

CENTRAL CORDILLERAN RECONSTRUCTIONS: ADDENDA TO REID

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1. INTRODUCTION

The northern sector of the island of Luzon, Philippines, contains a wide variety of peoples speaking a large number of related languages and dialects. Three of the languages spoken to the north of the Tagalog area, Kapampangan, Pangasinan and Ilokano, are among the eight generally-recognized majority languages of the nation. Each of them has a contingent of genetically related speech forms which are the mother tongues of ethnic minorities.

All of these languages and dialects are Austronesian, and all of them belong to the Northern Philippine group of languages. Figure 1 is an approximation to the family tree of which these languages are members. Kapampangan belongs to the Sambalic grouping (McFarland 1980) and Pangasinan to the Southern Cordilleran grouping (Reid 1979). Ilokano is either a first level member of Northern Cordilleran or it is coordinate with it (Tharp 1974, Reid 1979). Central Cordilleran and Southern Cordilleran share a common intermediate parent language, Proto-South-Central Cordilleran (PSCC), which, together with the Alta languages of northeastern Luzon, comprises the Meso-Cordilleran family of languages (Reid 1988a, 1988b).

The internal relationships of the Central Cordilleran subgroup of languages, established by Reid (1974), are diagrammed in Figure 2. Thus, it can be seen that if an item or an innovation appears in Isinai and at least one language of the North Central Cordilleran (NCC) group, it can be assigned to Proto-Central Cordilleran (PCC). If an item is shared by Kalinga-Itneg and also a Nuclear Cordilleran language, then it can be assigned to PNCC. Those items whose distribution is limited to two (or all three) of the Bontok-Kankanaey, Balangaw and Ifugaw speech communities are assumed to have been innovations in the Proto-Nuclear Cordilleran (PNC) period.

In his landmark article establishing the validity of the Central Cordilleran sub-grouping, Reid (1974) provided a list of lexemes exclusively shared at each of the three levels: PCC, PNCC, and PNC. For ease of reference they are listed here, but without the supporting evidence.

2. INNOVATIONS EXCLUSIVELY SHARED BY CC LANGUAGES

An item is assigned to PCC if it appears in Isinai and at least one, non-contiguous, language of the NCC group.

2.1. Lexical Items. An item is identified as a lexical innovation if there is no immediately apparent provenience for it.

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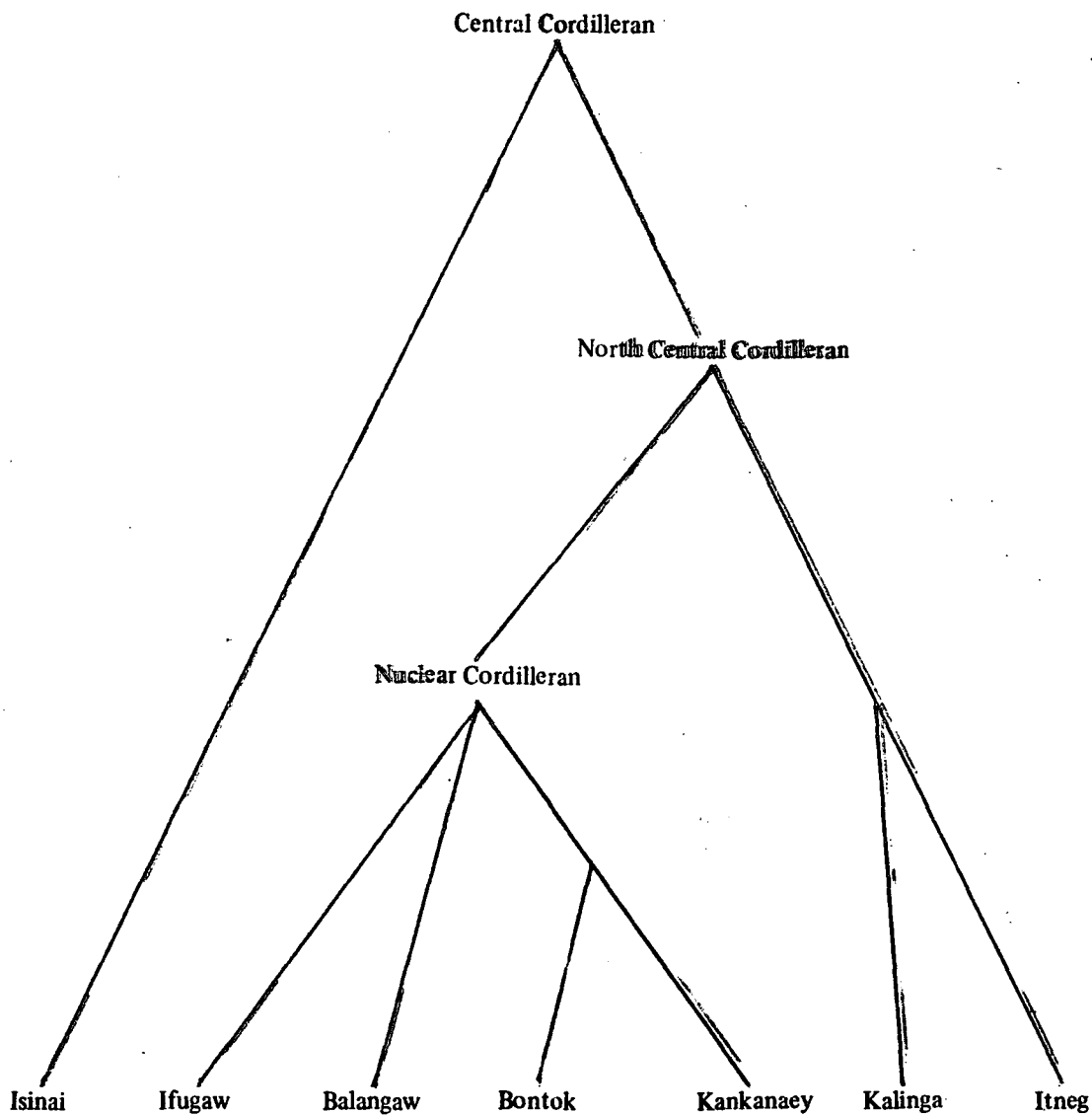


Figure 2. Internal relations of the Central Cordilleran subgroup (Reid 1974:512)

2.1.1. REID'S LIST

*?igid	'left (side)'
*?ila	'see'
*ban?+g	'small'
*dalit	'eel'
*d+pag	'lie flat, on one's back'
*dugi	'husk of rice'
*g+g+d	'slice meat'
*k+lan	'worm'
*kiyat	'swim'
*kugab	'afternoon, last night, late'
*l+ktat	'sudden'
*liglig	'circumvent, deviate, off to the side'
*l+gab	'set ablaze, conflagration, burn'
*lusud	'wooden fence'
*na?id	'there is none'
*putu	'belly, intestines'
*sagamsam	'remove weeds from growing rice'
*sag?+n	'near, next to'
*sakuku	'kind of snake'
*s+pdak	'whip, beat in wrestling'
*sin-	'one unit'
*sukup	'cover, lid, cap'
*t+k+n	'different'
*wanwan	'river'

2.1.2. CORRIGENDA

On the basis of data from Ibaloy, Reid (1988c) has raised the following items to the level of PSCC:

*?atun	'hot'
*l+t+p	'to dive'
*libu?u	'cloud'
*pun+g	'blood sausage; to fill'

Also on the original list were three items which can be raised to levels higher than that of PCC:

*?+t+n	Kla ?oton, Itg ?+t+n, Blw ma-tan, Bon, Knk, ?+t+n 'mature', Ifg ?oton 'mature pig' Nifg ?aton 'big', Kallahan (Kayapa) ?+t+n, Kallahan (Keleyqiq) ?eten, Kallahan (Kalanguya) ?aten 'big'. This evidence is strong enough to raise the lexeme to the level of PSCC.
*tag?+y	Bon, Knk tag?+y, Isi tax?oy 'above, up', Itg tag?ay 'raise', Kla tan?oy 'raise, elevate' Pangasinan ?atag+y 'tall, high, above', Kallahan (Kalanguya) ?eta?gey 'tall, high'. The Sambalic languages also have reflexes with the meanings of 'tall, high, above': Sambal (Botolan) tag?ay, Sambal (Santa Cruz) mata?gay, and Sambal (Bolinao) ?ata?gay. This item may then be restructured as *ta?gay and assigned to PNPB.
*t+b+n	Bon, Knk t+b+n, Ifg, Isi tobon 'pierce'. Ilokano tebbeng 'to make a hole in the earlobe' is most probably a cognate, and the item should be raised to the PC level.

CENTRAL CORDILLERAN RECONSTRUCTIONS

2.1.3. ADDENDA

The items which follow have a reflex in Isinai and in at least one non-contiguous NCC language. They are, therefore, relatively safe reconstructions for PCC:¹

*?a?+w	Bon ?a?+w, Blw ?a??aw, Ifg ?a??o, IsiA ?a?aw 'shadow' ²
*?aklaŋ	NBon, CBon ?aklaŋ, IsiA ?e?eŋ 'clothes' ³
*?ali[n]kamut	EBon ?alikamot, CBon ?alinkakamot, Blw (Tonglayan) ?allekamot, Kla, ?ali?amut, IsiB ?alin?amut 'chicken louse'
*?aptik+y	Bon, NKnk, SKnk /?aptik, Blw ?atte?, IsiA, ?apti?oy, ?aptiyo?, IsiB ?attiyo? 'short' ⁴
*?ati[n]bulan+n	EBon <i>bolanŋ</i> , NKnk (Pide) ?atinbowaŋ+n, NKnk (Fidelisan) ?atinbowaŋan, IsiB ?asibua:ŋon 'rainbow'; other derived forms exhibit metathesis of the second and third root consonants: Bon ?atinbowaŋ+n, NKnk (Alab) ?atinbowa?+n, NKnk (Balili) ?atimbowa?+n, SKnk ?abowa, Ifg ?at?atibowaŋon, NKla, SEKla ?atibowaŋon, ?atibowaŋon, CKla ?abowaŋ, IsiA <i>tavoneyon</i> 'rainbow'
*d+la	EBon <i>dala</i> , CIfg <i>dula</i> , Kla <i>dola</i> , Isi <i>deya</i> 'below'
*dika	NBon <i>nadikadika?an</i> , Ifg <i>nadidi:ka</i> , Isi <i>nariddi:?a</i> 'dirty'
*dit+k	EBon, Blw <i>ditak</i> , Isi <i>dirito?</i> 'red'
*dulnu	SKnk <i>do:nu</i> , Blw, Ifg, Kla <i>dulnu</i> , IsiA <i>di:nu</i> 'dew'
*guwab	Bon, NKnk, SKnk <i>gowab</i> , Blw (Tonglayan), Kla <i>guwab</i> , Isi <i>guwaw</i> 'below'; NKnk <i>gowabna</i> , Kla <i>guwab</i> , Isi <i>guwaw</i> 'space-under-house'
*k+p+t	EBon <i>nakpat</i> , Blw <i>na?pat</i> , Ifg <i>kopot</i> , CIfg, Isi <i>na?pot</i> 'wet' ⁵
*kugut	EBon, SBon <i>kogot</i> , Blw, Ifg <i>kugut</i> , Isi ? <i>uxut</i> 'sew'
*kulaŋ	NBon <i>kolarŋ</i> 'intestinal worm', SKnk <i>koway</i> , Blw ? <i>olarŋ</i> , Kla <i>kulaŋ</i> , IsiA ? <i>uwerŋ</i> 'earthworm'
*lagud	Bon <i>lagod</i> 'the villages lying to the east and north of Bontoc, such as Tocucan and Sadanga', CBon <i>lagod</i> , CKla <i>lagud</i> , IsiA <i>laxur</i> 'west'; NKnk <i>lagod</i> , Ifg <i>lagud</i> 'down-stream'
*lukuy	NKla <i>lukuy</i> , Isi <i>lu?uy</i> 'accompany, companion'
*talantag	Blw, NKla, SEKla <i>talantag</i> , Isi <i>teyantax</i> 'shore'
*t+nnin	EBon, Blw, CIfg, NIfg, Kla <i>tonnin</i> , CBon <i>t+nnin</i> , Isi <i>tunin</i> 'cold' ⁶

The two items below occur only in Ifugaw and Isinai, and they therefore provide less convincing evidence for assignment to PCC:

*gand+w	Ifg <i>gando</i> , Isi <i>gandaw</i> 'rat'
*tilak	NIfg, Isi <i>ti:la?</i> 'lost'

¹ Unless otherwise indicated, all sound changes in the languages and dialects used as evidence are predictable by rule.

² Reid had originally assigned this item to NC.

³ Vanoverbergh lists *aklang* 'jacket' for Knk: the unexpected /l/ indicates that it is a loan from somewhere. If it is from Bontok, then the reconstruction stands as PCC. But if it is a loan from an unattested dialect of Ilokano then it does not.

⁴ It is more economical to postulate that the long form *?aptik+y is PCC with a regular reflex in IsiA with subsequent apocope in NC than to assume that Isi borrowed the form (especially since it does not appear in Ifugaw). Isi shows metathesis, and both IsiB and Blw show regressive assimilation of the voiceless stops.

⁵ Reid had originally reconstructed this item as *?+p+t and assigned it to PNC.

⁶ But cf. Northern Alta *d+ngngin* and Southern Alta *dognin* 'cold' (Reid 1988a:16).

2.2. **Semantic Shift.** An item is considered an innovation if its denotation is markedly different from that of the immediately ancestral form.

2.2.1. FROM REID'S LIST

*?iba	'sibling' cf. PAN(D)	*?ibah 'other, different' ⁷
*baganj	'neck' cf. PPH(Z)	*baRqan 'molar tooth'
*kupkup	'skin (of human)' cf. PC(H)	*kupkup 'to wrap'
*tubu	'leaf' cf. PAN(Dy)	*tubuq 'to grow'

2.2.2. ADDENDA

*?apiŋ	'face' cf. PPH(H)	*?apiŋ 'cheek', Blw ?apeŋ, Kla, Isi ?apiŋ 'face'
*laman	'deer' cf. PC(H)	*laman 'wild animal', Blw, Isi laman 'deer'
*s(a+)?+d	'wait' cf. PC(H)	*sa?+d 'ambush, lie in wait', Bon sad?+n, s+?+d, Blw hadd+n, Ifg had?on, IsiB mantod, IsiA mansor 'to wait'
*sani	'chin' cf. PC(H)	*sani 'mouth', Bon, SKla, IsiA sani 'chin'
*s+d+l	'strong' cf. PSCC(H)	*s+d+l 'thick', Ifg hodol, SEKla kasdol, IsiB matde: 'strong'

2.3. Phonological/Morphological Change

These items contain morphological and/or phonological changes other than those which are predictable by rule.

2.3.1. FROM REID'S LIST

*?ak+w	'steal' cf. PAN(D)	*takaw 'steal' ⁸ Bon, NKnk, SKnk, ?ak+w, Blw, Nifg, Kla ?akaw, Isi mana?aw 'steal'
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2.3.2. ADDENDA

*?+b+g	'lie down' cf. PPH(Z)	*lubug 'lie down' Bon, NKnk, ?omb+g, ?ib?+g, Blaw, Kla ?umbug, Isi? umboh 'to lie down'
*piy+k	'mud' cf. PC(H)	*puy+k 'mud' Kla piyo? 'mud'; IsiA piyo? 'land, soil'
*puknas	'wipe' apparently a blend of PAN(C)	*punas and PSCC(H) *puknad 'wipe' NKnk poknas, Blw (Aliawan), Clfg pu? nah, Nifg po? nah, IsiB pu?nat, IsiA pu?nas 'wipe'
*sip?uk	'to blow' cf. PMC(R)	*siqbuk 'to blow' NKnk sip?ok, IsiA sippu?, IsiB sipu? 'to blow'

The two items below occur only in Ifugaw and Isinai.

*?alat+y	'liver' cf. PPH(He)	*?aRtey 'liver' Ifg (Hapaw) ?oa:te, ⁹ IsiB ?eyatoy 'liver'
*kun?an	'when?' cf. PPH(Z)	*ke-[]anu 'when?' Ifg kon?ana, Isi ?un?an 'when?'

⁷ The PAN and PPH reconstructions are primarily those of Dempwolff (D), Dyen (Dy), Blust (B), Charles (C), and Healey (He) as cited in Wurm and Wilson (1975). Some of the PPH forms and all of the reconstructions at the level of PC and lower are from Reid (1974, 1988a,c) (R) and Himes (1988) (H).

⁸ This item appears on Reid's list of NCC forms.

⁹ Were the Ifg (Hapaw) form derived from PCC *?alt+y we would expect *?a:toy by analogy with *?a:go from *?alg+w; the actually occurring form is analogous to *boa:?inan* from *bala? in 'cockroach'. IsiA has the regular reflex of *?alt+y, ?e:toy.

3. INNOVATIONS EXCLUSIVELY SHARED BY NCC LANGUAGES

Those items which have a reflex in Kalinga-Itneg and also in two or more of the Bontok-Kankanaey/Ifugaw/Balangaw group can reliably be assigned to the PNCC level.

3.1. Lexical Items.

3.1.1. REID'S LIST

*?anuka	'what's-it'
*?+gyat	'fear'
*dakig	'bolt of a door'
*gaman	'head axe'
*kan	'say'
*lukbub	'to lie on one's stomach'
*palay+n	'a kind of tree'
*sapit	'to relate; word'
*tayap	'to fly'
*tukdu	'to sit'

3.1.2. CORRIGENDA

Reid (1988c) has raised the following items to the level of PSCC:

*?awil	'kind of gift'
*bagiw	'pondfield algae; moss'
*lawa	'useless, without purpose, insignificant'
*panad	'level area'
*sunsun	'to smell'
*?ak+w	This item has been raised to PCC (see above)
*?+s+k	Itg, Bon, Knk ?+s+k, Ifg ?oho? 'to plant', Kla ?oso? 'to transplant rice' Ibaloy ?+s+k, Ilongot ?+t+k 'to plant' This item may be raised to PSCC.

3.1.3. ADDENDA

*?akitt(+u)y	EBon ?ak?akittoy, NKnk kittoy, SKnk kitkittoy, Blw ?akettoy, NKla ?akittoy 'small'; SEKla ?akitoy 'few'
*?amulan	EBon, Blw (Tonglayan), SEKla ?amolan, NIfg ?amulan 'taro stem'; NKnk ?ammowan 'taro'
*?ang(a+y)	Bon, NKnk, Blw, NIfg ?angay, SBon, NKnk ?ang+y, NKla ?agay, SEKla ?ange 'only'
*?angiw	Bon, NKnk, SKnk, Ifg, Itg (Lacub), Kla ?angiw, Blw, NIfg, NKla ?angew 'saliva, drivel'
*?awni	Bon, Blw ?as ?awni, NKnk ?is ?awni, Kla ?awni 'later'
*?inangu	SBon ?inango, Blw ?in?innango, NIfg ?innango, CKla ?inngango, SKla ?ininnangu, SEKla ?ininango 'to play'
*?is+w	NBon nis+w, CBon ?is+w, Itg, Kla ?isaw 'dirty'; EBon nisiw, Itg (Lacub) ?is+w, Ifg ?iho, NKla ?issaw 'bad, ugly' ¹⁰
*?up+k	Bon ?op+k, Blw (Aliawan) ?appo?, Ifg ?upok, SEKla ?uppo? 'rice bran' Cf. PAN(D) *?u(m)pak 'bark, skin'

¹⁰ With accretion of the initial velar nasal being an innovation within Bontok; cf. Ibl isew 'stinginess' (Reid 1988c).

*baklun	NKnk, SKnk <i>bakkon</i> , Blw (Tonglayan) <i>ba? lon</i> , Itg (Lacub) <i>baklon</i> 'ladle'
*bayas	Bon, NKnk, Kla <i>bayas</i> , Blw <i>b'yah</i> 'sugarcane wine'
*b+kaŋ	NBon. <i>b+kb+kaŋ</i> , NKnk (Balili) <i>B+kaŋ</i> , Ifg <i>bukay</i> , SKla <i>bo?äŋ</i> 'bow-and-arrow'; NKnk <i>b+kaŋ</i> 'bow'
*bila	NBon <i>bila</i> 'wild taro'; CBon, Ifg, CKla <i>bila</i> 'taro'
*bilig	Bon, NKnk, Blw, Itg, Kla <i>bilig</i> 'mountain'
*bun+t	EBon <i>bonat</i> , NBon <i>bon+t</i> , Blw <i>bunat</i> , Ifg, Kla <i>buhot</i> 'cloud'
*danggu	SKnk <i>danggo</i> , Ifg, SKla, SEKla <i>danggu</i> 'onion'
*g+l+m	Bon, Blw <i>g+l+m</i> , NKnk <i>g+?+m</i> , Ifg, Kla <i>golom</i> 'pubic hair'
*gun?u	Bon, SEKla <i>goŋ?o</i> , Blw <i>goŋo</i> 'knee'
*kadanyan	Bon, NKnk, Ifg <i>kadanyan</i> , SEKla <i>?adanyay</i> 'rich'
*kamana	Bon, Blw <i>kamana</i> , SKla <i>?ammuna</i> , SEKLA <i>?am?anna</i> , <i>?am?an</i> 'how many?'; NBon, Blw <i>kamana</i> , SEKla <i>kama?ana</i> 'when?'
*kasin	Bon, NKnk, Kla <i>kasin</i> , Blw <i>kasen</i> 'again, to repeat'
*latud	EBon, SBon, NKnk <i>latod</i> , Blw (Tonglayan), Cifg, NKla <i>latud</i> 'taro'; Cifg, Itg (Lacub) <i>latud</i> 'taro tops'
*layad	Bon, NKnk, SKnk, SKla <i>layad</i> , Blw <i>lay^d</i> , SEKla <i>laylayad</i> 'happy'
*li?u	NKnk <i>li?o</i> , Ifg (Hapaw) <i>?ipalyuwan</i> , Itg <i>mali?o</i> , Kla <i>li?u</i> , <i>li?uwan</i> 'to forget'
*p+y?as	NBon, NKnk <i>p+yp+y?as</i> , SKnk <i>p+y?as</i> , Ifg <i>poy?ah</i> , CKla <i>po?as</i> , SEKla <i>poyya?as</i> 'waterfall'
*sigab	EBon, NBon, Itg, Kla <i>sigab</i> , Blw <i>sig^b</i> 'pain'
*suy+p	CBon, SKnk, Itg <i>soy+p</i> , Ifg <i>huyop</i> , Kla <i>suyop</i> 'to sleep'
*taplak	EBon, NBon, Ifg, SEKla <i>taplak</i> , NKnk <i>tappak</i> , Blw (Tonglayan), Cifg, SKla <i>tapla?</i> 'to float'
*tilag	Bon, Ifg, CKla <i>tilag</i> , Blw <i>telag</i> 'rainbow'
*tukyud	NBon <i>tokvod</i> , Blw, Kla <i>tu?yud</i> 'to push' ¹¹
*tuy?ub	EBon, NKnk <i>toy?ob</i> , SBon <i>toyo?ob</i> , NIfg <i>tuyub</i> , Kla <i>tumuytuy?ub</i> 'waterfall'
*wakas	Bon <i>?as wakas</i> , NKnk <i>?is wakas</i> , Blw <i>?ah wakas</i> 'tomorrow'; Itg <i>wakas</i> 'day'
*wisnit	NKnk <i>wisnit</i> , Ifg <i>wihnit</i> 'dawn'; CKla <i>wiswisnit</i> 'morning'

3.1.4. Additional Items With a Reflex in Kalinga-Itneg And Only One of the Nuclear Cordilleran Languages were Identified.

*?+b+l	'wet'
*?isna	'cooked rice'
*dap?ay	'rock with a wide flat surface, paved place, men's communal house'
*k+gk+g	'knock, beat, as on a door'
*lagan	'sand'
*muŋ?ul	'summit'
*puta?ak	'white'

3.1.5. CORRIGENDUM

One item on the original list has been raised to the level of PSCC (Reid 1988c):

*lak+y	'termite'
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¹¹ Gaddang *?itu?yud* is probably a borrowing from Kalinga.

3.1.6. ADDENDA

*?al[l]in	'Bon, NKnk ? <i>alin</i> , SKla ? <i>alli</i> 'younger sibling'
*?asug	SBon ? <i>in?ahog</i> , Itg ? <i>asog</i> , SKla ? <i>asug</i> 'cooked rice' CKla ? <i>asug</i> 'to cook'
*?ataki	EBon, NKla ? <i>ataki</i> , NBon, SKnk <i>takki</i> , NKnk, SKnk <i>taki</i> , SEKla ? <i>attaki</i> 'cockroach'
*?inggi	Ifg ? <i>inggi</i> 'mouse'; CKla ? <i>inggi</i> 'rat'
*?ub+y	Bon (Mainit) ? <i>ob+y</i> , SKla ? <i>oboy</i> , SEKla ? <i>aboy</i> 'vagina'
*?ugud	Bon ? <i>og?ogod</i> , Kla ? <i>ug?uggud</i> 'story'
*?ulku?uk	NKnk ? <i>oko?ok</i> , CKla ? <i>ul?u?u?</i> , ? <i>ulku?uk</i> , SEKla ? <i>olko?ok</i> 'throat'
*?utbu	Bon ? <i>utbo</i> , SKla ? <i>utbu</i> 'to vomit'
*?utl+k	Blw ? <i>utla?</i> , CKla ? <i>otlok</i> 'to vomit'
*bitug	NKnk <i>bitog</i> 'stone wall'; Itg <i>bitog</i> , NKla <i>bitug</i> , SEKla <i>gitob</i> ¹² 'wall'
*buwanj	NBon, NKnk, SKnk, <i>bowanj</i> , Kla <i>buwanj</i> 'belly'
*daku	Ifg <i>dako</i> , NKla <i>daku</i> 'fever'
*d(+i)?+s	EBon, SEKla <i>do?os</i> , NBon <i>d+?+s</i> , <i>di?+s</i> , SBon <i>di?+h</i> 'to cough'
*dub [u] dub	Ifg <i>dubu?ub</i> , Itg <i>dobdob</i> , Kla <i>dubdub</i> 'wind'
*ganad	Bon, SKla <i>ganad</i> 'today'
*kiyud	Bon, NKnk <i>kiyod</i> , SEKla <i>keyud</i> 'dipper'
*lansi	Blw <i>lalanhi</i> , SKla <i>lansi</i> 'green (color)'
*l+san	NKnk, Itg <i>l+san</i> , NKla ? <i>alsan</i> , Kla <i>losan</i> 'all'
*na?ag	Bon, NKnk <i>na?ag</i> 'to listen to'; NKnk, Itg <i>na?ag</i> 'to hear'
*patud	NKnk, SEKla <i>patod</i> , CKla <i>pinatud</i> 'torch'
*p+?+s	NKnk <i>p+?+s</i> , <i>p+san</i> , SEKla <i>pop?os</i> 'to squeeze'
*p+s+l	Bon, Itg <i>p+s+l</i> , NKnk, SKnk <i>p+s+</i> , <i>p+s+l+n</i> , Kla (Manabo) <i>paslon</i> 'to kill'
*sal?u	Ifg <i>hal?o</i> 'inhabited zone in which the hamlets or villages are mutually neighboring'; CKla <i>kasalsal?on</i> 'neighbor'
*samp+t	NKnk <i>samp+t</i> 'tart'; NKnk <i>samp+t</i> 'rough'; Ifg <i>hampot</i> 'sour, but not bitter'; NKla <i>sampot</i> 'bitter'
*s(au)p?uy	NBon, Itg <i>sap?oy</i> , Kla <i>sap?uy</i> 'to blow'; CBon <i>sop?oy</i> , NKla <i>sup?uy</i> 'to blow'
*s+m+k	Bon <i>s+m+k</i> , <i>s+mk+n</i> , Kla <i>somsomkon</i> , <i>somsomok</i> 'think' ¹³
*siput	Bon <i>sipot</i> 'to go to work'; SEKla <i>siput</i> 'to work'
*tagaliy+ŋ	NKnk <i>tagaliy+ŋ</i> , Kla <i>tagaliyŋ</i> 'cold'
*t(+i)ŋi	EBon, NBon, Itg (Lacub) <i>tiŋi</i> , Kla <i>toni</i> , SKla <i>tuni</i> 'chicken louse'
*tup+k	Bon, NKnk, SKnk <i>top+k</i> , Kla <i>tupo?</i> 'mouth' ¹⁴
*was(+i)t	Bon, NKnk <i>wasit</i> , Kla <i>wasot</i> , SKla ? <i>iwassit</i> 'to throw away'
*y+k+t	SBon <i>y+k+t</i> , NKla <i>yokot</i> 'armpit'
*y+ky+k	SKnk <i>y+ky+k</i> , CKla <i>yokyok</i> , SKla <i>yo?yo?</i> 'to laugh' ¹⁵
*yuyuk	Bon <i>yoyok</i> , CKla <i>yuyuk</i> 'to stab'

¹² With metathesis of the voiced stops.

¹³ Cf. Ibl *semek* 'to love' (Reid 1988c).

¹⁴ Cf. Ibl *topek* 'to peck, as cocks fighting' (Reid 1988c).

¹⁵ Cf. Ibl *yekyek* 'to tickle' (Reid 1988c).

3.2. Semantic Shift

3.2.1. ADDENDA

The reconstructions in this section have a representative in Kalinga-Itneg and in at least two branches of the Nuclear Cordilleran group.

*d+la	'space-under-house' cf. PCC(H) *d+la 'below' EBon <i>dala</i> , CIfg, NIfg, SKla, SEKla <i>dola</i> 'space-under-house'
*ka?ag	'monkey' cf. PC(H) *ka?ag 'young monkey' Bon, NKnk, SKnk, Ifg, Itg, Kla <i>ka? ag</i> 'monkey'
*kadak+lan	'river' cf. PPH(Z) *Dakel 'big' NKnk <i>kadak?an</i> 'wide, large river'; Ifg <i>kadaklan hudhud</i> term for 'large river'; Itg (Lacub) <i>kadak+lan</i> 'river'
*lagud	'east' cf. PCC(H) *lagud 'west, downstream' NKnk <i>lagod</i> , Blw (Tonglayan), Ifg, Kla <i>lagud</i> , CIfg, SEKla ? <i>ad lagud</i> 'east'
*lam+s	'flesh' cf. PSCC(H) *lam+s 'fruit' NKnk, SKnk, Itg (Lacub) <i>lam+s</i> , Ifg <i>lamoh</i> , NKla <i>lamos</i> 'flesh'
*lidu	'to forget' cf. PC(H) *lidu 'negligent' NBon, NKnk <i>kalido</i> , NIfg <i>lidu</i> , Itg <i>malduwan</i> 'to forget'
*paŋis	'widower' cf. PC(H) *paŋis 'unmatched' EBon ? <i>ampaŋis</i> , Blw, Itg, Kla <i>paŋis</i> , NIfg ? <i>ampa:geh</i> 'widower'
*sinu	'what?' cf. PPH(H) *sinu 'who?' Bon, NKnk, SKnk <i>sino</i> , Blw <i>heno</i> , Kla <i>sinu</i> , SKla <i>siman</i> 'what?'

Because of their limited distribution in Nuclear Cordilleran languages, the items which follow are less confidently assigned to PNCC.

*?+b+g	'mat' cf. PCC(H) *?+b+g 'to lie down' CBon ? <i>ib+g</i> , SBon ? <i>b+g</i> , SKla ? <i>obog</i> 'mat'
*gatin	'to kick' cf. PC(H) *gatin 'to step on' EBon, NBon, NKnk, SEKla <i>gatin</i> 'to kick'
*lu?um	'smooth' cf. PC(R) *luqum 'ripe' EBon, NBon <i>lo?om</i> , CKla <i>lu?um</i> 'smooth'
*sigab	'difficult' cf. PNCC *sigab 'pain' Bon, NKnk, Kla <i>sigab</i> 'difficult'
*t+ŋnin	'wind' cf. PCC(H) *t+ŋnin 'cold' CBon <i>t+ŋnin</i> , SKla <i>toŋnin</i> 'wind'
*tubay	'spear' cf. PC(H) *tubay 'straight post' Bon, NKnk <i>tobay</i> , Kla <i>tubay</i> 'spear'

3.3. Phonological/Morphological Change

3.3.1. FROM REID'S LIST

*?+kdag	'fall' cf. PMC(R) *tek[nd] lag 'to fall' ¹⁶
*?+ŋ+l	'nose' cf. PSCC(R) *?+l+ŋ 'nose'
*?ina	'ear' cf. PAN(D) *taliŋa 'ear'
*?utu	'cook' cf. PAN(D) *lu(n)[t] uh 'cook'
*ma?id	'there is none' cf. PCC(R) *na?id 'there none'
*tun?al	'bone' cf. PPH(Z) *tuqlaŋ 'bone'

¹⁶ NCC languages also reflect forms with regressive assimilation of the voiceless stop: CBon, Itg ?+tdag, NKla, SKla, SEKla ?otdag 'to fall'.

3.32. ADDENDA

The following are reconstructions based on Kalinga/Itneg and at least two of the branches of Nuclear Cordilleran:

- *kuk?ul(+u)ŋ 'fingernail' cf. PPH(H) *kulkulhun 'fingernail'
EBon *kok ?olon*, SBon *kok ?ol+ŋ*, Blw *?o??olon*, Nifg,
SKla *?o?olon*, Cifg, SEKla *?u??uluy* 'fingernail'
- *kulap?+y 'butterfly' cf. PSCC(H) *ku[m]pa?+y 'butterfly'
NBon *kolkollap+y*, CBon *kolap?+y*, Blw *?ol?olappoy*,
Ifg *kulkulap?e*, NKla *kullapoy*, SKla *?ullapoy* 'butterfly'
- *lami?is 'sweet' cf. PAN(D) *mamit 'sweet'
Bon *lami?is*, NKnk *lami?isan*, Nifg *lameh*, NKla *nalmi?is*
'sweet'
- *tuppa 'to spit, saliva' cf. PPH(Z) *tuLpa 'to spit'
EBon, NKnk, Blw *toppa*, Ifg, Kla *tuppa* 'to spit, sputum';
Bon, NKnk, Blw (Aliawan) *tobba*,
SKla *tubba* 'to spit, sputum'¹⁷

The following reconstructions are based on evidence from Kalinga-Itneg and only one of the branches of Nuclear Cordilleran.

- *?akit 'few' cf. PNCC *?akitt(+u)y 'few, small'
Bon, NKnk, Kla *?akit* 'few'
- *?akiy(+u)t 'few' cf. PNCC *?akitt(+u)y 'few, small'
CBon, Kla *?akiyot* 'very little'; NBon *?ak?akiyot* 'small';
CBon (Tocucan) *?ak?akiyot*, CBon, SBon *?ak?akiy+t*,
CKla *?akkeyut*, *?akkeyot* 'few'
- *?ata 'eye' cf. PAN(D) *mata 'eye'
NKnk, Kla *?ata* 'eye'
- *dawwan 'river' cf. PCC(R) *wanwan 'river'
EBon, CBon, SBon, Kla *dawwan* 'river'
- *galabi 'yesterday' cf. PPH(R) *ka-Rabi^oi 'yesterday'
NBon *?ad galabyan*, SKla *galabyan* 'yesterday'
CKla *?isan galabyan* 'day-before-yesterday'
- *guyguy 'to pull' cf. PPH(Z) *guyud 'to pull'
Bon, NKnk *goygoy*, CKla, SKla *guyguy* 'to pull'
- *kuglit 'skin' cf. PPH(H) *kublitt 'skin'
Blw *?uglet*, CKla, SKla *?uglit* 'skin'
- *t+pa 'winnow' cf. PPH(H) *tahep 'winnow'
EBon, Kla *topa* 'winnow'
- *tulkud 'housepost' cf. PPH(Z) *tukud 'housepost'
Bon *tolkod*, SEKla *tolkud* 'housepost'

4. INNOVATIONS EXCLUSIVELY SHARED BY NC LANGUAGES: ALL THREE BRANCHES

Those items which have reflexes in all three of the branches of Nuclear Cordilleran and which also have a wide-spread distribution are confidently assigned to this level.¹⁸

4.1. Lexical Items.

4.1.1. REID'S LIST

- *?agid 'to sharpen to a point, as a stick'
- *?ad[?u]wani 'today'

¹⁷ The latter forms show voicing of the intervocallic geminate cluster.

¹⁸ There are many lexemes which occur in the core area of Balangaw, Eastern Bontok and Northern Ifugaw (as well as in Southeast Kalinga) which undoubtedly reflect a good deal of hidden borrowing.

*g+sg+s	'to slice, as camote leaves' ¹⁹
*kawa	'way; to pass along a trail'
*l+ml+m	'rain storm, typhoon' ²⁰
*paduj	'similar'
*puk+l	'shoulder' ²¹
*tikid	'ascend'

4.1.2. CORRIGENDA

*?a?+w	'shadow' This item has been raised to the level of PCC.
*kitinj	'to pinch' Reid (1988c) has raised this to the PSCC level.

4.1.3. ADDENDA

*?ad+l	EBon, Ifg ? <i>adol</i> , SBon, Ifg (Hapaw) ? <i>ado</i> ., Blw ? <i>adal</i> 'body' ²²
*?idat	EBon, Ifg ? <i>idat</i> , Blw ? <i>iddat</i> 'to give'
*?ugga	CBon, CIfg ? <i>ad ?ogga</i> , Blw, NIfg ? <i>ad ?ugg</i> ^ 'yesterday'
*batanj	NBOn <i>sinbatanan</i> , Bon ? <i>anbattanj</i> , Blw <i>bum^ tanjan</i> , Ifg <i>himbatanjan</i> 'afternoon'
*b+lal	EBon <i>bomlol</i> , CBon <i>bomlal</i> , <i>b+lal</i> , Blw <i>bumnal</i> , Ifg <i>bumlal</i> , <i>bolal</i> 'to swell'
*da?ul	Bon <i>da?ol</i> , NKnk <i>da?o</i> , SKnk <i>da?o?an</i> , Blw <i>do??ol</i> , Ifg <i>da?ul</i> 'space-under-house'
*k+l+n	EBon, Ifg <i>maylon</i> , Blw <i>mayl+n</i> , Ifg <i>kolon</i> 'to split'
*l(a+)ŋ+s	Bon, NKnk <i>lanj+n</i> , Blw, CIfg <i>lonjoh</i> , <i>lonhon</i> 'to cut off, chop'
*li?iw	EBon <i>liwan</i> , NKnk <i>li?iwan</i> , SKnk <i>liw?an</i> , Blw ? <i>aliw?</i> ^n, Ifg <i>kal?iwan</i> 'to forget'
*pagat	Bon, NKnk, SKnk, Blw, Ifg <i>pagat</i> 'thorn'
*sik+t	EBon <i>sikat</i> , SBon <i>hik+t</i> , NKnk, SKnk <i>sik+t</i> , Blw (Tonglayan) <i>he? at</i> , Ifg <i>hikot</i> 'sheath for bolo'

4.2. Semantic Shift

4.2.1. FROM REID'S LIST

*lakuwan	'to buy' <PNPH(H) *laku? 'to sell'
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4.2.2. ADDENDA

*daya	'above' cf. PPH(C) *daya 'upstream' SKnk, CIfg <i>daya</i> , Blw <i>day</i> ^ 'above'
*lakat	'taro' cf. PC(H) *lakat 'kind of banana' Bon, NKnk, Blw (Tonglayan) <i>lakat</i> , Ifg <i>la? at</i> 'taro'
*samp+t	'rough (touch)' <PNCC *samp+t 'rough (taste)' NKnk, SKnk <i>samp+t</i> , Blw (Aliawan) <i>hampat</i> , Ifg <i>hampot</i> 'rough to the touch'

¹⁹ Cf. Ibl *geges* 'to cut something into bits, as leaves' (Reid 1988c).

²⁰ Cf. Ibl *demdem* 'cloudy, overcast' (Reid 1988c).

²¹ Cf. Ibl *pokol* 'bone'; also Southern Alta *pokol*, Northern Alta *pu?+l*, and Casiguran Dumagat *puk+l* 'thigh' (Reid 1988a:14).

²² Reid had originally placed this in the category of reconstructions with reflexes in only two of the three NC languages.

4.3. Morphological/Phonological Change

4.3.1. ADDENDA

- *bilat 'scar' cf. PPH(H) *pilat 'scar'
Bon, Blw, Nlfg *bilat* 'scar'
*tili 'vagina' cf. PAN *i(ŋ) (CtT)il 'clitoris'
Bon, NKnk, Ifg *tili*, Blw (Tonglayan) *tehi* 'vagina'

INNOVATIONS EXCLUSIVELY SHARED WITHIN NC LANGUAGES: two of the three branches or, if in all three, of limited distribution.

5.1. Lexical innovations

5.1.1. FROM REID'S LIST

- *buyuy 'a boil'
*pagpag 'forest'

5.1.2. CORRIGENDA

- *?ad+l This item has been reassigned to the confirmed NC reconstructions above.
*?+p+t This item has been reconstructed as *k+p+t and assigned to the CC level above.
*nilu 'dull' Blw, Ifg *nilu* 'dull'
SEKla *nilo*, Kallahan (Kayapa), Ilongot *nilud* 'dull'
If the Southern Cordilleran term is cognate this item may be assigned to PSCC; otherwise, it is probably PNCC.

5.1.3. ADDENDA

- *?aklit Bon, NKnk, Nlfg ?*aklit*, Clfg ?*aklet* 'bitter'
*?akud NKnk, SKnk ?*akod*, Ifg ?*akud* 'ladle, spatula'
*?alugu?ug Bon ?*alogo?og*, Ifg ?*alugu?ug* 'throat'
*?aml+ŋ Bon ?*aml+ŋ*, NKnk ?*amm+ŋ*, Blw ?*amlan* 'to laugh'
*?am[m]ay EBon, Blw ?*ammay*, NKnk ?*amay* 'good, pretty'
*?a[n]gul+m EBon ?*agolom*, Bon *gol+m*, NKnk ?*agow+n*,
Ifg *gulom*, Nlfg ?*angugu:lom*; ?*angugulon* 'ant'
*?anibat NKnk, Ifg ?*anibat* 'kind of fence'
*?apis SKnk ?*apis*, Ifg ?*apih* 'sleeping mat'
*?im+l EBon, Nlfg ?*imol*, Blw (Tonglayan) ?*imal* 'round'
*?ubud Bon ?*obod*, Ifg ?*ubud* 'fine sand'
*?uplak EBon, Blw (Tonglayan) ?*oplak*, Clfg ?*uplak* 'bark (of a tree)'
*ba?un Bon, NKnk *ba?on*, Ifg *ba?un* 'debt'
*bagsay NKnk *bagsay*, Ifg *baghe* 'kind of spear'
*bakag NBon, NKnk *bakag*, Blw *ba?ag* 'to cut off'
*baktad Bon, NKnk, SKnk, Ifg *baktad* 'to lie down'
*bidan Bon, NKnk, Ifg *bidan* 'to be burning'
*da?an Bon, Blw *da?an* 'not (negator of past verbs)'
*da[k] lig SBon, NKnk, SKnk *dalig*, Nlfg *d^?* lig 'wall'
*dukug Bon, NKnk *dokog*, Ifg *dukug* 'to turn one's back'
*ginnaw Bon, Nlfg *ginnaw*, Nknk *ginnawan* 'stream'
*gisa NKnk *gisa*, Ifg *giha* 'to split (wood)'
*ka?at Bon, NKnk, Ifg *ka?at* 'how many?'
*kalanakan NKnk *kalanakan*, *kallanakan*, Nlfg ?*alana?an* 'throat'

*kanaykay	EBon <i>kanaykay</i> , Blw, NIfg <i>?anay?ay</i> 'itch'
*kasa?ud	Bon, NKnk, SKnk <i>kasa?od</i> , Blw <i>kasa?ud</i> 'sibling-in-law (esp. brother-in-law)'
*kug?ug	Bon <i>kog?on</i> , Ifg <i>kug?uj</i> 'to hit with the fist'
*kunut	Bon, NKnk <i>konot</i> , CIfg <i>kunut</i> 'to scratch'
*lat[?]+d	Bon, NKnk, SKnk <i>lat+d</i> , Ifg <i>lat?od</i> 'to swell'
*lul+k	EBon <i>lolak</i> , SBon <i>lol+k</i> ; NKnk <i>low+k</i> , Ifg <i>lulok</i> 'deaf'
*ŋ+t+g	EBon <i>gotog</i> , CBon <i>ŋ+t+g</i> , Blw <i>ŋ^{tt}gⁿ</i> 'black, dark'
*pakdal	SKnk <i>pakda</i> , Ifg <i>pakdal</i> 'bridge'
*pitay	Bon <i>pitay</i> , Blw <i>petay</i> 'skirt'; NKnk <i>pitay</i> 'short skirt'
*pu?us	Bon, NKnk <i>po?os</i> , Ifg <i>pu?uh</i> 'hot'
*saguguj	Bon, NKnk <i>sagogoj</i> , Ifg <i>hagugoj</i> 'neighbor'
*sakyat	Bon <i>sakyat</i> 'to step upwards; Blw <i>ha?yat</i> , Ifg <i>hakyat</i> 'to return home'
*san?adum	EBon, NBon <i>?ad san? adom</i> , Blw <i>?ad san? adum</i> 'day-before-yesterday'; EBon, NBon <i>? as san? adom</i> , Blw <i>? ah san? adum</i> 'day-after-tomorrow'
*sap?ud	Blw, NIfg <i>hapod</i> , Ifg <i>hap? ud</i> 'to blow'
*s+kaw	NKnk <i>s+kaw</i> , Blw <i>sokaw</i> 'feel cold'; Blw (Aliawan) <i>maskaw</i> 'headcold'
*silap	Bon <i>silap</i> , CIfg <i>hilap</i> 'dream'; Ifg <i>hilap</i> 'bad dream'
*sina?aj	EBon <i>sina? aj</i> , Blw, NIfg <i>henaj</i> , NIfg <i>hina:ŋ</i> 'hungry'
*sudpak	Bon, NKnk <i>sodpak</i> , Blw <i>subpak</i> , Blw (Tonglayan) <i>sudpak</i> 'to hit, slap'
*sul?at	EBon <i>sinol?at</i> , Blw <i>senol?at</i> 'cooked rice'; EBon, Blw (Aliawan) <i>sol?at</i> 'to cook'
*su[l] kud	Bon <i>solkod</i> , NIfg <i>ho?ud</i> , <i>hu?ud</i> 'spear'; Ifg <i>hulkud</i> 'spear shaft'
*tantan	EBon, NKnk, Ifg <i>tantan</i> 'needle (usually of bamboo)'
*tapi	Bon, NKnk <i>tap? ina</i> , NBon, NKnk, Blw <i>tapina</i> , Bon, NKnk <i>tapi</i> 'rest, remainder, others'
*t+lg+y	NBon <i>t+lg+y</i> , Ifg <i>tolge</i> 'skirt'
*tuduk	NKnk <i>todok</i> , Ifg <i>tuduk</i> , CIfg <i>tudu?</i> , <i>natdu?</i> 'dry (fields)'
*tukag	EBon, Blw <i>tokag</i> , NIfg <i>tu? ag</i> 'monkey'
*wan+s	Bon, NKnk, SKnk <i>wan+s</i> , Ifg <i>wanoh</i> 'G-string'
*wanti	Bon <i>wanti</i> 'irrigation canal'; NKnk (Gonogon), CIfg <i>wanti</i> 'path'
*wi?it	Bon, Ifg <i>wi? it</i> 'morning: tomorrow'
*yagpaw	EBon, NIfg <i>yagpaw</i> 'light (weight)'
*yawyaw	Blw <i>y[^]wy[^]w</i> 'wind'; Ifg <i>yawyaw</i> 'breeze'

5.2. Semantic Shift

5.2.1. CORRIGENDA

*k+n+g	'firm, hard' cf. PC(H) *k+n+g 'thick' This item has been raised to the level of PSCC (Reid 1988c).
*bayag	'old (object)' cf. PC(H) *bayag 'long time' Bon, Knk <i>bayag</i> , Blw <i>b^yg</i> 'old (obj.)' Ibaloi of Trinidad and Kalanguya of Hungduan both have <i>bayag</i> 'old (obj.)' This item may be raised to PSCC.

5.2.2. ADDENDA

*?ila	'to know' cf. PCC(R) *?ila 'to see' Blw <i>? inil[^]</i> , Ifg <i>? inila</i> 'to know (fact, person)'
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*?inl(a+)kas	'widow' cf. PC(H) *I+kas 'to undo, untie' EBon, CBon ? <i>illakas</i> , Bon ? <i>inl+kas</i> , Nlfg ? <i>illo?ah</i> 'widow'
*?udu	'sky' cf. PPH(Z) *?uDtu 'directly above' EBon ? <i>ad ?odo</i> , Blw, Nlfg ? <i>udu</i> 'sky'
*b(+u)kaŋ	'rainbow' cf. PNCC *b+kan 'bow(-and-arrow)' NKnk ? <i>atimbokaŋ+n</i> , Ifg <i>bukaŋ, bokaŋ</i> 'rainbow'
*buwa	'seed' cf. PAN(D) *buwah 'areca nut' Bon, NKnk, SKnk <i>bowa</i> , Ifg <i>buwa</i> 'seed'
*d+la	'outside' cf. PCC *d+la 'below' EBon, Blw (Tonglayan) <i>dala</i> , Bon <i>d+la</i> , NKnk <i>d+?a</i> , SKnk <i>d+ya</i> , Ifg <i>dola</i> 'outside'
*gayaŋ	'to throw' cf. PC(H) *gayaŋ 'spear' NKnk, Ifg <i>gayaŋ</i> 'to throw'
*kali	'to call' cf. PAN(B) *kaRi 'to talk' Bon <i>kaliyan</i> , NKnk, Ifg (Hungduan) <i>kalyan</i> , NKnk <i>kaliy+n</i> , Clfg <i>kali</i> 'to call'
*payak	'leaf' cf. PC(H) *payak 'wing' SKnk <i>payak</i> , Nlfg <i>paya?</i> 'leaf'
*s+d+m	'night, late afternoon' cf. PMC(R) *s+d+m 'dark' Bon, NKnk <i>masd+m</i> , Ifg <i>nahdom, mahdom, hodom</i> 'night'; SBon <i>nahd+m</i> , NKnk <i>masd+m, s+d+m</i> , Clfg <i>mahdom</i> 'afternoon'

5.3. Morphological/Phonological Change

5.3.1. FROM REID'S LIST

*?aptik	'short' cf. PCC *?aptik+y 'short'
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5.3.2. ADDENDA

*?adaww+y	'far' cf. PPH(C) *hadawi 'far' EBon ? <i>adawwoy</i> , CBon <i>daww+y</i> , Blw ? <i>ad^ww+y</i> 'far'
*?awan	'right (side)' cf. PAN(D) *wanan 'right' Bon, NKnk ? <i>awan</i> , Blw ? <i>aw^n</i> 'right'
*?ibsu	'urine' cf. PPH(He) *qisbu 'urine' NKnk ? <i>ibso</i> , Nlfg ? <i>ibho, ? ibhu</i> 'urine'
*kittay	'few' cf. PNCC *?akitt+y 'few' NBon ? <i>akittay</i> , Ifg (Hapaw) <i>kittay</i> , Clfg, Nlfg ? <i>ittay</i> 'few'

ABBREVIATIONS

Blw	Balangaw	Knk	Kankanaey
Bon	Bontok	PAN	Proto-Austronesian
Ibl	Ibaloy	PC	Proto-Cordilleran
Ifg	Ifugaw	PCC	Proto-Central Cordilleran
Isi	Isinai	PMC	Proto-Meso Cordilleran
IsiA	Isinai of Aritao	PNC	Proto-Nuclear Cordilleran
IsiB	Isinai of Bambang	PNCC	Proto-North Central Cordilleran
Itg	Itneg	PNPH	Proto-Northern Philippine
Kla	Kalinga	PPH	Proto-Philippine
		PSCC	Proto-South-Central Cordilleran

APPENDIX

The Central Cordilleran language data were largely collected in the field during the years 1962-64, 1966-68, 1977, and 1981. Some of the data are taken from the following published sources: Allen (1975, 1980), Chandler (1974), Gieser (1958, 1970, 1972), Lambrecht (1978), McFarland (1977), Newell (1968, 1970), Reid (1971, 1976), Scott (1957), Shetler (1976), Vanoverbergh (1933), Walton (1975).

An item is listed simply as Bon, NKnk, etc., if it appears in the literature and/or it is widespread within the language. Otherwise, its distribution is indicated by the barangay (in parentheses) or the region within which it occurs.

For the sake of convenience, data have been grouped by region within Bontok, Northern Kankanaey, Ifugaw and Kalinga as follows:

Northern Bontok (NBon): Saclit, Belwang, Sadanga Poblacion, Sacasacan, and Betwagan, all in Sadanga.

Eastern Bontok (EBon): Barlig Poblacion, Kadaklan, and Lias, all in Barlig.

Southern Bontok (SBon): Talubin and Bayyo, Bontoc.

Central Bontok (CBon): Mainit, Maligcong, Guinaang, Dallican, Bontoc Ili, Bontoc Poblacion, Samoki, Tocucan, and Caneo, all in Bontoc.

Northern Kankanaey (NKnk): Luba, Abra; Alab, Balili, and Gonogon, Bontoc; all barangays of Sagada; Dandanac, Agawa, and Besao Poblacion, Besao; Sumadel, Tadian; Bila, Otucan, and Bauko Poblacion, Bauko; Namatec, Sabangan.

Southern Kankanaey (SKnk): Ampusungan, Bakun; Kibungan and Kapangan Poblacions.

Northern Ifugao (NIfg): Batad, Banaue; Guinhon and Mayoyaw Proper, Mayoyaw.

Central Ifugaw (CIfg): Cababuyan, Amganad, Gohang, Banaue Poblacion, and Bayninan, Banaue.

Northern Kalinga (NKla): Manabo, Daguioman, and Malibcong Poblacions, Abra; Talalang (Balbalasang), Magnao (Tabuk), and Tabuk Poblacion in Kalinga-Apayao.

Central Kalinga (CKla): Guinaang and Dangtalan, Pasil; Bangad, Tinglayan; and Poblacion, Lubuagan.

Southern Kalinga (SKla): Balatoc, Pasil; Tulgaw and Butbut, Tinglayan.

Southeastern Kalinga (SEKla): Lubo, Tanudan in Kalinga-Apayao; Dalipoy (Paracilis) and Maducayan (Natonin), Mountain Province.

REFERENCES

- ALLEN, LAWRENCE P. 1975. Distinctive features in Kankanaey. *Philippine Journal of Linguistics* 6. 2. 23-30.
- , 1980. The interaction of reduplication and phonology in Kankanaey. *Philippine Journal of Linguistics* 11. 2. 27-43.
- CHANDLER, DONNA H. 1974. Verb stem classes in Northern Kankanaey. *Papers in Philippine Linguistics* No. 5, *Pacific Linguistics Series A* - No. 41.
- GIESER, C.R. 1958. The phonemes of Kalinga. *Oceanic Linguistics Monographs* No. 3.
- , 1970. The morphophonemic system of Guininaang (Kalinga). *Philippine Journal of Linguistics* 1.2. 52-68.
- , 1972. Kalinga sequential discourse. *Philippine Journal of Linguistics* 3.1. 15-33.
- HIMES, RONALD S. 1988. Central Cordilleran, Philippines, cognate sets 1-574. Online database in *The Pacific and Asian Language Archives*, University of Hawaii.
- LAMBRECHT, FRANS H. 1978. *Ifugaw-English dictionary*. Baguio City: The Catholic Vicar Apostolic of the Mountain Province.
- MCFARLAND, CURTIS D. 1977. *Northern Philippine linguistic geography*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- , 1980. *A linguistic atlas of the Philippines*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- NEWELL, LEONARD E. 1968. *A Batad Ifugao vocabulary*. New Haven: Human Relations Area Files, Inc.
- , 1970. Phonology of Batad Ifugao. *Philippine Journal of Linguistics* 1.1. 101-17.
- REID, LAWRENCE A., ed. 1971. *Philippine minor languages: word lists and phonologies*. *Oceanic Linguistics Special Publication* No. 8. Honolulu: University of Hawaii Press.
- REID, LAWRENCE A. 1974. The Central Cordilleran subgroup of Philippine languages. *Oceanic Linguistics* 13:511-560.
- , 1976. *Bontok-English dictionary*. *Pacific Linguistics, Series C*, no. 36.
- , 1979. Towards a reconstruction of the pronominal systems of Proto-Cordilleran, Philippines. In *South-East Asian Linguistic Studies, Vol. 3, Pacific Linguistics Series C-No. 45*. 259-75.
- , 1988a. The Alta languages of the Philippines. To appear in *Proceedings of the Fifth International Conference on Austronesian Linguistics*.
- , 1988b. Arta, another Philippine Negrito language. In press. *Oceanic Linguistics*.
- , 1988c. Personal communication.
- SCOTT, WILLIAM H. 1957. *A vocabulary of the Sagada Igorot dialect*. Chicago: University of Chicago.
- SHETLER, JOANNE. 1976. Notes on Balangao grammar. *Language Data, Asian-Pacific Series*, No. 9.
- THARP, JAMES A. 1974. The Northern Cordilleran subgroup of Philippine languages. *Working Papers in Linguistics, University of Hawaii* 6.6. 53-114.
- VANOVERBERGH, MORICE. 1933. *A dictionary of Lepanto Igorot or Kankanaey as it is spoken at Bauco*. Vienna, Anthropos.
- WALTON, JANICE. 1975. Binongan Itneg sentences. *Pacific Linguistics Series B* - No. 32.
- WURM, S.A., and B. WILSON. 1975. *English finderlist of reconstructions in Austronesian languages (post-Brandstetter)*. *Pacific Linguistics Series C-No. 33*. Canberra: The Australian National University.