Should we reconstruct decimal or non-decimal counting for proto-Austroasiatic?

Paul Sidwell
ANU & CRCL
SEALSXXII
May31-June2 2012

The Problem

- All AA branches show counting in tens, with variously:

- apparently indigenous forms 1-10
- partial/complete replacement with loans (< Tai, Malay …)
- subtractive/additive forms (6-10)
- other odd/isolated replacements

Previous work

- Significant discussion in the 1970s
- 1973 ICAAL meeting
- 1976 Zide monograph on Munda numerals
- 1976 Diffloth & Zide edited volume

- Variously remarked that there are traces of counting in 4s, 12s, 20s…..
- Such systems may exist alongside decimal counting; can we reconstruct a regular set of base 10 lower numerals?
- Time to revisit the issue now that better branch level reconstructions are accessible

Khmer

Jenner (1976:59): "clearly decimal" + "quantifiers"

Since the 19th century a few scholars have maintained that the Khmer number system is "based on" five while others have held it "based on" four. Exposition of number names in modern standard Khmer reveals a decimal system the clear outlines of which are only slightly obscured by several types of replacement, including loans from Chinese and Thai. Historical and comparative data are adduced to show that, in respect to these replacements, the number system of Khmer has developed away from the general Mon-Khmer type, which is clearly decimal. The same evidence is used to show the existence in Khmer of a set of collective quantifiers, independent of but parallel to the number system proper, which are "based on" four and ten and are strongly reminiscent of Austronesian systems. A socio-economic explanation of the aforesaid replacements is offered, but the question of the ultimate Chinese source of the Thai decades taken into Khmer is not broached.

Munda

From introduction to Diffloth&Zide(eds) 1976:

(3.) The Proto-Munda system is far from a 'primitive system' *(i.e.,* one like those of the Andamans, or various Australian or Brazilian aboriginal groups), and this is consistent with claims (by A. Zide and N. Zide) for the comparatively advanced state of agriculture of the Proto-Mundas.

(5.) This suggests that '20' was the denotation for the highest monomorphemic word reconstructible in Proto-Munda. (This question should not be confused with the question of whether counting in twenties is traceable back to PM; I think one must conclude it is.)

(6.) the highest monomorphemic number word we can reconstruct for Proto-Munda--is ***gaXl** '10ʻ.

(26-27.) 1-10 proto-Munda forms – see handout

Thomas 1976:72

This, then, would suggest that Proto-Mon-Khmer used a counting system based on 4, or more probably on 5, with two alternate words for 5. But under the influence of Indian, Chinese, and Thai merchants and rulers, after Proto-Mon-Khmer had already split into its several branches, they converted to decimal systems, each branch devising its own means of filling in the needed extra forms. The only widespread set of terms for 6-9 is that shared by Bahnaric, Viet-Mu'o'ng, Monic, Semelaic, and Mang, groups widely separated from each other, which suggests that it may gained some degree of currency as the groups were separating, but not firm enough to become established in the other groups. Khmer formed its terms by derivation from the terms for 1-5.

More recent work

- Sidwell 1999:
  Proposed that pAA numerals 1-10 can be reconstructed, although proto-forms were not proposed because of phonological complications.

- Daladier 2011:
  Has a different conception in which there were AA names for amounts or common groups of things, e.g. bunches of leaves or fruits sold/traded. I.e. counting was different based on what was counted.
  "AA cardinal number systems are late comers compared to "grouping" number systems and have probably emerged under contacts with Hindu and Chinese trades and more locally in the Assam corridor with Tai and Bodish trades, around the beginning of our era."

Old borrowing/influence?

- Lack of (other than isolate and/or recent) loans among lower numerals argues against old borrowing in the number system.
- I go along with Zide, Jenner etc. that counting in 10s (and maybe 20s) is old and I submit is likely for pAA.

1 – 4 few problems

- Palaungic, Khasian, Nicobaric show "2" and "3" without initial glottal/lateral instead of bilabial stops.
- It is difficult to see how P,K,N could share and innovation, so maybe there were competing, non-alliterating 2,3 pAA forms
- Other isolated replacements in Nicobaric and Khasian

5

- Khmer, Bahnaric, Vietic – looks to me like a diffusion from pre-Vietic (+ loan from Khmer > Pearic, South Bahnaric)
- Monic, Mangic, Palaungic, Khasian: central diffusion area?
- Aslian, Khumic, Katuic: difficult to explain presence in Aslian unless very old
- Munda form oddball?

6-9

- Khmer, Bahnaric, Vietic, Mangic, Munda, Aslian (plus isolated forms in Khmuic, Palaungic, Khasian) strongly suggest pAA reconstructions, allowing for extensive analogical changes.

However, additional forms:

- Katuic, Palaungic, Nicobaric ****-pu:l** '6' (with displacement in Katuic, Palaungic)
- Munda, Katuic, Khmuic, Pearic ****gu:l** '7' (with displacement in Katuic)
- Khmuic, Palaungic, Pearic, Nicobaric ****ti?** '8' (with displacement in Nicobaric, also)
- Forms for '8' show phonological irregularity that parallels etymon for 'blood/bleed' in AA!! (c.f. Ferlus 2008)

10

- Bahnaric forms show internal irregularities consistent with diffusion from Katuic
- Only other well distributed form is ****ga:l** (reflected even in one Bahnaric language, assumed affixed form in Vietic, Mangic)

Preliminary conclusions #1

- A pAA series 1-10 can be reconstructed, with the following features:
- 1-4 initial bilabials by ancient alliteration
- 5-8 alternate forms were available, perhaps special ritual significance or referred to arbitrary group values (9-10 also?)
- 6-9 evidence of **t-** prefix, even when different numeral roots used
- 10 – single strong candidate for pAA form

Preliminary conclusions #2

- What can we say about forming groups on the pattern:
  1-4, 5, 6-9, 10?
- Does it suggest counting on fingers + thumb, plus fingers + thumb again?
- Was there a switch from counting on just fingers to including thumbs?

References

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