

History of numerals as history of East African languages

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key words: Cushitic, numbers, semantic change, subclassification

The West-Rift Southern Cushitic languages (Tanzania) have a word for ‘three’ that is cognate with the word for ‘two’ in the East Cushitic branches; and a word for ‘four’ that is cognate to the word for ‘three’ in East Cushitic, while the terms for ‘five’ and ‘six’ correspond regularly in form and meaning with the rest of Cushitic. This remarkable semantic shift in itself shows that the East-Rift SC language Aasa which has the regular reflex for ‘two’ did not share this intriguing innovation, and is therefore not part of West-Rift; the other East-Rift SC language, Kw’adza, does share this 2 > 3 semantic innovation, and is better classified as West-Rift. But how did this shift in meaning come about?

I propose a scenario in which the West-Rift South Cushitic languages including Kw’adza changed the shape of their inherited Cushitic word for ‘4’ under the influence of a Late (Oromoid) Cushitic term for ‘3’ and innovated the Late (Oromoid) term for ‘two’ to be used for ‘three’. The proposal is for a double Cushitic history of West-Rift South Cushitic with an early Cushitic group being influenced by a late Cushitic group of Oromoid origin. Kiessling and Mous (2002:38) already showed a number of remarkable resemblances between Proto-West-Rift South Cushitic and Oromo in both lexical items and grammatical forms. The admixture in a Cushitic language with an intruding Oromoid (East-Cushitic) group led to competing similar words and to an amalgamation of similar sounding forms and an intriguing shift in meaning of number forms as a consequence.

The following table presents the reconstructed words for the relevant numerals. Proto Agaw (or Central Cushitic), a primary branch of Cushitic, is taken from Appleyard (2006); Proto West-Rift South Cushitic, and representative for South Cushitic, is taken from Kiessling and Mous (2002) and Proto-(Lowland-)East-Cushitic is taken from Sasse (1979).

Number	*Agaw	*WestRift	*East-Cushitic
2	*läŋa/laŋa	*tsada	*lam(m)
3	*säyʷa/səyʷa	*tam	*saddeh
4	*säʒa	≈ *ts'igaḥa	≠ *'afur

The West-Rift form for ‘4’ was inherited from a common early ancestor of Proto West-Rift South Cushitic and Proto Agaw. As can be seen in the reconstructions for Agaw, the forms for ‘3’ and ‘4’ were quite similar at that stage. In a relatively recent contact situation with an Oromoid group of speakers, the similarity of this inherited form for ‘4’ with the Oromoid form ***saddeh** ‘3’ resulted in a shift in meaning from ‘3’ to ‘4’ for the Oromoid speakers while the form ***ts'igaḥa** developed as an amalgamation of ***ts'iga** and ***saddeh**. As a subsequent step these Oromoid speakers started using their word for ‘2’ (***lam(m)**) for ‘3’ which was copied by the West-Rift speakers and resulted in ***tam** ‘3’. The **I** <> **t** correspondence can also be found internally in East Cushitic as Muusiye has **taamo** ‘2’ (Yibeltal 2018: 199); or **tammo** (Wondwosen 2015:84). The Oromoid speakers may have been of higher status but low in number.

The West-Rift form for ‘2’ is an internal new-formation based on the proto-West-Rift verb ***tsat** ‘to cut’ (Kiessling and Mous 2002:292). An alternative proposal is contained in Blazek (2018) who links the form ***tsada** for ‘two’ in West-Rift Cushitic to an old form **sada** “2” in Arbore, as reported by Conti Rossini (1927). Present-day Arbore has the more common East-Cushitic root **laamá**

for '2' (Hayward 1984:446). However, this form **sada** was collected in 1894 by a traveler, A. Donaldson Smith (1897) but his other reported numerals correspond more or less to the ones reported by Hayward (1984) for Arbore but some of these numbers (and other lexical material) in Donaldson Smith contain a suffix **-da**, probably the current feminine predicative suffix -ta (Hayward 1984:136). Hence his form **sada** is actually just a root **sa-** which makes the correspondence with West-Rift ***tsada** weaker; in addition to the fact that this is an unconfirmed form collected by a non-linguist and in only one language.

Asa has **lam** or **laam** for '2'. If this is cognate with Lowland East Cushitic ***lama** then the innovation of **lam/tam** to come to mean '3' is one separating West Rift Southen Cushitic from Asa. While Kw'adza has **tami** '3' like West Rift and thus shared the putative WR innovation '2' > '3'. Since this is unlikely to happen independently, the innovation would put Kw'adza and West-Rift SC together and separate from Aasa.

A secondary interesting historical number story is that of *haka* '4': some unrelated languages in the region have this root for '4': Aasa and Kw'adza (both South Cushitic, Tanzania) have *hak*. The mixed register of the Bantu language Inner Mbugu (or Mixed Ma'á) has *hai*. Sandawe has *haká* '4' which is a reflex of Khoekhoe ***haka** '4' (Voßen 1997:503). This points to a Sandawe transfer into Qwadza, Aasa, and eventually Mixed Ma'á. These are all languages that are not directly related nor in direct contact presently. However, the word is also used in Gorwaa (South Cushitic) in the register of diviners counting stones In Iraqw (own fieldnotes) and in Gorwaa (Andrew Harvey p.c.); showing that this form for '4' was more widely known in the area. This requires scenarios of earlier contact. The historical semantic shift in the numbers of West-Rift South Cushitic suggest a history that involves more than one Cushitic branch, and more than one language migration. The wide distribution of *haka* shows the earlier importance of Sandawe as a donor language with prestige.

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