

## GENERAL PRINCIPLES

### 1. RECONSTRUCTION AND THE COMPARATIVE METHOD

(Note potential circularity involved in 1.1 and 1.2, also in 2.2)

1.1. Phonology.	PPH	*p	*t	*k	*q	/*?	/*?
		*b	*d	*g		/*g	
		*m	*n	/*ŋ		*ŋ	
		*w	*l	*y	/*r	*R	
			*s			*h	
				*f		*v	
					*θ		
					*ð		

Suprasegmentals: vowel length on penult \*

- 1.2. Lexicon. PPH \*mata [máta] 'eye', \*di:laq 'tongue', \*la:ña 'coconut oil', \*qaba:Rah- 'shoulder', \*ba:lu 'widow', \*da:Raq 'blood', \*da:lan 'path, trail', \*hi:lut 'massage', \*i:kuk 'tail', \*ku:tuh- 'louse', \*gi:pan 'tooth', \*tu:buq 'to grow, sprout', \*anak 'child', \*apuh- 'grandparent', \*qasin 'salt', \*basaq 'wet', \*lu:heq 'tear (from crying)', \*danun 'water'...  
Note: \*ba:Rah- 'glowing embers' / \*baRaq 'lungs'

- 1.3. Grammar = Morphology and Syntax. Pronouns, e.g., \*aku 'I', \*ikaw 'thou', \*siya 'he/she', \*kami 'we (excl)', \*kita 'we (incl)', \*kamu 'yo'; \*sida 'they'; formatives \*si-, \*da-. Deictics, e.g., \*ni (nearest), \*tu (not far), \*ti (far); formatives \*i-, \*a-. Case markers; affixes (prefixes \*ma-, \*na-, \*hi-, \*maR-, infixes \*-um-, \*-in-, suffixes \*-an, \*-a, \*-f, circumfixes \*ka--an, \*-in--an); voice or focus relationships of noun phrase to verb. Syntax, e.g., negatives (\*bakan predicative, \*had1 preverbal) or interrogatives (\*si?anuh- 'who?', \*?anuh- 'what?', di?anuh- 'where?') clause initial.

EXAMPLES OF SOME RECONSTRUCTIONS (PPH) AND SPURIOUS RECONSTRUCTIONS.

eye, \*tongue, new, \*penis, \*pot/drag,

Fugao

m̩ata

m̩ata

m̩ata?

Tokano

m̩ata

m̩ata

m̩ata?

Ibayaten

m̩ata?

Kapampangan

m̩ata

m̩ata

m̩ata?

Kalimian

m̩ata

m̩ata

m̩ata?

Tagalog

m̩ata

m̩ata?

PROTO-Phil.

m̩ata

m̩ata?

Note:

Malay

m̩ata

Spanish

m̩ata

Manobo

m̩ata

m̩ata

m̩ata?

PPH CONSONANTS (rearranged)

Kapampangan

\*q

\*d

\*f

\*k

\*g

\*l

\*r

\*s

\*t

\*n

\*m

\*p

\*b

\*v

\*w

Kalimian

\*q

\*d

\*f

\*k

\*g

\*l

\*r

\*s

\*t

\*n

\*m

\*p

\*b

\*v

\*w

Tagalog

\*q

\*d

\*f

\*k

\*g

\*l

\*r

\*s

\*t

\*n

\*m

\*p

\*b

\*v

\*w

E.g., Kalimian

\*q

\*d

\*f

\*k

\*g

\*l

\*r

\*s

\*t

\*n

\*m

\*p

\*b

\*v

\*w

Fugao

\*q

\*d

\*f

\*k

\*g

\*l

\*r

\*s

\*t

\*n

\*m

\*p

\*b

\*v

\*w

Tokano

\*q

\*d

\*f

\*k

\*g

\*l

\*r

\*s

\*t

\*n

\*m

\*p

\*b

\*v

\*w

Ibayaten

\*q

\*d

\*f

\*k

\*g

\*l

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\*s

\*t

\*n

\*m

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\*b

\*v

\*w

Kapampangan

\*q

\*d

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Manobo

\*q

\*d

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\*s

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\*m

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\*b

\*v

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Mata

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\*p

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\*v

\*w

2. SUBGROUPING  
(Quantitative vs qualitative methods.)

- 2.1. Judgment by inspection.  
 2.2. Discovery of exclusively shared (non-accidental) innovations.

1. In phonology (generally proving to be least sound in Ph).  
 Note accent, treatment of \*q, \*R, \*j, \*ə, \*ɪ.  
 Complex phonological innovations, e.g., metathesis of certain clusters (PPH \*IC > Bisayan \*CI); assimilation of \*ə to \*u or \*i; etc.
2. In Lexicon (quality vs quantity) [Wolff's review of Llamzon]
3. In functors, morphology, or grammar.

2.3. Lexicostatistics (vs glottochronology).

- 2.4. Functor Analysis (Zorc), Morphemic Differentiae Analysis (McFarland).  
Selection of functors most likely to be different or actually known to differ, or total paradigmatic comparison of all sets (pronouns, deictics, negatives, verb inflection, case-marking particles, discourse particles, numerals, locatives, temporals, etc.).

3. PREHISTORY

- 3.1. Use of other criteria from other fields, e.g., archaeology and artifacts, geography, culture and traditions, etc.
- 3.2. The case of Kagayanen: a Manobo or a Bisayan Language?  
[Quality of innovations; reduction of list and etymological analysis.]
- 3.3. The [bisayaq] of Borneo and of the Philippines; sharing of retentions (e.g., PAN \*maCa 'eye', \*qa(1)jaw 'day', \*?inum 'drink', PHS \*beRas 'milled rice', \*pajay 'unhusked rice, rice plant', etc.).
- 3.4. Gubat dialect on the Bikol Peninsula; is it Bikol?, Peripheral Bisayan?, or Warayan? [comparison of functor vs lexicostatistical scores plus exclusively-shared innovations]
- 3.5. Comparison of results of various methods; implications of discrepancies in prehistorical terms.
- 3.6. Wörte und Sachen technique. Proto Philippine speakers apparently had:  
 RICE AGRICULTURE: \*beRas 'milled rice', \*pa:jay 'unhusked rice', hemay 'rice', \*daRa:mi 'rice stalk', qumah 'ricefield', a:sud 'to pound rice in mortar (two people in succession)', labek 'to pound rice', \*haqlu 'pestle', \*lesun 'mortar'...  
 WEAVING: \*qules 'blanket', habel 'to weave', \*ball:ja 'shuttle'...  
 SEWING: \*tahiq 'to sew' (\*da:qit doublet), \*da:Rum 'needle', \*benay 'thread'...  
 HOUSES: \*balay 'house', \*hal:Ri 'pillar', \*qatap 'roof', \*pa:wad 'thatch roofing', \*haRdan 'ladder, staircase'...  
 TOOLS AND UTENSILS: \*ku:dan 'cooking pot', \*bajaq 'earthen jar', \*wa:say 'axe, adze', \*dapuR 'stove, hearth'...

<b>NORTHERN</b>	<b>PHILIPPINE "Cordilleran" (NPh)</b>	<b>PANGASINIC</b> (Conkltn, L. Tagon)	Ilongot (Ilg) ~ 2 Kallahan (Kln) Inibalot (Ibl) Pangasinan (Png)
		<b>CENTRAL CORDILLERAN</b> (Xcld)	Isinai (Isn) Kalinga (Kla) Bontoc (Bon) Balangao (Blw) Ifugao (Ifg) ~ 3
		<b>ILOKAN</b>	Ilokano (Ilk) ~ 2
		<b>NORTHERN CORDILLERAN</b> (Xcld)	Ibanag (Ibg) ~ 2 Isneg (Isq) Gaddang (Ged) Atta (Atta)
		<b>BATANIC/BASHITIC</b> (Ynada)	Yami (Yam) Itbayaten (Itb) Ivatan (Ivt) ~ 2
		<b>SAMBAL</b>	Sambal (Sbl) ~ 3
		<b>PAMPANGIC</b>	Kapampangan (Pam)
		<b>NORTH MANGYAN</b> (Conkltn, Zoro)	Iraya (Iry) Alangan (Aln) Tadyawan (Tdy)
		<b>SOUTH MANGYAN</b>	Buhid (Buh) ~ 4 Hanunoo (Han) ~ 2
		<b>PALAWANIC</b>	Palawano (Pal) ~ 3 Aborlan (Abr)
<b>SOUTHERN</b>	<b>PHILIPPINE "Sulic" (SPh)</b>	<b>KALAMIANIC</b>	Kalamian (Kat) ~ 3
		<b>SUBANON</b>	Subanon (Sub) ~ 2
		<b>TAGALIC/CENTRAL PHILIPPINE</b> (Galician, Moravian, Zoro)	Tagalog (Tag) Bikol (Bik) ~ 9
		<b>MANOBO</b> (Fikno)	Bisayan (Bis) ~ 36 Mansakan (Msk) ~ 10 Kagayanan (Kag) Western Bukidnon (Wbm) ~ 5 Cotabato (Cot) ~ 2 Tasaday (Tsd)
		<b>DANAQ</b> (Allison)	Maranao (Mar) ~ 2 Maguindanao (Mgd)
		<b>CELEBES EXTENSION</b> (Charles)	Mongondow (Mon) ~ 2 Gorontalo (Got) ~ 2

<u>Relatable to Manobo</u>		<u>Expected Bs</u>
'belly'	gettak	*tiyan
'blood'	lajessa	*duguq
'body'	la:wa	*la:was
'earth'	basak	*lugtaq, *lu:paq
'eat'	ka:qan	*ka:qan
'fingernail'	su:lu	*kuku, *kulu
'I'	qa	*qaku
'knee'	bu:qu1	*tu:(h)ud
'man'	ma:ma	*(la)la:ki
'night'	ki:lem	*gabiqi, *dalem
'person'	qittaw	*ta:wu
'sand'	pantad	*baras, *bu(h)a:gin
'skin'	langit	*pa:nit
'sleep'	tunu:ga	*tu:rug
'that'	sanyaq	*qinaq, *qilyan, *yaqun, *dan
'thou'	ka:un	*qikaw
'water'	wa:ig	*tu:big

<u>Relatable to Bisayan</u>		<u>Expected Mb</u>
'all'	tanán	*la:nun, *tibeq, *qəlin
'arrive'	qabut	*quma, *dunguk
'hear'	ka-ma:tiq	*dinəg, *paliman
'fat'	tambak	*lambuq

<u>South Bis.</u>		<u>Expected Mb</u>	<u>Expected WBs</u>
'bone'	bekkeq	*tulqan	*tulqan
'cold'	tignaw	*gennaw	*ramig
'give'	qa:tag	*baggay	*taqu
'not (so)'	di:liq	*kennaq	*bekken

<u>West Bis.</u>		<u>Expected Mb</u>	<u>Expected SBs</u>
'good'	miyad	*(qu)piya	*dayaw
'heart'	tagipusu:qun	*pusuŋ	*kastinka:sip
'know'	na:man	*taqu, *sabut	*hibaru, *qf:nat
'say'	qambal	*ka:gi	*laquj
'sit'	puŋkuq	*piŋqu	*qiqkud, *lɪŋkud

Note: 58 forms give no information beyond the fact that Kagayanen fits, like both the Bisayan and Manobo families, a Southern Philippine/Austronesian language; 12 forms appear to be innovations in form or meaning within Kagayanen itself.

COMPARISON OF LEXICOSTATISTICAL SCORES (on left) WITH  
THOSE DERIVED FROM THE FUNCTOR COMPARISON (on right).  
(13 Bisayan dialects)

		WEST BISAYAN	
		Kuyonon	Semirara
86/80	-5	94/89	Bulalakaw
85/76	-9	91/78	92/87 Pandan
86/69	-17	-13	-5
80/66	-14	86/80	87/81 Kinaray-a
82/68	-14	86/71	88/77 Aklanon
80/59	-21	85/66	86/73
73/55	-18	-19	-13
		76/68	78/72
		-8	-6

		CENTRAL BISAYAN	
		Romblon	
86/61	-25	79/67	
83/64	-19	-12	
84/78	-6	83/76	Hiligaynon
80/82	-5	-3	
86/81	-5	80/75	
72/70	-2	78/76	
66/64	-8	-4	
66/58	-9	-2	
65/56	-8	-1	
75/65	-10	73/73	
81/64	-7	76/68	
82/80	-8	73/66	
		-7	Karay-a

N-Samar

Subat

Sorsogon

Cebu

Bukidnon

Maguindanao

Maranao

Maguindanao

Maguindanao

Maguindanao

Maguindanao

Maguindanao

Maguindanao