day after tomorrow”, Iraqw *male*, *maleḡale* “again” (Ehret 1980, 343).

2.2. Iraqwoid **tsada* “2” looks as isolated within Cushitic, perhaps with exception of two no less isolated ECush. forms, namely Yaaku *ce* “2” and Arbore (Conti Rossini) *sada* “2”. Related may be the most wide-spread Chadic form for the numeral “2”, reconstructible as **ciru*.

“three”

3.1. Beja **mhay* “3” is compatible with Egyptian *hmt(w)* m., *hmtt* f. “3”, vocalized as **hamtaw* & **hamtat* (Vycichl) or **hám̄t̄w* & **hám̄t̄t* (Schenkel), besides *hmnw* m., *hmnt* f. “8”, vocalized as **ḫamánaw*, **únaw* (Loprieno), and perhaps Guanche of Tenerife *amiat*, *amiet* “3”, *amiago* “30”, if the Beja numeral originated from a metathetical form **hmay* (details see Blažek 1999b, 229–30, 234–35). If the cluster **mh-* was original in Beja, it would be tempting to speculate about connection with Yaaku *xaat* “3” and Ma’a *xai* “3”, where the initial cluster would be simplified, or, in the case of its prefixal origin in Beja, *m-* did not appear at all.

3.2. Agaw **säy^wa* / **səy^wa* “3” and **säy^wä-tta* “8”, originally “3 plus”, stand isolated within Cushitic and Afroasiatic at all. Perhaps a NS source is thinkable, although not from historical neighbors, e.g. p-Kanuri **pasuku* “3” and **wusuku* “8” (Blažek 1999, 5, 8) or p-Nubian **təssik* “3” (Blažek 1999, 17), if the first syllable was reduced into **tsik*.

3.3. ECush. **šazh-/šizh-/šaz(z)ih-* “3” (Sasse 1976, 138) and **šiz[h]ent-* “8” < **šizh-* “3” + **(ə)mut-* “5” correspond maybe with Mao (NOM.) **(t)siyaz-* “3”, if it is not an ECush. loan. In Semitic, there is a promising cognate in the Akkadian length-unit *šizum*, *šizû* “Drittel-Elle” < **šihz/d-* or **šiz/dH-*, and maybe also **šid-* “6”, derivable from **šid-šid-* “3+3” (cf. Ugaritic *l̄ltt w l̄ltt* “6” = “3 + 3”) or from **šid-tin-* “3x2” (Blažek 2001, 23).

3.4. Dahalo *ḳaba* (Tosco) = *ḳāḅa* (Ehret) “3” is 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 *dēnaa gūbii* “8” (Lukas).

3.5. Iraqwoid & Qwadza **tami* “3” is probably related to Dahalo *ʔittaanjóóni* “3rd day after tomorrow” (Ehret 1980, 290). It is tempting to add Muussiyi (Konsoid/ECush.) *taammu* “2”, but the semantic difference is surmountable only in the case of original finger-names and various strategies of counting on fingers, e.g. if this numeral was based on the middle-finger, counting from the thumb leads to “3”, but counting from the “index-finger” indicates “2”.

“four”

4.1. Beja *faḍig* “4”, with regard to older records as *phadéggā* (Seetzen), *faḍdeg* (Kremer), *fardik* (Krockow) and Beni Amer *farig* (Reinisch), is derivable from **fardiga* or **farḍiga*, where *-g(a)* is the plural ending (Roper 1928, 183). Only the starting-point with **-r-* is compatible with ECush. **ʔafur-* / **ʔaffar-* < **ʔafwar-* “4”, without **ʔa-* Afar *fareyi* ||| Om. **ʔawurd-* “4” ||| Chadic **firadu* or **faridu* “4” ||| Egyptian *fd-w/-t* “4”, *ifd.t* “Vierheit”, Coptic f. $\text{ϣ}\tau\omicron\epsilon$ < **fd^www̄.t* < **fd^w3w̄.t* (Vycichl 1940, 83) < **fida3wat* < **fidarwat* (Blažek 1999, 32–33). Etymology may be sought in Somaloid (ECush.) **far-* “finger” (Lamberti 1986, 244, 362): fingers of one hand (without thumb) = four fingers.

4.2. Agaw **sä3(3)a* “4” (Appleyard) probably originated from **sägya* (cf. Reinisch 1887, 298: von alten Leuten und Weibern noch öfters *sägyá*, *säqyá* gesprochen; Munzinger had recorded *segia* “4”). The corresponding archaized form **säxyata* of the numeral “9” was borrowed into Ethio-Semitic: Harari *zəḥtāñ*, Argobba *zāḥtāñ*, Amhara *zāḥtāñ* “9” which were a source of borrowing for this numeral in Ḍirayta (Konsoid/ECush.) *tsinqoota* and Zayse (Ometo/NOM.) *tsingō*. The more archaic Agaw protoform **sägya* “4” is compatible with Iraqwoid **tsigaha* “4”.

4.3. ECush. **šalah-* “4” is compatible with Dahalo *saḥála* “4” via metathesis of the liquid and laryngeal in one of these two forms. Yaaku *ḥwen* (Heine) = *shuen* (Hobley) “4” may be related, although *n* instead of expected *l* is unclear. On the other hand, there is an attractive NS parallel in Nera *šoonā* “4”. The NS parallels also exist to ECush. **šalah-* & Dahalo *saḥála* “4”, namely in Kunama *salle* “4” and Mabang *asali*, Kodoi *asal*, Maba *asaal* “4”.

“five”

5.1. Agaw **ʔankʷa* || ECush. **kani*/**koni* || SCush.: Iraqwoid **kooʔani*, Qwadza *koʔana*; Ma'a *kooi* “5” are derivable from a common protoform **kʷani*. In the numerals “6”, “7” maybe appears in the form **hVn-* or only **-h-*, if it is not a continuant of the Dullay-Yaaku isogloss **xubin*. It seems, within Cushitic and AA there are no cognates or relatives of **kʷani* (the isolated form as WChad./Sbauchi: Guruntum *kyoon* “5” cannot be taken in account). On the other hand, the NS counterparts are more promising: Ilit *kona*, Kunama *koona* “hand” vs. *kussuume* “5”; Nilotic: (West) Lango *kañ* “5” vs. Dinka *kon* “arm”; (East) Teso *-káñi*, Turkana *ḡa-kàni*, Karimojong *-qan*, Bari (*mo-*)*kánat* etc. “5” vs. **-k₃am-* “arm, hand”.

5.2. Dullay **xubin* “5” and Yaaku *xoopi* “5” are probably connected with ECush. **hub[i]n-* > Somali *hubin* “limb”, Oromo *humnaa* “muscle, power”, Konso *hupna* “power, strength, energy” (Sasse 1979, 15) and further with Semitic **hupn-*/**ḥapn-* “hollow of the hand, handful, fist” (SED I, 113–14, #125).

5.3. HECush. **ʔomute* “5” and Asa *mut* “5” are probably of NS origin, cf. South Nilotic **mu:t* “5” (Rottland 1982, 304); East Nilotic **-miet-* “5” (Vossen 1982, 367) and North Koma *miit* “hand” (Bender).

5.4. Dahalo *dáwàtte* “5” is probably contracted from **daba-watte* “hand x 1”, cf. Dahalo *dába* “hand” & *vattúkʷe* m., *vattékʷe* f. “1”, further Iraqwoid **daba* “hand, arm” (Ehret 1980, 162; Kießling & Mous 2003, 78), Yaaku *dab* “palm of the hand” (Hobley) = *dap* “foot” (Heine).

5.5. Beja **ʔay* “5” transparently corresponds to **ʔay* “hand, arm”. There are promising cognates in SCush.: Iraqwoid **yaaʔee* “leg, foot”, Qwadza *yaʔo* id., Asa *yaʔata* “sandal” : Iraqw *yaʔati* id. (Ehret 1980, 384; Kießling & Mous 2003, 328) on the basis of the semantic correspondence “palm of hand” ~ “sole of foot”.

“six”

6.1. Beja **ʔasa-gwiL* “6” = *“(growing of 1)” (see §1.1.).

6.2. Agaw **wäl-ta* “6” = “1 plus”, cf. ECush. **wal-*/**wil-* “union, together, each other” > Saho *wili*, Afar *uli* “one”, Somali *wal* “all”, Elmolo *wol* “together”, Oromo *wol(-i)* “together, with”, Sidamo *wole* “other”, Burji *wólli* “each other” etc. (Sasse 1982, 188–89).

6.3. ECush. *(*ʔha*)/*lih-* “6” and SCush. **lahooʔu* “6” = “1+5” or “other 5”: *(*Ha*)/*lih-* < **ʔhali-hVn-* or **-xubin-* “1 + 5” – see §1.2.

6.3. Dullay **tabbi[n]* < **tak-xubin-* “1+5”, perhaps also Qwadza (SCush.) *típa* “6” (Claus) – see §1.3.

“seven”

7.1. Agaw **lāñä-*/**lañä-tta* and HECush. **lamala* “7” are transparent derivatives of the numeral “2”, expressing “2 plus”. It is natural to expect analogous structures in other forms of this numeral:

7.2. Beja **ʔasa-Lamaa* “7” probably expresses “growing of 2” – see §2.1.

7.3. Afar-Saho **mal(V)-hVn-* “7” – §2.1.

7.4. Dullay **tahhan* ~ **tamman* “7”, if it reflects **tamhan* < **tlan-han-* or **xubin-* – see §2.1.

7.5. The most enigmatic form of the numeral “7” remains LECush. **tizzuba-* “7”. With respect to Arbore *tazbudda* “7” mediated by Conti Rossini it is possible to derive **tizzuba-* from **tizduba-* < **tizbu(d)da-*. None of these protoforms are analyzable within Cushitic, but **tizbu(d)da-* at least resembles a compound of the numerals “3” + “4” in the Mao branch of North Omotic: **t/siyazi* “3” + *(*m*)/*beṣi* “4”, or Gongga **ʔawudda* “4”, continuing from Omotic **ʔawurda* “4” which corresponds to Beja **fardig* and ECush. **ʔafwar-*/**ʔafur-* “4” (see §4.1.). The internal structure “7” = “3+4” or “4+3” is unknown in Cushitic and Omotic, but well-attested in Chadic: (West) Gerka *praukum* “7” = *prau* “4” + *kun* “3”; Polči *woosər-myeen* “7” = *woopsə* “4” + *myeen* “3”

|| (East) Kujarke (Doornbos) *angofadagobo* ~ *gafadagubo* “7” = *fada* “4” + *ubo* “3”; Ndam (Decorse) *wo subo* “7” = *woro* “4” + *supu* “3”. In NS e.g. in the West Nilotic language Jumjum: *ngūnguk* “7” = *ngūn* “4” + *dūk* “3”.

7.6. Iraqwoid **faanqu* and Qwadza (Claus) *tipafānku* “7” (where *tīpa* = “6”) are probably of Bantu origin, where the forms as Šambala *mufungate*, Tabwa, Konde *fungate* “7” are explainable as **funga* & **ntatu* “bound 3 {fingers}” (Schmidl 1915, 172). There are remarkable parallels in CChad.: Fali Wuba *birfufuj*, Fali Gili *mburufufuj*, Fali Jilbu *mburfifj* “7” (Kraft) etc., perhaps also of Bantu/Bantoid origin.

“eight”

8.1. Beja **ʔasa-mhay* and Agaw **säy’ä-tta* “8” are transparent formations expressing “growing of 3” and “3 over {5}” respectively, differing only in the order of their components.

8.2. ECush. **šiz[h]ent-* “8” probably follows the same pattern, if it is analyzable as ECush. **šizh-* “3” (§3.3.) + HECush. **ʔomut-* “5” (§5.3), cf. Haberland & Lamberti 1988, 136–37.

8.3. Afar-Saho **bahaar* “8” is probably explainable as a borrowing of Tigrinya *bāhār*, *bāhār* “big, strong”, Tigre *baharat* “sprouting” (LH 267). Bilin *bahaar*, pl. *bahaliil* “big, great” is of the same origin.

8.4. Ɖirayta (Jensen apud Moreno) *lakkusedda* “8” is analyzable as Konsoid **lakki* < **lamki* “2” and Oromo *sadii* or Dasaneč *seddi* “3”, hence “second three”? Could Qwadza *lakādu* “8” be of the same origin?

8.5. Iraqwoid **dakati* “8” resembles the West Nilotic numeral “8”: Šilluk *abi-dek*, Lango *wu-adek*, Nuer *be-dek* “8” vs. Šilluk, Lango *adek*, Dinka *dyak* etc. “3”; the West Nilotic origin of the Bari (East Nilotic) numerals “6” – “9”, including *budök* “8”, is also very probable. Qwadza *lakādu* “8” may, but need not, be of the same origin.

“nine”

9.1. Beja **ʔas-faḍig* “9” is a transparent compound “growing of 4”. Similarly Agaw **säṣ-ta* “9” = “4 over”. Its more archaic form **säxyata* was borrowed into Ethio-Semitic: Harari *zəḥṭāñ*, Argobba *zāḥṭān*, Amhara *zāṭāñ*, Gurage of Silte *ziṭṭāññä*, Inor *ziṭṭä* etc. “9” which were probably a source of borrowing for this numeral in Ɖirayta (Konsoid/ECush.) *tsinqoota* and Zayse (Ometo/NOm.) *tsingō* “9” – see §4.2.

9.2. ECush. **sagal(an)-* “9”, besides Dullay **gollan-* “9” || SCush.: Iraqwoid **gwaleeli*, Qwadza *gweli* “9”, probably represent the subtractive formation *[10] minus 1” based on Cush. **gwal-* “1” (see §1.1.).

9.3. HECush. **honso* “9” remains enigmatic, perhaps a compound of **šalah-* “4” + **ʔomut-* “5” > **Hont-* + **-sV* as in Alaba *tənsú* “10”.

“ten”

10.1. Beja **tamin* “10” (by Reinisch also *tamín*) || Agaw **-täḥən* “-ty” (formant of tens) || ECush. **tomman-* “10” || Om.: Ometo **tamma*, but Čara *tansa* | Gimira **tam* | Dizoid **tammu* | Gongga **taNsa* || Aroid **tamma* “10” represent a Cushitic-Omotc isogloss (or a Cushitic loan in Omotic) with suggestive counterparts in NS: Nilotic (South) **taman* | (East) **təmən* (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 *tomín*^a || Nubian: Nobiin *dimé*, Kenzi *dimin*, Haraza *timinah*, Birgid *tummun*, Meidob *timizi* || Bertha: Fadashi & Mayu (TB) *ma-ṭuma*, Fazoglo (Tutschek) *ma-doma* || Saharan: Zaghawa (MacMichael) *timm(i)*, all “10”, besides the compounded forms attested in Koman: Fungí (MacMichael) *diman-didin* “9” = “10 – 1”, cf. *didian* “1”, Gule (Seligmann) *dēmadidin* “9” : *dēdín* “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 languages. 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. Agaw **cəka* “10” originated perhaps via palatalization from **təka* with respect to Kunfāl *teka* “10”. This protoform resembles the East Cushitic numeral **tak-* “1” (see §1.5.). In this case it is logical to propose an original syntagm **təka-təgən* “1 x 10”, where the second component was eliminated thereafter the first member had lost its independent singular meaning.

10.3. Oromoid **kuḍan/*kurn-* “10”, besides Oromo *kurnaffa* “10th”, Dullay **kuḍdan* “10” perhaps reflect a hypothetical protoform **kurḍan-*. Forms without final **-an-* are probably related: Ma’a *ixadu* (Ehret / Elderkin) = *χadš* (Meinhof) “10”, *miḡadu gānā* “100” and Rendille *kúd / kúqó:* “100”, Dasaneč *kó-t tígídí* “100” (*tígídí* = “1”). Although the internal structure remains dark (singulative or diminutive role of **-an-*?), there are promising parallels in Chadic: (West) Daffo-Butura *hùryè*, Bokkos *hùrè* “10” || (Central) Mofu *kúrúw*, Zulgo *káró*, Gisiga *kúrú*, Baldamu *kúrú*, Muzgum *gúru* “10” || (East) Sumray *koaar*, Tumak *koar*, Ndam *ankwar*, Miltu *kwar*, Nancere *góra*, Mubi *kúrúk*, Kera *hór*, Barain *kur*, Jegu *ḡrək*, Birgid *ḡorok* etc. “10”.

10.3. Yaaku *qapon* “10” is enigmatic.

10.4. Iraqwoid **mibaangw* and Qwadza *mibi* “10” are enigmatic.

“hundred”

100.1. Beja **šee* “100” was borrowed from Coptic Sahidic & Bohairic *ϣε*, Fayyumic *ϣη* “100” < Egyptian *š(n)t /š(i)nju)t/* (Loprieno).

100.2. Agaw **liy ~ *lay*.

100.3. ECush. (Afar-Saho & Somaloid) **boqol-* id. Borrowed into Om.: Gimira **bal* | Dizoid: Nayi *balla* | Gongga **balla*. It also appears in Ethio-Semitic: Soddo, Zway *bāqəl*, Masqan, Selti, Gogot *bāqqəl*, Chaha, Ezha, Gyeto *bāqər*, Ennemor, Endegeñ *bāḡär*; Harari, Gafat *bāqlä*. Could it be connected with Geez *bāq’älä* “to germinate, flourish”, Arabic *baqala* “to sprout” etc. (Leslau 1979, 147)?

100.4. ECush.: Rendille *kúd / kúqó:* & Dasaneč *kó-t tígídí* “100” (*tígídí* = “1”) may be related with Oromoid **kuḍan/*kurn-* “10”, Dullay **kuḍdan* “10”. Forms without final **-an-* are probably related: Ma’a *ixadu* (Ehret / Elderkin) = *χadš* (Meinhof) “10”, *miḡadu gānā* “100”.

100.5. ECush. (Oromid-Dullay-HECush.) **ḍibba* “100”.

100.6. Ḍirayta (Mirjami Uusitalo) *tseeta* = (Tanaba, Cheru & Wedekind 1994, 11) *ṭeet*, Muusiye *seeta* “100”. Could it be related to Iraqwoid **tsiiru* “100”?

“thousand”

1000.1. ECush. **kuma* || Iraqwoid **kuma* id. ECush. > Om.: Yemsa *ḡ¹sa¹ k^ho²ma²* “1 x 1000” | Dizoid: Nayi *wuma* | Gongga **kuma*; EthSem.: Wolane *kəm*, Selti *kim*, Chaha, Ezha, Muher *x^wəm*, Gyeto *xūm*, Ennemor *xū*; Harari *kum* id. (Leslau 1979, 343). Reinisch (1902, 243) connected it with Arabic *kūm* “heap”.

1000.2. Agaw **šax-i* with Ethio-Semitic counterparts as Tigrinya *šəh*, OAmh. *ših*, Amh. *ši* “1000” may be connected with Beja *šee* “100” (Appleyard 2006, 137).

East Cushitic influence on the Surmic and Nilotic numerals

Southeast & Southwest Surmic numeral 2 and Southeast Surmic numerals 3, 5–10, plus Kwegu 4, are apparently of East Cushitic origin. In East Cushitic the closest counterparts appear in Galaboid. Heine, Rottland & Vossen (1979, 82) tried to explain the similarities between South Nilotic and East Cushitic numerals 6–10, 30, 40, 50, 100, assuming an absorption of a hypothetical Omo-Tana population by Southern Nilotes. They designated this hypothetical community *Baz* according to the name of the Lake Turkana. The East Nilotic (especially Maa) counterparts should have been transmitted via Southern Nilotic (*ibid.*, p. 85), but the Southeast Surmic mediation is more probable from the point of view of both phonetics and linguistic geography.

	Surma		South Nilotic (Rottland)		East Nilotic	East Cushitic
	Southeast	Southwest	pKalenjin	Datooga	(Vossen)	late Galaboid
2	* <i>ramma</i>	* <i>ramma</i>				* <i>laama</i>
3	* <i>sizzi</i>					* <i>seezzee</i>
4	Kw. <i>ahur</i>					* <i>af(f)ur</i>
5	* <i>(haa)čaana</i>					* <i>cen</i>
6	* <i>ille</i>		* <i>lo</i>	* <i>la</i>	TeMaa * <i>ille</i>	* <i>lih</i>
7	* <i>tsaba(i)</i>		* <i>tisop</i>	* <i>isub</i>	NMaa <i>sapa</i>	* <i>tizba</i>
8	* <i>isseet</i>		* <i>sisiit</i>	* <i>sisiit</i>	Maa <i>isiet</i>	* <i>sizeet</i>
9	* <i>sakal</i>		* <i>sakaal</i>	* <i>šageeš</i>	Maa <i>sa(a)l</i>	* <i>saagal</i>
10	* <i>tommon</i>		* <i>taman</i>	* <i>taman</i>	* <i>-tomon</i>	* <i>tommon</i>
20	Me'en <i>tidam</i>	Didinga <i>itumwa</i>	* <i>tiptem</i>	* <i>digdam</i>	Maa <i>tikitam</i>	Oromo <i>digdama</i> = (Tutschek) <i>digetam</i>
30			* <i>sosom</i>		Maa <i>ɔsɔm</i>	* <i>sozzom</i>
40			* <i>artam</i>		Maa <i>artam</i>	* <i>ʔafartam</i>
50			* <i>kɔnɔm</i>		Maa <i>ɔnɔm</i>	* <i>kontom</i>
100			* <i>pɔqɔl</i>	* <i>boqal</i>	Maa <i>iip</i>	* <i>boqal</i> * <i>qibb-</i>

East Cushitic influence on the Ongota numerals

The Ongota numerals 2–9 and 100 are apparently of East Cushitic, probably Dullay, origin.

	Ongota (Fl)	Tsamay	other Dullay (AMS)	other parallels
1	<i>akala</i> (á)kalbano	<i>dóoko</i>	Hrs <i>toʔo</i> , Go <i>tóʔo</i>	Aroid: Dime <i>wəkʰal</i> , Kara <i>kallà</i> , Banna <i>kola</i> NS: WNil.: Shil <i>akʰel</i> , Nu <i>kè:l</i> CSud: Yulu <i>kala</i>
2	<i>lama</i>	<i>lakki</i>	Dob <i>lammay</i> , but Hrs, Go, Ga <i>lákki</i>	Aroid: Hamer, Kara <i>lama</i> , Banna <i>lamma</i> ; NOM.: Male <i>lamʔ</i> , Koyra <i>lam^e</i>
3	<i>zéha</i> / <i>zexa</i>	<i>zeeh</i>	Hrs <i>ezzaḥ</i> , Go <i>izzéḥ</i>	ECu *s/š-z-ḥ- (Sasse 1976, 138f)
4	<i>talaxa</i> / <i>talaha</i>	<i>sála</i>	Hrs, Go <i>sala</i>	HECush.: Si, Gedeo <i>šoole</i> , Kmb <i>šolo</i> Dah <i>saśála</i> NS: Kunama <i>sàllè</i> Maban: Maba <i>asaal</i> ; Kibet <i>àttál</i>
5	<i>hobbe</i> / <i>hoppe</i>	<i>xóobin</i>	Hrs <i>xupin</i> , Go <i>hupin</i>	Yaaku <i>xoopi</i>
6	<i>ts/šanafa</i> < <i>*tsafana</i> ?	<i>tábben</i>	Hrs <i>cappi</i> , Go <i>tappi</i>	
7	<i>taxanke</i>	<i>táḥḥan</i>	Hrs <i>caḥḥan</i> , Go <i>tahḥa</i>	
8	<i>ʔiista</i> / <i>ista</i>	<i>sézzen</i>	Go <i>sétte</i> , Hrs <i>sasse</i>	Kmb <i>hezzeto</i> , Burji <i>hiditto</i> < * <i>ḥiszeet-</i> < * <i>sizḥeet-</i>
9	<i>gólanke</i>	<i>góllan</i>	Hrs <i>kollan</i> , Go <i>kolla</i>	SCush.: Iraqw <i>gʷalel</i> , Qwadza <i>gweli</i> “9”, cf. Beja <i>gaal</i> “1” ECush.: Arb. <i>gʷalaata</i> “other”
10	<i>coma</i>	<i>kúḡkó</i>	Hrs <i>húḡḡan</i> , Ga <i>xúḡḡa</i>	? NS: Gumuz: Sai <i>gicuma</i> “20”
100	<i>dīḡa</i>	<i>dbabaʼee</i>	Hrs, Go <i>dippá</i>	ECu: Or. <i>dibba</i> , Ko. <i>dippa</i> , Si. <i>ṭibbe</i> , Burji <i>ḥibba</i>

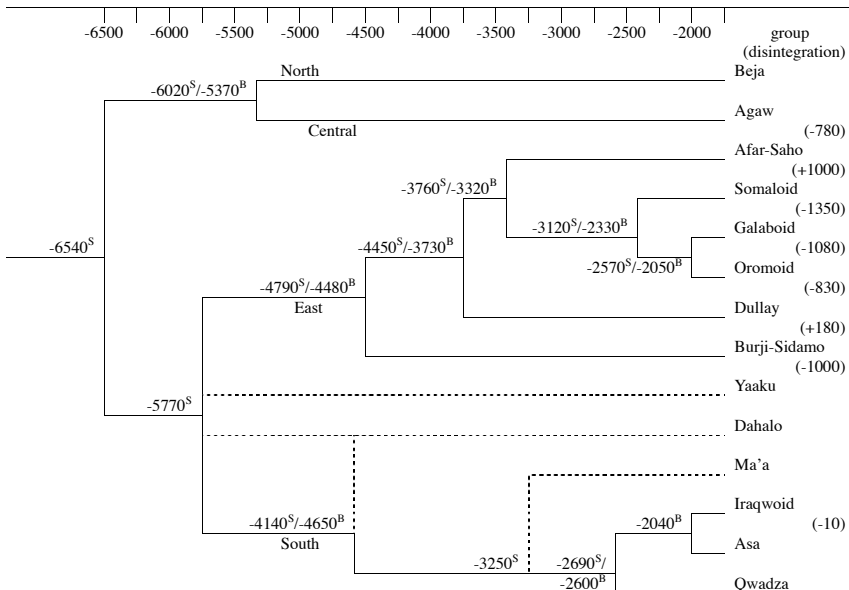
Sources of Cushitic

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

Afar: Marie-Claude Simeone-Senelle* (2007); **Agaw:** David Appleyard (2006); **Alaba:** Gertrud Schneider-Blum* (2007); **Alagwa:** Roland Kiessling* (1997, 2007); **Arbore₁:** Mauro Tosco* (1997), ^w Klaus Wedekind* (2002); **Arbore₂:** Carlo Conti Rossini (1927); **Asa:** Ehret (1980);

Awngi: Andreas Joswig* (2007); **Bayso:** Mathias Brenzinger* (2007); **Beja:** Martine Vanhove* (2006); **Bilin₁:** David Appleyard* (2007); **Bilin₂:** Munzinger apud Halévy (1873); **Boni:** Mauro Tosco* (1994); **Burji₁:** Grover Hudson* (1993); **Burji₂:** Moreno (1937); **Burji₃** = Bambala: Conti Rossini (1914–15); **Burunge₁:** Roland Kiessling* (1994), Anna Bodman* (2007); **Burunge₂** = **Mbulungwe:** Carl Meinhof (1906); **Dahalo:** Mauro Tosco* (1994); **Dasaneč₁:** James Ness* (2007); **Dasaneč₂:** Carlo Conti Rossini (1927); **Dirayta₁:** Mirjami Uusitalo* (1993); **Dirayta₂:** Jensen apud Moreno (1943); **Dobase:** AMS (1980); **Dume:** Donaldson Smith apud Conti Rosini (1927); **Elmolo:** Bernd Heine* (2010); **Falaša₁:** David Appleyard (1996), M. Flad (1866); **Falaša₂:** Halévy (1873); **Garre (Karre):** Mauro Tosco* (2007); **Gawwada:** Mauro Tosco* (2007); **Gedeo:** Grover Hudson* (1993), Ayele Lola* (1996); **Gollango:** AMS (1980); **Gorowa:** Roland, Kiessling* (2007); **Gowaze:** Monnegat apud Moreno (1943); **Hadiyya:** Grover Hudson* (1993), Daniel Hankore* (1996); **Harso-Bobase = Bussa:** Hans-Jürgen Sasse* (2007); **Iraqw₁:** Mauro Tosco* (1994); **Iraqw₂:** Dempwolff (1916–17); **Jiddu₁:** Tilling (1921–22); Harold Fleming (1964); Bernd Heine (1978); **Jiddu₂:** Giorgio Banti & Saalim Aliyow Ibraaw (1996); **Kailliña:** David Appleyard (2006); **Kambaata:** Yvonne Treis* (2012); **Konso:** Mirjami Uusitalo* (1993), Maarten Mous* (2007); **Kule:** da Trento (1941); **Kunfāl:** R.W. Cowley (1971); **Kw'adza₁:** Ehret (1980); **Kw'adza₂** = **Wangomwia:** Claus (1910); **Libido:** Joachim Crass* (2007); **Ma'a₁:** Ehret (1980); **Ma'a₂:** Meinhof (1906); **Muusiye:** <<http://www.zompist.com/mide.htm#afro>>; **Orma:** Christa Kendall* (1995); **Oromo – West Central:** Tolemariam Fufa* (2007); **Qimant:** Appleyard* (2007, 2012); **Qwara:** David Appleyard (1996), Leo Reinisch (1885–87); **Rendille:** Steve Pillinger* (1995, 2007); **Saho:** Moreno Vergari* (2007); **Sidamo:** Anbessa Teferra* (2007); **Somali:** Mauro Tosco* (2007); **Tambaro:** Jules Borelli (1890); **Tsamai:** Graziano Savà* (2007); **Tunni:** Mauro Tosco* (2007); **Xamta:** Carlo Conti-Rossini (1904); **Xamtanga:** Appleyard* (2007, 2012); **Yaaku₁:** Bernd Heine (1975); **Yaaku₂** = **Mogogodo:** Hobley (1910), Greenberg (1963).

Cushitic classification



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.

Abbreviations

Akk. Akkadian; Amh. Amhara; Arb. Arbore; 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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