Reviewing the place of PAn within Asia

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1 Proposed PAn connections

- Attempts have been made to link Austronesian to almost every single neighboring (including some not so neighboring) language family: Austroasiatic, Sinitic, Sino-Tibetan, Kra-Dai, Indo-European, Semitic, Japanese, Ongan (of the Andaman Islands).
- Blust (2009) reviews the evidence for most of these proposals and maintains strong skepticism towards all of the proposals with the exception of Kra-Dai (based on the shared vocabulary).
- In this short presentation, I focus on (i) the power of chance and (ii) the stability of functional morphology in order to test some of the more popular hypotheses.

2 How do we calculate chance?

- All contributors to the macro-grouping of Austronesian have made statements about the probability of chance correspondences in the lexicon.
- I happen to agree with Campbell and Poser that that,

  > "…**impressionistic estimates of the likelihood of chance resemblances are worthless**; **the human mind is simply not equipped to make such judgments intuitively**."
  > (Campbell and Poser, 2008)

- This problem has been tackled with statistical algorithms in Indo-Europran and Uralic (Ringe, 1998, 1999) and discussed more generally (see the papers in Wichmann and Grant, 2012) but the issues are from settled.

- Will we ever have a generally applicable algorithm considering the factors involved? # of matching segments, # of segments in the inventory, phonotactic restrictions, number of homophones per match, semantic fit, regularity of correspondence, phonological plausibility of correspondence.
- Two non-statistical methods for testing chance:
  - **PIE test**: Attempt finding correspondents in language families that even Greenberg himself would not want to bring together, e.g. Austronesian and Proto-Indo-European. If a comparable connection can be made between Austronesian and PIE lexical items than we can safely attribute more SEA correspondences to chance.
  - **Morphology test**: Morphology typically changes more slowly than the lexicon and is far harder to borrow. Morphology forms an interlocking system making it more than the sum of its parts for the purposes of reconstruction.
- Afro-Asiatic, one of the oldest (convincing) proto-languages, has only a handful of good basic vocabulary correspondences and completely divergent typology (see (1)) but stunningly clear correspondences in functional (mostly inflectional) morphology, as seen in table 2.

(1) *Hausa*

Shīkɛ̂nan sai ya z-ō shī mā ya shìg-a ciki-n-sù
well.then then 3MSC-REL come-VENT 3MSC too 3MSC-REL enter-SV among-M.LINK-3PL
ya-nà y-î.
3MS-CONT do-VERBAL.NOUN
'Well then, he came and he too entered among them and was doing it.'

(2) *Hebrew*

Az hu gam ba ve-nixnas ben-hem ve-asa
then 3SG.MSC also enter3.MSC.PST and-enter.3S.MSC.PST among-3PL.MSC and-do.PST.3SG
et ze
ACC DEM
'Well then, he came and he too entered among them and was doing it.'

- This is what a good long-distance relationship should look like!

	Budai Rukai	**Samoan**
1	*iθa*	*tasi*
2	*ɖósa*	*lua*
3	*tóɭo*	*tolu*
4	*sepáte*	*fa*
5	*ɭíma*	*lima*
6	*éneme*	*ono*
7	*píto*	*fitu*
8	*vaɭo*	*valu*
9	*báŋate*	*iva*
10	*póɭoko*	*sefulu*

Table 2: Rukai numerals compared to Samoan

	Hebrew	**Hausa**
1SG	*-nī*	*-na*
2SG.MSC	*-kā*	*-ka*
2SG.FEM	*-kī*	*-ki*
3SG.MSC	*-hū, -āw, -ō*	*-sa*
3SG.FEM	*-hā, -ā(h)*	*-ta*
1PL	*-nū*	*-mu*
2PL.MSC	*-kem(ā)*	*-ku(m)*
2PL.FEM	*-ken(ā)*	*-ku(m)*
3PL.MSC	*-hem(ā)*	*-su(m)*
3PL.FEM	*-hen(ā)*	*-su(m)*

Table 1: Afro-Asiatic comparative morphology

- In terms of lexical change in Austronesian, we should also note that even between the most distantly separated languages, we find tremendous regularity (nothing like Afro-Asiatic, for instance).
- The numerals in table 2 are attested by languages that have developed in total isolation from each other for roughly 5,000 years.

2.1 A test case: Proto-Austronesian compared to Proto-Indo-European

- Bopp (1841) himself used spurious segmentation to connect Sanskrit *sapta* 'seven' with Kawi *pitu* (Blust, 2009, p.690) among other "cognates".
- 26 PAn-PIE comparisons and 27 PMP-PIE comparisons, collected over two days, are given below.
- Little to no semantic shift.
- The consonant correspondences, mostly regular, are given below in table 3.
- Fortition and aspiration of PAn initials account for many of the irregularities.
- For simplicity I searched for identical correspondents. Where PIE has no match we find the following relations: PAn **ŋ* > PIE **n*, PAn **S-* > PIE **∅*, PAn **N* > PIE **n*, PAn **D* > PIE **d*, PAn **C* > PIE **s*
- These can be profitably compared with correspondence sets accumulated over the last ten years for other Austronesian inter-family relationships.
- In any case, the search for further correspondences should reveal the baseline of chance for linking Austronesian to other families.

PAn	PIE	Etyma
b-	p-	‘pig, thick-haired’, ‘to stink’, ‘to cover’, ‘pale’
-b	-p	‘cover’
b-	b-	‘swelling’, ‘slap’
b-	bh-	‘boil’, ‘quick’ (mabikas), ‘chest’, ‘bright’, ‘beat, ‘albino’
-b	-bh	‘pry open’
C-	s-	‘ghost’
d-	d-	‘swelling’, ‘two’
d-	t-	‘think’
-D	-d	‘water conduit’ (w/metathesis), ‘flat’
g-	g-	‘grasp’
g-	k-	‘dry near a fire’
h-	∅	‘wind’, ‘unripe’
k-	k	‘thick haired’, ‘hair’, ‘eat’, ‘shake’, ‘scab’, ‘fish’, ‘hear’, ‘pry open’, ‘swift’, ‘cover’, ‘scratch’, ‘bend’
-k	k	‘pig’, ‘crush’, ‘slap’,
l	l	‘pale’, ‘albino’, ‘weak’, ‘flee’, ‘bend’, ‘turn’, ‘unripe’
m-	m-	‘grasp’, ‘crush’
-m	-m	‘to sink’
-m	∅	‘water’, ‘weak’
-m	-ng	‘think’
n	n	‘weave’, ‘enclosed body of water’
n-	l-	‘hear’ (*kl-* cluster)
n	∅	‘eat’, ‘fish’
N	n	‘water’, ‘ghost’
ñ-	l-	‘wash’
ŋ-	∅	‘chest’, ‘thorny tree’
ŋ-	n-	‘breathe’, ‘dry near a fire’?, ‘wind’?, ‘spin’, ‘snout’
-ŋ	-ng	‘turn’
p	p	‘fire’, ‘flee’, ‘thorny tree’, ‘flat’
q-	k	‘horn’
q-	∅	‘ghost’, ‘abscess’, ‘current’
-q	∅	‘put’
r-	r-	‘bright’, ‘scab’
R-	r-	‘abscess’, ‘chest’, ‘shake’, ‘horn’, ‘flow’ (wmetathesis)
R-	gh-	‘day’
R-	-g	‘put’
-R	∅	‘albino’, ‘hear’, ‘flee’ (w/metathesis)
s	∅	‘scab’, ‘water conduit’
s	s	‘current’, ‘scratch’, ‘snout’, ‘wet’, ‘wash’, ‘spin’
S-	∅	‘two’, ‘to breathe’, ‘fire’
S-	-s	‘fish’
t	t	‘weave’, ‘beat’, ‘put’

Table 3: PIE-PAn/PMP consonant correspondences

Proto-Austronesian		**Proto-Indo-European**	
aku	1sg	eg	1sg
baReq	‘abscess, boil’	bher-	‘to boil, swell, well up’
bedul	‘swelling of the body’	bed-	‘to swell’
beRay	‘give’	ai-	‘give’
baRaŋ	‘chest’	bhreus-	‘breast’
bərak	‘bright color’	bherəg-	‘bright’ (cf. OC **bˁrak* ‘white’)
beRek	‘domesticated pig’	porko-	‘pig(let)’
bukeS	‘head hair’	pŭk-	‘thick-haired’
daNum	‘water’	dānu-	‘river’
duSa	‘two’	dwo	‘two’
kan	‘to eat’	a̍k-	‘to eat’
keRkeR	‘shake’	kret-	‘to shake’
kuris	‘scabies’	kreup-	‘scab’
Seŋaw	‘to breathe’	an(ə)	‘to breathe, respire, animate’
Sapuy	‘fire’	pŭr	‘fire’
Sikan	‘fish’	pisk-	‘fish’
tenun	‘weave’	ent-	‘weave’
qaNiCu	‘ghost, spirit of the dead, owl’	ansu-	‘ghost, spirit, demon’
quRuŋ	‘horn’	kʸr̥n	‘horn’ (cf. Sem. *qrn*)
waRi	‘day; sun; dry in the sun’	agh-	‘day’
-dem	‘think ponder, brood, remember’	teng-, tong-	‘to feel, think’
-gaŋ	‘dry near a fire’	kenk-	‘to burn, dry feeling, thirst’
-gem	‘grasp in the fist’	gem-	‘to grasp, grip; be full’
-naw	‘enclosed body of water’	nebh-	‘wet, damp; clouds; water’
-ñaw	‘wash, bathe, rinse’	lou-	‘to wash’
-mek	‘crush, pulverize, powder’	māk-	‘to knead, press’

Table 4: PAn-PIE comparisons

Proto-Malayo-Polynesian		**Proto-Indo-European**	
bahu	‘stink’	peu̯ə-	‘to rot, stink’
balaR	‘pale’	pal̂	‘pale’
bebak	‘slap, beat on’	bak-	‘stick, staff; to hit, peg’
betbet	‘beat, thrash’	bhāt-, bhət-	‘to bat, hit’
ma-bikas	‘strong, vigorous, energetic’	abh-	‘swift, quick, abrupt’
bulaR	‘unnaturally white, albino’	albho-	‘white, albino’
buŋbuŋ	‘swell up’	ba^{x}mb-, *bha^{x}mbh-	‘swell’
haŋin	‘wind’	anĝhen-	‘scent, smell, odor’
hilaw (PPhil)	‘unripe’	iēlo-	‘raw, unripe’
(ki-)neR	‘hear’	k̂leu	‘to hear, listen’
lemi	‘weak’	lei-	‘think, weak’
pa-laRiw	‘flee’	pleu-	‘to flee’
qaRus	‘current, flow’	rōs-	‘flow’
sepaŋ	‘a thorny tree: Caesalpinia spp.’	apsā	aspen
saluD	‘water conduit’	ad(u)-, ad-ro-	‘current, water course’
taRuq	‘put, hide’	tāg-	‘set in order’
-kab	‘(pry) open’	skăb(h)	‘split’
-kas	‘swift, agile, strong’	ōk̂ú-s	‘quick(ly)’
-keb	‘cover’	(s)kep-	‘to hide, cover’
-kel	‘bend’	kel-	‘to bend; crooked’
-kis	‘scratch, grate, scrape’	kes-	‘to comb, itch, scratch’
-liŋ	‘turn, revolve’	sleng-	‘to turn, wind’
-liR	‘flow’	rī-	‘to flow, move’
-ŋus	‘snout’	nas-	‘nose’
-paD	‘flat’	plăd-	‘flat’
-seq	‘wet, wash’	sk̂lēk	‘wet’
-siŋ	‘spin around’	(s)nēi-	‘to spin’

Table 5: PMP-PIE comparisons

3 Evaluating functional morphology

3.1 Sino-Tibetan-Austronesian (Sagart 1993 et seq)

PAn	ST	Function
-en	*-n*	NOMINALIZER
<um>	*m-*	VALENCY DECREASING
Si-	*s-*	VALENCY INCREASING
<aR>	*<ar>*	DISTRIBUTED OBJECT

Table 6: STAN morphological comparisons (Sagart, 2005)

- A problem noted by Blust (2009, p.706) which is relevant here is that there is no accepted reconstruction of Tibeto-Burman.
- One can pick and choose from over 250 languages to support reconstruction to Proto-ST!

3.1.1 Proto-Tibeto-Burman **-n*

- Sagart (2005, p.168): "Comparison with TB provides the STAN source of this AN nominalising suffix: that is precisely the *-n* nominaliser found in TB languages."

Language	Unaffixed form	Affixed form
Atayal	*niq* 'to eat'	*niq-un* 'eaten thing'
Paiwan	*alap* 'take'	*alap-en* 'object being taken'
Amis	*aʃik* 'to sweep'	*aaʃik-en* 'place to sweep'
Tibetan	*za-ba* 'to eat'	*za-n* 'food, fodder'
	skyi-ba 'to borrow'	*skyi-n-pa* 'borrowed thing, loan'
	rdzu-ba 'to delude, falsify'	*rdzu-n-pa* 'falsehood, fiction, lie'
Lepcha	*hru* 'to be hot'	*ă-hru-n* 'heat'
	bu 'to carry'	*ă-bu-n* 'vehicle'

Table 7: Sagart's evidence for a STAN nominalizing suffix

- But further investigation of TB *-n* reveals that it has nothing to do with patients or objects, which is the hallmark of PAn **-en*. TB is just a generic nominalizer, weakening its claim to cognacy.
- WT *rku* 'steal' : *rkun-po* 'thief'
  nye 'near' : *nyen* 'relative'
  PTB **r-mi* 'person' : OC **mji-n* 'relative' (Jin, 1998; LaPolla, 2003; Benedict, 1972, p.99)
- Further adding to the confusion, Pulleyblank (1991) and Graham (1983) argue **-n* marks DURATIVE ASPECT, a function which is actually incompatible with PAn *-en*.

3.1.2 Valency increaser **s-*

- Sagart (2005, p.170) connects PAn **Si-* with Old Chinese and Tibeto-Burman *s-*, describing OC *s-* as making objects out of "a causer, beneficiary, instrument, etc."[1]
- This description stretches the meanings a bit on both sides to make two distinct functions meet half-way.
  - The TB and OC data presented make *s-* appear to be nothing more than a run of the mill causative marker.
  - PAn already has a very well attested and *extremely* stable causative: **pa-*.
  - PAn *Si-* does *not* typically causativize predicates nor should it be considered a general valency increaser. It appears on verbs of transfer and centrifugal movement (away from the speaker) to select the theme as the subject (Wolff, 1973).
  - It can work with a causative to select a particular argument as NOMINATIVE/ABSOLUTIVE.

    (3) *Saisiyat*
    ʃi-pæ-hilaa
    CV-CAUS-sun
    'to dry X in the sun'

    (4) *Tagalog*
    i-pa-araw
    CV-CAUS-sun
    'to dry X in the sun'

  - It can only be considered to increase valency in its instrumental and benefactive functions, but these functions do *not* appear to exist in OC or TB.

[1] Presumably, "causee" is meant here instead of "causer".

(5) *Saisiyat*

a.	ʃi-laʃoʔ	cv-bring.lunch	'to bring X as lunch'
b.	ʃi-mariʔ	cv-take	'to take X'
b.	ʃi-poetoy	cv-wrap	'to wrap X'

Language	**Intransitive form**		***s-* form**	
Atayal	*m-ŋuŋuʔ*	'to be afraid'	*s-ŋuŋuʔ*	'to frighten'
Paiwan	*k<m>avuL*	'to beg'	*si-kavuL*	'cause someone to beg'
Bunun	*daŋadx*	'to stop'	*is-daŋadx*	'to stop (tr.)'
Old Chinese	**^{b}m-lun-s*	'to be pliant, obedient'	**^{b}s-lun*	'to tame'
Tibetan	*Nbar*	'to catch fire, be ignited'	*s-bar-pa*	'to light, to kindle'
	m-nam-pa	'to smell, stink' (intr.)	*s-nam-pa*	'to smell' (tr.)
Gyarong	*rong*	'to see'	*s-rong*	'show'
Boro	*gi*	'to be afraid of, fear'	*si-gi*	'to frighten'
Proto-Loloish	*(C)-no*$_2$	'to awake'	*sə-no*$_2$	'to awaken'

Table 8: STAN **s-* comparisons from Sagart (2005, p.170)

3.1.3 Intransitivizer **N-*

- Voiced/voiceless alternation correlates with transitivity distinction in several Sino-Tibetan languages.
- Sagart reconstructs a Proto-ST prefix **m-* which detransitivizes transitive verbs (Sagart, 1994).
- Gyarong, a TB language, is claimed to still show the nasal on intransitives. Early Chinese loans to Miao-Yao languages suggest the presence of a nasal in similar OC contexts as well.
- **Problem**: PAn **<um>* is not a genuine *detransitivizer*, as may be incorrectly surmised from the ergativist literature. It appears on intransitives and (zero valency) meteorological verbs (e.g. 'to rain', 'to be sunny', 'to earthquake', etc.).
- In the two reconstructions in table 9, we could say *<um>* actually *increases* valency (by adding an event argument). It is thus not at all a classical anti-passive as found in languages like Dyirbal, Eskimo and others, where the anti-passive marker only occurs on transitive predicates.

Voiced/unaspirated form		Unvoiced/aspirated form	
bɛɛ	'to open (the hand)'	*phɛ̀ɛ*	'to spread out'
bìd	'to twist; false'	*phìd*	'to err, wrong'
cîi	'to rub, tickle'	*chûm*	'to point at'
cùm	'to put (smt.) in water'	*chûm*	'to get really wet'
kân	'to obstruct (a way)'	*khân*	'to partition off (a room)'
klɨŋ	'to make round'	*khlɨŋ*	'to roll'
tân	'to resist, oppose'	*thaan*	'to bear (the weight), resist'

Table 10: Thai evidence for a [+voice] morpheme (Beckwith, 1996, p.815)

Bare root		Affixed with <um>	
**quzaN*	'rain'	**q<um>uzaN*	'to rain'
**qajaw*	'sun'	**q<um>ajaw*	'to be sunny'

Table 9: PAn meteorological verbs with *<um> (Blust et al., 1995/2011)

- Furthermore, how clear is it that the voicing alternation in ST really comes from *N-*? Beckwith (1996) (see table 10) shows a similar voicing/aspiration distinction in Thai plus other potential problems.

3.1.4 Distributed action/object *<aR>*

- I will not reproduce all the evidence here but compare Sagart's 2005 Paiwan *kim* 'search' vs. *k<ar>akim* 'search everywhere' with Burmese *pok* 'a drop' vs. *p<r>ok* 'speckled'.
- The function of PAn *<aR> is exceedingly difficult to pin down in Austronesian but distributed action/object could be a good description of one function.
- **Problem**: We find similar examples in Austro-Asiatic, as seen in table 11.

Bare root		**Affixed with <ra>**	
babo?	'woman'	*b<ra>bo?*	'women'
kɟɨh	'man'	*k<ra>ɟɨh*	'men'
kɟɨh	'man'	*k<ra>ɟɨh*	'men'
tbɔh	'hit'	*t<ra>bɔh*	'fighters'

Table 11: Jahai (Aslian) collective *<ra>* (Burenhult, 2005, p.74,79)

3.2 Austroasiatic (Reid, 1994, 1999, 2005)

- Austroasiatic is a unique case because the strongest arguments comes from the morphology rather than from the lexicon.
- The potential An-AA family ('Austric') has a long history (Schmidt, 1900-1901, 1906).

PAn	**AA**	**Function**
pa-	*p-/ɓ-*	CAUSATIVE
<um>	*ma-/-am-*	CAUSATIVE?
<in>	*<n>*	NOMINALIZER?
a	*-a*	OBJECTIVE?
ta-	*ta-*	INVOLUNTARY ACTION
<R>	*Car-*	RECIPROCAL?

Table 12: AA morphological comparisons (Reid, 2005, plus additional)

3.2.1 Causative **p-/ɓ-*

- Reid (1994) argues for two causative cognates between AA and An: **pa-* and **ka-*. But the An evidence only really supports the first as a causative.
- Still, this appears to be a good match with a Mon-Khmer *p-* initial causative, as seen in table 13.

Language	Unaffixed form	Affixed form
Kammu	*háan* 'to die'	*pháan* 'to kill'
	kàa 'to climb'	*pkàa* 'to cause to go up'
	skár 'straight'	*smkár* 'to straighten'
Jahai (Aslian)	*gej* 'to eat'	*pjgej* 'to feed'
	muc 'to eat'	*picmuc* 'to feed'
	kap 'to bite'	*pikap* 'to tear apart with teeth'

Table 13: Mon-Khmer **p*- (Sidwell, 2008)

3.2.2 Agentive **-um-, *ma-/-am-*

- Reid (1999) claims that PAn *<*um*> must have had a causative meaning on the basis of Bontok forms such as *s*<*um*>*akit* 'that which sickens' (causes one to become *ma-sakit* 'sick').
- Similar examples can be adduced from Tagalog, see table 14.
- Note that this is precisely the opposite function we need to reconstruct for Sagart's *N*- and <*um*> comparison to work out!
- It's unlikely that a causative function can reconstructed for PAn <*um*> and so the formal comparison is probably coincidental.

Root	Gloss	Affixed form	Gloss
gálit	'anger'	*g*<*um*>*álit*	'to anger someone'
bágo	'new'	*b*<*um*>*ágo*	'to change something'
ganda	'beauty'	*g*<*um*>*anda*	'to become beautiful'
sakit	'pain'	*s*<*um*>*akit*	'to become painful'

Table 14: Tagalog causative vs. inchoative <*um*>

3.2.3 Nominalizing **-n-*

- Reid compares a PAn infix *<*in*>, reconstructed as PERFECTIVE with an MK nominalizing *<*n*>.
- **Problem**: PAn *<*in*> only picks up steam as a nominalizer later in life. It starts out as a purely aspectual marker. (Blust, 2009, p.692)

- In both AA and PAn we find a combination of infixes: AA *-mn-* and PAn *<umin>* but there is no functional match. The An form is ACTOR VOICE PERFECTIVE.
- Also, MK *<n>* derives event nominalizations as well (see table 16, something which PAn **<in>* never takes part in.
- The rarity of infixation is cited here as a typological argument for a genetic relationship. But is infixation really that rare? Even Latin had an *aspectual* nasal infix (table 15), making it a better match with PAn **<in>* than AA *<n>*. (See Yu (2007) for a survey of the phenomenon.)

Unaffixed form		Affixed form	
vīcit	'has won'	*vincit*	'wins'
contudit	'has crushed'	*contundit*	'crushes'
scidit	'has cut'	*scindit*	'cuts'

Table 15: The PIE nasal infix as attested in Latin

Language	**Unaffixed form**	**Affixed form**
Kammu	*kóh* 'to cut' *kɛ̀ɛp* 'to fasten belt'	*knóh* 'cutting board' *knɛ̀ɛp* 'quiver'
Khmu	*pɛɛr* 'to slice'	*pnɛɛr* 'sliced pieces'
Khasi (North M-K)	*shong* 'to sit, dwell' *sait* 'to wash (vegetables)'	*shnong* 'place, village, town' *snait* 'strainer'
Jahai (Aslian)	*sam* 'to hunt' *tbɔh* 'to beat'	*nmsam* 'act of hunting' *tnhbɔh* 'act of beating'
Semelai (Aslian)	*c^{h}ɔr* 'treat with fire' *smaɲ* 'to request'	*nrc^{h}ɔr* 'firing' *snɲmaɲ* 'request for something'
Katu	*cha* 'to eat' *pruung* 'to blow fire'	*chana* 'food' *paruung* 'pipe to blow fire'

Table 16: Mon-Khmer **-n-* (Sidwell, 2008)

3.2.4 *ta-* INVOLUNTARY ACTION

- Blust (2009, p.693) notes a correspondence that had apparently not been picked up upon: Katu *ta-*

'involuntary action' (Costello, 1966), which resembles PAN **ta/taR-* SPONTANEOUS/INVOLUNTARY ACTION.

3.2.5 *Car-* RECIPROCAL

- Mark Alves (this conference) presented tantalizing evidence for a MK reciprocal of the shape *par-/tar-/kar-*.
- This could correspond with PMP *maR-* discussed by Liao (this conference) and a PAn **<R>* which I suggest should be reconstructed as a middle marker (including reciprocal functions) in PAn (Kaufman, 2009).
- The MK *p-/t-/k-* initials could correspond to PAn **pa-* CAUSATIVE, **ta-* SPONTANEOUS/INVOLUNTARY ACTION? and what I would reconstruct as **ka-* HAVE (Kaufman, 2012).
- If PAn **k-* could be made out to correspond to Khmu *h*, then perhaps the alternation in table 17 is supporting evidence for a shared *ka-* prefix.

Language	**Unaffixed form**		**Affixed form**	
Khmu	*paaŋ*	'to open'	*hmpaaŋ*	'opened'
	caak	'to tear'	*hncaak*	'torn'
PAn	*betak*	'crack open'	*k<um>a-betak*	'cracked opened' (stative)

Table 17: Khmu *hN-* prefix (Suwilai, 2002; Sidwell, 2008) compared to PAn **k<um>a-*

3.3 Kra-Dai (Ostapirat, 2000, 2005)

- Blust (2009, p.709) "a historical connection of some type now appears virtually certain for Tai-Kadai and AN"
- No Kra-Dai morphology at all has entered the discussion yet. Comparisons are purely lexical with the greatest weight being put on the numerals 1-10.
- There is exceptional phonology in several of the proposed cognates. Some forms could be doubted on the basis of sound symbolism, e.g. PKra **C-tot* 'fart' and borrowings *leŋa* 'sesame'.
- Ostapirat's claim here, that Kra-Dai could not be a daughter of PAn, can be augmented slightly by his own reconstruction of the stress pattern.

- Distinctive stress is required for the correspondences in PAn **(d)áNum* – PKra **ɦnam* and the data in table 18 to work out. Namely, reflexes of PAn final **-R* vs. Proto-Kra *-ɣ* or *-l* and **-N* vs. Proto-Kra *-n* or *-l*.
- Importantly, this contradicts the claim that nothing pre-PAn is required for the Kadai-Austronesian connection (Ostapirat, 2005; Sagart, 2001).
- There is little evidence for reconstructing an accentual distinction to PAn Blust (2009, chap.8). While most Philippine languages do make accentual distinctions, these cannot be linked cleanly to Ostapirat's accents, e.g. Wolff (2010) **daɬúm* 'water' (Wolff, 2010, p.814) based on Knn *canúm*, Ilk *danúm*, among others.

Gloss	**Proto-An**	**Proto-Kra**	**Bd**	**Ht**	**Ym**
'hand'	**(qa)lima*	*(l)íma*	*meɯ*	*meɯ*	*meɯ*
'five'	**lima*	*l(i)má*	*pa*	*ma*	*pa*

Table 18: **-ui* final reconstructions in Ostapirat (2000)

4 Conclusion

- Only by understanding the extremes can we understand the norm - serious work needs to be done trying to establish truly outlandish connections to An!
- Regarding morphology:
  - STAN was found to show few convincing affixal cognates with An.
  - MK (Austroasiatic) fares better, but perhaps because there is so much more to choose from. Many proposed cognates do not match well semantically.
  - Unfortunately, there is no morphology forthcoming from the greatest contender for a long distance relationship, Kra-Dai.
- It is still far too early for a synthesis of the macro-groupings but the evidence adduced so far suggests quite a bit of **incompatibility**, e.g. Ostapirat (2005, p.125): "etyma that are shared by Tai and Chinese are seldom found in all Kadai branches and almost none of them belong to the core vocabulary".
- If so, we are probably not reconstructing the faintest traces of proto-SEAsia but rather dealing with chance similarities.

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