

CENTRAL CORDILLERAN ADDENDA II

RONALD S. HIMES

San Diego State University

1. INTRODUCTION

In earlier works (Reid 1974, Himes 1989), a number of lexical, semantic and phonological/morphological innovations were ascribed to the Central Cordilleran (CC) languages. The latter are more closely related to the Southern Cordilleran languages than to the others of northern Luzon, although all of them are ultimately related to each other as members of the Philippine group of Austronesian languages. Figure 1 shows the external relationships of the CC languages, based on the revised subgrouping of Reid (1989b). Figure 2 diagrams the internal relations of the CC languages. It is evident from this that if we can reconstruct an item which has reflexes in Isinai and at least one other CC language, then it may be assigned to the level of Proto Central Cordilleran (PCC). Items without reflexes in Isinai but with reflexes in Itneg and/or Kalinga and at least one of the other languages are placed at the level of Proto North Central Cordilleran (PNCC). And those with representatives in two or more of the cluster of Ifugaw, Balangaw and Bontok/Kankanaey speech communities are assigned to the level of Proto Nuclear Cordilleran (PNC).

Continuing research has brought to light some corrections to the earlier assignments as well as additional innovations which should be added to this lexicon. Items which have been previously established are provided here, but without the supporting evidence.

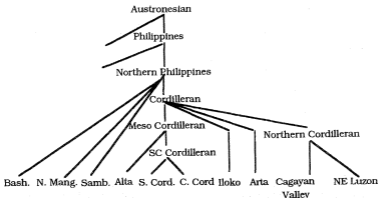


Figure 1. External Relationships of the Central Cordilleran Languages

Bash.	Bashiic
C.Cord.	Central Cordilleran
NELuzon	Northeastern Luzon
N. Mang.	Northern Mangyan
Samb.	Sambalic
SC	South-Central
S.Cord.	Southern Cordilleran

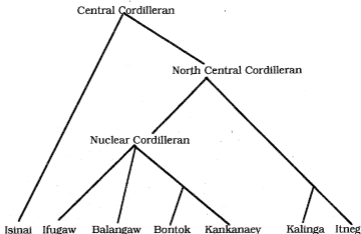


Figure 2. Internal relations of the Central Cordilleran subgroup
(Reid 1974:512)

2. INNOVATIONS EXCLUSIVELY SHARED BY CC LANGUAGES

2.1. LEXICAL ITEMS

If there is no readily apparent provenience for an item it is assumed to be a lexical innovation.

2.1.1. Items previously established

*ʔa:ʔiw	'shadow' ¹
*ʔaklaŋ	'clothes'

¹Reconstructed forms showing ambiguity between two similar segments have those segments in square brackets; e.g., *s[ai]ʔid has reflexes of *siʔid* and *saʔid*. If a segment may or may not have been present in the ancestral form it is placed in parentheses; e.g., the form giving both *dubdub* and *dubúdup* is reconstructed as *dub(ú)dub.

*ʔah(n)kamut	'chicken louse' ²
*ʔapti:kiy	'short (object)'
*ʔigid	'left (side)'
*banʔg	'small'
*dalit	'eel'
*dila	'below'
*dipag	'lie flat, on one's back'
*di:ka	'dirty'
*di:tik	'red'
*dugi	'husk of rice'
*dulnu	'dew'
*gandw	'rat'
*g:gid	'sliced meat'
*guwab	'below, space-under-house'
*kiyat	'to swim'
*ku:gab	'afternoon, last night, late'
*ku:gut	'sew'
*la:gud	'downstream'
*ligab	'set ablaze, conflagration, burn'
*liktat	'sudden'
*liglig	'circumvent, deviate, off to the side'
*lukuy	'accompany, companion'
*naʔid	'there is none'
*putu	'belly, intestines'
*sagamsan	'remove weeds from growing rice'
*sagʔin	'near, next to'
*saku:ku	'kind of snake'
*sipdak	'whip, beat in wrestling'
*sin-	'one unit'
*su:kup	'cover, lid, cap'
*talantag	'shore'
*tikin	'different'
*tiʔnin	'cold'
*ti:lak	'lost'
*waʔwaʔ	'river'

2.1.2. Corrigenda

Reid (1989a) has raised an item from the original list to the PSCC level on the basis of *ibl* data:

*ʔi:la	'see'
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²Ilongot (Payo) also has *ʔainʔamut* but, because of phonetic [ʔ] and the glottal stop instead of expected /k/, it must be a borrowing from Isinai.

Two other items on that list should likewise be reassigned to PSCC:

*kilaŋ	Bon kilaŋ, Knk kiʔaŋ, Ifg kolaŋ, ʔolaŋ, Ibl kidaŋ 'earthworm'
*kɪpɪt	BonE nakpat, Blw naʔpat, ʔɪptɪn, Ifg kopot, ʔopot, naʔpot, Ahn nekpɪt, Hng nakpot, Keh nakpɪt 'wet'

Two items, *ʔati(n)bula:ŋin 'rainbow' and *lusud 'wooden fence', previously assigned to PCC, may be raised to the level of PC:

*ʔati(n)bula:ŋin	BonE boláŋon, KnkN ʔatiŋbowáŋin, ʔatinbowáŋan, Itg ʔatibuwáŋin, IsiB ʔasivuwa:ŋon, Yogad bulaŋun, Itawis hulaŋun, DgtC buláŋon 'rainbow' ³
*Ru:sud	Knk lósod, Ifg, Kel luhud, Isi lusur, Ibanag gutuk 'wooden fence'

An item which was raised to PSCC should be reassigned to the level of PNPh since a reflex of it appears in a northern Mangyan language:

*libu:ʔu	Bon, Knk, Itg libóʔo, Kla libúʔu, IsiA livvu, IsiB, IsiD libbu, Ibl díbuʔu, Ilongot (Payo) yibu, Alangan liboʔ (Yap 1977) 'cloud'
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2.1.3. Addenda

The following items are relatively safe reconstructions for PCC since they are shared by Isi and at least one non-contiguous NCC language:

*ʔa:gɪs	Bon ʔágɪs, IsiD ʔáhis 'slice,' IsiB majakit 'split' (cf. Iloko ʔágɪs 'to make narrower')
*ʔalintayuk	KnkN ʔalintayok, IsiB ʔalintayuʔ 'summit, top' (cf. Iloko táyuk, Isnag táyoʔ 'to soar')
*ʔapis	KnkN ʔapis, Ifg ʔapoh 'compete,' IsiB ʔa:pot 'to fight'
*ʔumis	Blw, KlaSE, IsiA ʔumis 'sweet'
*gabgab	KnkN, IsiB gabgab 'rub'

³Because of /w/ instead of expected /l/, the Itg form must be borrowed from KnkN.

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*galasu:gas	Bon, KnkN galasógas, IsiD maxeyasu:xas 'rough, coarse' (cf. Iloko galasúgas 'stubborn, obstinate')
*gamayu:giy	BonN (Sacasacan) gayamógíy, KnkN gamoyágiy, IsiA, IsiD gamayu:xoy, IsiB gamayu:koy 'finger, toe' ⁴
*k[ɿu]du:ʔul	BonE kodʔol, Bon kidol, Itg kodóʔol, kidóʔol, KlaN (Manabo) kidúʔul, IsiA, IsiD ʔuru:, IsiB ʔiru: 'thunder'
*(l)ind[ɿu]N	BonE, IfgN lindom, ItgE lenčom, lenčoj, IsiA, IsiB, IsiD ʔindoŋ 'G-string'
*liwa	Bon liwa, IsiD liwliwa 'long (time)'
*ɲutʔu	Bon ɲotʔo 'upper front teeth', Knk, Ifg ɲotʔo 'molar', KlaN, IsiA ɲutʔu 'tooth' (cf. PHn(Z) *quntu 'tooth', DgtC ɲuntu 'top front teeth')
*sagi:ʔit	KnkN sagiʔit 'suckling pig', Ifg hagiʔit 'wild boar, wild pig', IsiB taki:t 'wild pig'
*sukba	KlaC sokba, soʔba, IsiB ʔatoʔba 'short (person)', KlaC, KlaSE soʔba, IsiA, IsiD ʔasoʔba, IsiB ʔatoʔba 'low (object)' (cf. Bon, Knk sokba 'to fall headlong')
*tablak	Bon, Ifg tablak 'to wallow', Bon tablak, KnkN, KnkS tabbak, KlaS tablaʔ 'carabao wallow, pond', IsiD tavveʔ 'mud,' IsiB tabbeʔ 'land, soil', IsiA tavveʔ 'dust'
*tugʔik	KnkN tugʔik 'to stick canes or sticks in the ground', IsiB tuggoʔ 'stick in, stab'
*tu:yu	BonC (Mainit), KnkN tóyo, isiB tutuyu 'regret'

⁴The Isi forms appear to be the most basic in that the Bon and Knk forms can easily be derived from them by means of one metathetical change each.

The three items below occur only in Isi and Ifg, providing less certain evidence of a PCC origin:

*ʔigwas	IfgN, IfgE ʔegwah, IsiB ʔigwat, IsiD ʔixwas 'wash (object)', IsiA ʔixuwas, IsiB ʔigwat, IsiD ʔixwas 'wash hands'
*datʔiŋ	IfgN (Dukligan) datʔoŋ, IsiD datoŋ 'flood'
*sanit	Ifg hanot, Isi sanot 'exchange'

2.2. SEMANTIC SHIFT

An item is innovative if its denotation is significantly different from its ancestral form.

2.1.1. Items previously established

*ʔapiŋ	'face'
*ʔiba	'sibling'
*kupkup	'skin (of human)'
*la:man	'deer'
*s[ai]ʔid	'wait'
*sa:ŋi	'chin'
*sidi	'strong'
*tu:bu	'leaf'

2.2.2. Corrigendum

One item previously assigned to PCC should be raised to PSCC:

*bagaŋ	Bon, Knk, Ifg, Kla bagaŋ 'neck,' KnkS, KlaN, Ibl bagaŋ 'throat,' Ibl bigaŋ, bagaŋ 'neck, throat'
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2.2.3. Addenda

*[ai]miw	'swim' cf. PC *lamaw 'to cross a river' KnkN lamiw, IsiA leyommaw 'swim' ⁵
*lu:bu	'bury' cf. PC *lu:bu 'to sink in mud' KnkS lóbo, Ifg KlaC lúbu, IsiD ʔilu:vu 'bury'
*ta:gu	'person' cf. PSCC *ta:gu 'alive, bring to life, resuscitate', Bon, KnkN tágo, Blw tatágu, Ifg, Kla tágu, Isi ta:xu, ta:ku 'person'

⁵Reconstructions at the levels of PAn, PMP, PHn and PPh are primarily those of Dempwolf (D), Dyen (Dy), Blust (B), Charles (C), Healey (He) and Zorc (Z), as cited in Wurm and Wilson (1975), Blust (1970, 1980, 1986) and Zorc (1986). Some of the PPh forms and all of the reconstructions at the level of PNPh and lower are from Reid (1974, 1988, 1989) (R) and Himes (1988, 1989) (unmarked).

The item below occurs only in Ifg and Isi:

*tayaban	'shooting star' cf. PC *tayab 'to fly' Ifg (Banawc) tayaban, IsiB tayavan 'shooting star', Ifg (Kiangan) tayabban 'will-o'-the-wisp'
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2.3. PHONOLOGICAL /MORPHOLOGICAL CHANGE

The items which follow exhibit phonological and/or morphological changes other than those which are predictable:

2.3.1. Items previously established

*ʔa:kiw	'steal'
*ʔala:tiy	'liver'
*ʔbig	'lie down'
*kulaŋ	'worm'
*kunʔan	'when?'
*piyik	'mud'
*puknas	'wipe'

2.3.2. Corrigendum

The item *sipʔuk 'to blow' should be reassigned to the level of PSCC in the light of evidence from Karaw:

*siʔpuk	KnkN sipʔok, IsiA sippuʔ, IsiB sipuʔ, Karaw siʔpuʔ 'blow'
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2.3.3. Addenda

*ʔudum	'other, remaining' cf. PSCC *ʔadum 'others, rest', KnkN, KnkS, Itg ʔodom, Itg, Kla ʔudum, Isi ʔurum 'other, remaining'
*ta:yaw	'to fly' cf. PC *tayab 'to fly' Bon, KnkN, KnkS, Kla (Manabo) táyaw 'to fly', IsiA ta:yaw 'wing'

One item occurs only in Ifg and Isi:

*waw(w)an	'right (side)' cf. PAN(D) *wanan 'right (side)' Ifg wawwan, Isi wawan 'right (side)'
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3. INNOVATIONS EXCLUSIVELY SHARED BY NCC LANGUAGES

Those innovative items which occur in Kalinga-Itneg and in at least one of the NC languages, and whose distribution would indicate that they are not likely to have been borrowed from one to the other are assigned to the PNCC level with some degree of confidence. There are many items which are doubtful, however, since they are shared by

communities quite near each other geographically. Especially suspect are those whose distribution in Kla is limited to the southern portion along the Chico River, since there have apparently been migrations to that area from Bontoc (Cole 1922, Reid 1992). Likewise, there must have been considerable borrowing among the 'Itneg' communities of Abra, whether they are Itneg proper, Kalinga- or Kankanaey-speaking. Also doubtful are those items shared by KlaSE, Blw and BonE communities.

3.1. LEXICAL ITEMS

3.1.1. Items previously established, borrowing unlikely

Included here are those items which had been tentatively assigned to PNCC but for which there is now evidence of a wider distribution in NC languages.

*ʔakitt[ɨu]y	'small, few'
*ʔamulaŋ	'taro stem'
*ʔaŋg[ɨa]y	'only'
*ʔaŋw	'saliva, drivel'
*ʔanuka	'what's-it'
*ʔásug	'cooked rice, to cook'
*ʔataki	'cockroach'
*ʔawni	'later'
*ʔəyət	'to fear'
*ʔináŋu	'to play'
*ʔiŋgi	'rat, mouse'
*ʔisiw	'dirty, bad, ugly'
*ʔubiy	'vagina'
*ʔúgud	'story'
*ʔulkuʔuk	'throat'
*ʔutlik	'to vomit'
*bakluŋ	'ladle'
*bayas	'sugarcane wine'
*bilig	'mountain'
*bitug	'wall'
*bunit	'cloud'
*buwaŋ	'belly'
*dákiŋ	'bolt of a door'
*dáku	'fever'
*dapʔay	'rock with a wide flat surface, paved place, men's communal house'
*dub(ú)dub	'wind'
*gaman	'head axe, bolo'
*glim	'pubic hair'
*kamána	'how man?, when?'
*kasin	'again, to repeat'
*kigkig	'knock, beat, as on a door'
*kíyud	'dipper'
*lagan	'sand'

*lansi	'green (color)'
*látud	'taro, taro tops'
*lisan	'all'
*lukbub	'to lie on one's stomach'
*náʔag	'to hear'
*pátud	'torch'
*paláyin	'a kind of tree'
*piás	'to squeeze'
*salʔu	'neighbor'
*sampit	'bitter, tart, rough'
*sigab	'pain, difficulty'
*siput	'to work'
*súyip	'to sleep'
*tagaliyíŋ	'cold'
*taplak	'to float'
*táyap	'to fly'
*tʃijji	'chicken louse'
*tukdu	'to sit'
*tuyʔub	'waterfall'
*wákas	'tomorrow, day'
*wasíit	'to throw away'
*wisjit	'dawn, morning'
*yíkit	'armpit'
*yíkyík	'to laugh'

3.1.2. Items previously established, borrowing likely

The items below are likely to have been borrowed into KI from a NC language:

*ʔal(l)in	'younger sibling'
*ʔupik	'rice bran'
*ʔutbu	'to vomit'
*dʃiʃʔs	'to cough'
*ganad	'today'
*guʃʔu	'knee'
*kadaŋyan	'rich'
*layad	'happy'
*muʃʔul	'summit, hill' ⁶
*pisil	'to kill'
*putaʔak	'white'
*tílag	'rainbow'
*tupik	'mouth'
*yúyuk	'to stab'

⁶Adasen muʃʔul 'hill' is probably borrowed from Kla or Itg.

HIMES

The items below are distributed widely in Kla and may have been borrowed into NC:

*ʔisna	'cooked rice'
*s[au]pʔuy	'to blow'

3.1.3. Corrigenda

Several items previously assigned to the PNCC level should be raised to the level of PSCC, since they have reflexes in SC languages:

*bika[kɨ]	BonN bikbikan, KnkN (Balili) bikaɨ, Ifg bukaɨ, KlaS boʔaɨ 'bow-and-arrow', KnkN bikaɨ, KlaS boʔaɨ, Ilongot bikak 'bow'
*daɨgu	KnkS daɨgo, Ifg, Kln daɨgu, Ibl šaɨko, Karaw čaɨko 'onion'
*ʔibil	Bon ʔibil, nabʔil, Knk ʔibi, nabʔi, Kla ʔobol, nabʔol, Kln (Kel) ʔebel, naʔbel 'wet' ⁷
*kan	Bon, KnkN, Kla kanan, Blw (Tonglayan) ʔanan, Kla ʔan, Kln (Kay, Kel) kan 'to say'
*piyʔas	BonN, KnkN piypiyʔas, KnkN, KnkS, Ibl piyʔas, Ifg, Kln (Hng) poyʔah 'waterfall'
*sápit	KnkN sapsápit, Blw (Alunugan), Kln (Keh) hápit 'story', Ifg, Kln (Kay, Ahn) hápit 'word', Kln (Kel) hápit 'to say' ⁸
*simik	Bon, Knk simik, Blw hamhamaʔ, Kla somsomok 'to think', Ifg homok 'compassion', Kln (Kel) nahmek 'sad, reflective'

One item previously attributed to PNCC should properly be assigned to the level of PC:

*tukyud	BonN tokyod, Kla tukyud, Gaddang tuʔyud, tuyyud 'to push'
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⁷Since *ʔibil does not occur in Ifg, the Kel form is likely to be inherited rather than diffused from a CC language.

⁸This item also occurs in Gaddang, *sápit* 'to say, word,' but the presence of /s/ rather than /t/ in this environment indicates that it is probably a loan from elsewhere.

And two items have been reconstructed at higher levels:

*biRah	PAn(D) *biyah 'alocasia'
*liqu	PHn(B) *liqu 'to forget'

3.1.4. Addenda

Those innovations which are not likely to have been borrowed in one direction or the other include:

*ʔaliwan	KnkN (Agawa) ʔaliwin, KlaC ʔalliliwan 'shadow'
*ʔalukúʔuk	BonE, KnkN ʔalokóʔok, KlaN (Balbalasang) ʔalokʔok 'throat'
*ʔaluŋásaw	Ifg luŋáho 'steam from hot food,' KlaN (Daguioman) ʔaluŋásaw 'dew'
*ʔamma	Bon, KnkN, Kla ʔamma 'slow'
*ʔatt[ai]kab	BonN (Betwagan), KlaSE (Maducayan) ʔattakab, Ifg tokab 'cockroach'
*ʔawi	BonN (Belwang) ʔad ʔawi, IfgE ʔad ʔawi, Kla ʔawi 'long (time)'
*ʔilis	BonN (Saclit) ʔilis, KlaS, KlaSE ʔolos 'to exchange'
*ʔigw	IfgC (Bayninan) ʔiggo, KlaN ʔigawna, KlaSE góna 'where?'
*ʔinit	KnkN ʔinit, Ifg ʔinot, KlaSE ʔinut 'hard'
*ʔi(u)(N)giw	Blw ʔggiw, ʔumngaw, Kla ʔiŋgaw, ʔigaw, ʔuŋgaw 'to live, dwell'
*ʔiyas	BonN (Belwang), KnkN (Luba), Itg, Kla (Manabo) ʔiyas 'pig'
*ʔugadiw	Bon, Blw, Ifg gadiw, BonN ʔogadiw, ʔoggadiw, Ifg, Kla ʔugadiw 'small river fish'
*ʔumiy	KnkS ʔomʔomiy, Kla ʔumuy, ʔumoy 'to flow'
*ʔutu	Blw ʔuto, Kla ʔutu 'waterfall' (but cf. Ilongot ʔatu 'waterfall')

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*báʔal	Bon, Ifg báʔal, Knk báʔa, KlaSE babáʔal 'servant, messenger'
*badis	KnkN bádís 'to hit, as by throwing something', KlaSE badis 'to hit with an object'
*balnu	Ifg balnu, Kla ballu 'to throw' ⁹
*baltu	KnkS baba:to, KlaS baltu 'termite'
*bann[ai]y	KnkN banniy, Kla bannay 'slow'
*bannuN	Ifg bannun 'to stop, block the flow of water', KlaN (Pinukupuk) bannuŋ 'pond, lake'
*butigi	KnkN botigi, KlaN (Pinukupuk) butigi 'waterfall'
*d[au]ntug	IfgE (Lamut) ċuntug, Kla dantug 'to hit, box'
*daʔup	Bon daʔop 'to cover, as with a blanket', BonN daʔop, KlaN (Pinukupuk) daup 'blanket'
*daki	KnkN daki, dakʔ 'stop!'. KnkS dakiy, KlaSE daʔon 'don't'
*dVʔúwit	IfgC (Cababuyan) duʔúwit, IfgN (Dukligan) daʔʔúwet, KlaSE didʔiwit 'dragonfly'
*gipgip	KnkN, Ifg, KlaSE gipgip 'slice'
*gVpʔay	KnkN gopʔay, gipʔay, gapʔay, KlaS gopʔay 'to kick'
*k[au]mʔut	Bon komʔot 'to pop into the mouth', KnkN komʔot, KlaN kamʔot 'to swallow'
*kaliNputuy	KnkN kalimpotoy, Itg (Lacub) kalimotoy 'buttocks'
*káwas	Bon káwas 'to rot', KnkN káwas 'bad', KlaN (Pinukupuk) kawas 'ugly'
*kúmug	Ifg kúmog, KlaN kúmug 'cold (weather)'
*labun	Bon labon 'to cover', IfgE, Kla labun 'to bury'

⁹With progressive assimilation of the nasal to the lateral in Kla.

*layiw	Blw (Alitawan) layiw, KlaS (Butbut) layaw 'to go home'
*limnas	KnkN limnas 'soft, smooth', KlaSE limnas 'smooth'
*ɽjlan	KnkN ɽjiʔan 'dragonfly', KlaC (Dangtalan) ɽjolan 'termite'
*paŋʔik	KnkN paŋʔik, Kla paŋʔok 'to hit (as with a stick)'
*piklit	IfgN (Kambulo) peʔlat, KlaN (Pinukupuk) pikkot 'to stick to'
*səkim	Ifg halom, nahalman 'too many, too much, excessively', KlaSE (Maducayan) ʔansəlom 'many'
*s[au]llagaŋ	KnkN sollagaŋ 'ugly, useless', KlaC sallagaŋ 'rough, coarse'
*s[ai]ŋpat	Bon siŋpat 'to cut down overgrowth', Bon (Caneo) saŋpat, KlaSE saŋpat, soŋpat 'to cut off'
*siʔit	Bon, KnkN siʔit 'water in which camotes have been cooked', Ifg hiʔit 'to pour a liquid', KlaN (Manabo) siʔit 'soup'
*sulit	Bon solit 'a long time ago', Itg (Lacub) nasolitin 'long (time)'
*talun	KnkN taʔon 'calculation of time; moon, month', KnkS taʔon, KlaC (Taloctoc) təlun 'time'
*tugnu	Bon togno 'small bamboo container', KlaC tugnu 'bamboo water container' (cf. Tagalog tuḡnó 'salt water filtered through sand in the process of salt making')
*tuláluk	KnkN towáʔok, Ifg tuláluk 'wood or bamboo gutter or aqueduct', IfgN (Dukligan) tuláloʔ, Itg patuláluk 'waterfall' (cf. Bon tollak 'a water conveyor or guttering made from a hollowed out young pine log', KlaC (Balenciagao) tumalutálok 'waterfall')
*tuláyan	BonE (Kadakan) toláyan, KlaC tuláyan 'crow', IfgN, IfgE tulayan 'hawk'

*tunʔud	Bon tonʔod 'one who stands next to another in line', BonN tonʔod 'companion,' KnkN tonʔod 'relative', Kla tunʔud 'companion' (cf. DgtC tunod-tunod 'to follow someone secretly')
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Innovative items which are likely to have been borrowed into Kla and/or Itg from a NC language include:

*ʔamma	Bon, Blw, Ifg, Itg, Kla (Manabo) ʔamma 'to do, make'
*ʔapat	BonC (Mainit) ʔapʔapat, KnkN (Agawa) ʔapat 'word, speech, language', KnkN ʔapʔapat, ʔapat 'story', KnkN ʔapat, KlaS (Butbut) ʔapapat 'to say'
*ʔaplay	Bon (Guinaang) ʔaplay 'the group of villages lying to the west or southwest of Bontoc', Bon (Maligcong) ʔaplay 'west', BonN, KlaS (Butbut) ʔaplay 'south'
*ʔilaŋ	Bon, KnkN, KlaC ʔilaŋ 'a share of meat'
*ʔisu	Bon, KnkN ʔisu 'to be the same, to align', KlaC (Taloctoc) ʔiʔisu 'straight'
*ʔukput	Bon ʔokpot 'to pull out, as a new shoot from the top of the sugarcane', KlaS (Butbut) ʔuʔput 'to pull'
*bágay	Bon bágay 'to tickle', KnkN, KlaS (Balatoc) bágay 'ampit'
*bulikawkaw	Bon, KnkN bolikawkaw, KlaS buliŋawŋaw 'dark' ¹⁰
*bulláyaw	Bon bolláyaw, Blw bulláyaw, Ifg, Kla bulláyaw, bulaláyaw 'shooting star'
*daŋ(n)il	Bon (Guinaang) daŋil 'slippery', BonC (Tocucan) daŋni 'smooth', Bon (Dallikan, Bontoc Ili), KnkN daŋi 'smooth', Ifg daŋol, daŋŋol 'slippery, smooth', KlaS (Balatoc) daŋol 'smooth'

¹⁰With a shift from stop to nasal in Kla.

*dúʔut	Bon dóʔot 'to thrust at', BonN (Belwang) dodʔot, Blw do:ton, KlaSE (Lubo) duut 'to stab' (cf. Isnag duʔut 'dibble')
*gVʔud	Bon (Maligcong) gayod 'noon', BonE gayod, Blw (Tonglayan) gayud, KlaSE (Maducayan) goyud 'afternoon', KnkN gayod 'very near cockcrow'
*káʔan	Bon, KnkN, Ifg káʔan 'to remove, pull off, cut off', KlaC (Talocloc) káʔan 'to cut off'
*kuliapyap	Bon, Blw kuliapyap, Bon yapyap, Blw kuliapyap, KlaSE (Maducayan) kulyapyap 'lightning'
*lipis	BonE (Kadaklan) linpos, Blw lempɔh, linpoh, linpɔh, KlaSE limpos 'rice wine', Ifg lopoh 'fermentation of rice wine', limpoh 'recently fermented rice wine'
*ŋúlub	Bon ŋólob, KlaS (Bangad) ŋúlub 'mouth' (cf. Ilngot ŋúyub 'mouth')
*pidin	Bon, Knk, Blw pidin, Kla podon 'peace pact'
*pudan	Bon podan 'to fall and roll', KnkN podan 'to lie down', Ifg pudan 'to roll down', KlaS (Tulgaw) pudan 'to lie down'
*púkuŋ	Bon, KnkN pókoŋ 'to flood a field', Blw póʔoŋ, KlaSE (Lubo) púʔuŋ 'pond'
*sáʔal	Bon, KlaC (Galdang) sáʔal, Knk sáʔa 'to go home'
*sáŋja	Bon, KnkN, KlaS (Butbut) sasáŋja 'sad, lonely'
*túpu	Bon tópo, Blw tópu, Ifg, KlaSE túpu 'dull' ¹¹

The following items are likely to have been borrowed into NC languages from KI:

*bisal	BonN (Saclit) bisal, Blw bihal, Kla bosal 'face'
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¹¹Kln (Kel) *netupuʔ* 'dull' is a likely loan from Ifugaw.

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*dama	BonN (Sacasacan), Kla madama 'noon', BonN, KlaC madama 'afternoon'
*gintud	Blw (Aliawan), Kla gintud 'bamboo water container', Blw (Alunugan) gintud 'water jar'

Several items could have been borrowed, but their distribution gives no hint of the direction of diffusion:

*ʔalubúʔub	BonN (Sadanga) ʔalobóʔob, KlaSE (Lubo) ʔolbúʔub 'throat'
*kiʔs	KnkN, Itg (Binongan) kiʔs, Kla (Manabo) káʔos 'to cough'
*puyuy]	Blw, KlaSE puyuy] 'helper, servant'
*takyad	BonN takyad, KlaS taʔyad 'G-string' (cf. DgtC takyad 'to wear a bolo on one's side')

3.2. SEMANTIC SHIFT

3.2.1. Items previously established, borrowing unlikely

*ʔbig	'sleeping mat' cf. PCC ʔbig 'to lie down'
*dila	'space-under-house' cf. PCC dila 'below'
*gátin	'to kick' cf. PC *gatin 'to step on'
*káʔag	'monkey' cf. PC *ka:ʔag 'young monkey'
*láʔud	'east, below' cf. PCC *la:ʔud 'west, downstream'
*lamis	'flesh' cf. PSCC *lamis 'fruit'
*lidu	'to forget' cf. PC *lidu 'negligent'
*sínu	'what?' cf. PPh *si:nu 'who?'
*t̪ɪŋnɪn	'wind' cf. PCC *t̪ɪŋnɪn 'cold'
*túbay	'spear' cf. PC *tu:bay 'straight post'

3.2.2. Items previously established, borrowing likely

*luʔum	'smooth' cf. PC(R) *luʔum 'ripe'
*páʔis	'widower' cf. PC *pa:ʔis 'unmatched'

3.2.3. Corrigendum

One item previously considered a semantic innovation within PNCC may be reassigned to PSCC:

*kadakilan	'river' cf. PPh(C) *dakel 'big' KnkN kadakʔan 'wide, large river,' Ifg kadaklan 'hudhud term for "larger river"', Itg (Lacub) kadakilan, Ibl (Kabayan) karaqdan 'river'
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3.2.4. Addenda

Innovations which, because of their distribution, are assignable to PNCC with some confidence include:

*ʔadpal	'hand, finger' cf. PSCC *ʔadpal 'palm of the hand' Bon ʔadpal, KnkN ʔadpa, Kla ʔabpal, ʔagpal 'hand', Blw ʔagpal, KlaC, KlaSE ʔabpal 'finger' ¹²
*ʔáŋʃiud	'headcold' cf. PC *ʔa:ŋed 'mucus' BonE KnkN KlaN, KlaS ʔáŋod, KnkN, Blw (Alunugan) ʔáŋid, KlaSE ʔáŋud 'headcold'
*ʔigas	'flesh' cf. PPh *beRas 'fruit' ¹³ Bon, Knk bigas, Kla bogas 'flesh'
*daʔan	'yet, still' cf. PAn(B) *(dD)aqɑ(nN) 'old' Bon, KnkN, KnkS, Kla daʔan 'yet, still'
*litim	'ant' cf. PAn(B) *li(n)tem 'deep black, shiny black', KnkN litim 'a kind of large black ant', Itg (San Quentin) litim 'ant'
*lúgam	'medicine' cf. PC *lu:gam 'grass' KnkN lógam 'a kind of herb used for medicine', KlaN, KlaC lúgam 'medicine'
*palagpag	'chest' cf. PC *paragpag 'rib' Bon, Blw, Ifg Kla palagpag 'chest'
*p/al/ataŋ	'chin' cf. PC *pataŋ 'to chat' KnkS pataŋ, Kla palátaŋ 'chin'
*palʔuŋ	'dragonfly' cf. Tagalog paloŋ, DgtC paluŋ 'cockscomb', Bon palʔoŋ, KnkN paʔoŋ 'heron', KnkN papaʔoŋ, KlaS (Butbut) palpalluŋ 'dragonfly'

¹²With assimilation in Kla and dissimilation in Blw of the voiced stop.

¹³This item is problematic because of the phonological shape in CC languages. It must ultimately derive from PAn(D) *beRas 'husked rice', but it has entered CC languages via Northern Cordilleran or some language wherein the regular reflex of *R is *g*. The PAn form is represented in CC languages as *bilas with the meaning of 'grass, weeds'.

*pisit	'to squeeze' cf. PC *pisʔit 'to crush' Bon, KnkS pisit, Bon, KnkN pistin, Kla (Manabo) piston 'to squeeze'
*sadut	'sad, lonely' cf. PC *sadut 'lazy' KnkN, KnkS sadot, Blw sadadAt, KlaC, KlaS sadut 'sad, lonely'
*sidim	'afternoon, night' cf. PMC(R) *sidim 'dark' KnkN, KnkS sidim, masdim, Ifg (Cababuyan) mahdom, Kla masdom 'afternoon', Bon, KnkN masdim, Ifg hodom, nahdom, nahdom 'night'
*y[au]mis	'smooth' cf. PSCC *yVmʔis 'soft' Bon (Bontoc Ili) yamis, BonS yamih, KlaSE (Mangali) yumos 'smooth'

Items with limited distribution in Kla and/or Itg are assigned to PNCC with somewhat less assurance:

*ʔipugaw	'person' cf. Iloko pugʔaw 'to breathe upon' Bon, Knk ʔipogaw, Ifg ʔipugo, ʔipugaw 'the people of the Earth', i.e. 'man' (no longer used in current speech), KlaSE (Lubo) ʔipugaw 'person'
*balin	'to turn back' cf. PC *balin 'to change into' Bon, KnkN, KlaS (Bangad) balin, IfgC ballin 'to turn back'
*káʔub	'to bury' cf. PC *ka:ʔub 'to dig' Bon, KnkN, KnkS ʔikáʔob, KlaC (Dangtalan) ʔiʔaub 'to bury'
*kintig	'strong' cf. PSCC *kintig 'hard' Bon kintig, KlaS (Butbut) ʔontog 'strong'
*láku	'to buy' cf. PAn(Dy) *laku 'merchandise, to sell', Bon, KnkN, KnkS láko, Blw láʔo, Ifg láʔu, láku, KlaS (Butbut) láʔu 'to buy' ¹⁴
*sapsap	'bark (of tree)' cf. PC *sapsap 'to decorticate' BonN, KnkN, KlaS (Bangad) sapsap 'bark (of tree)'
*súpit	'vagina' cf. PAn(D) *supit 'narrow' Bon E (Kadaklan) sópit, Blw sopet, súpit, KlaSE (Maducayan) súpit 'vagina'

¹⁴This item has previously been assigned to the PNC level.

Two items widely distributed within KI appear to have been borrowed into NC languages. If this is indeed the case, then they are innovations assignable to Proto Kalinga-Itneg.

*silim	'sour' cf. PC *silem 'vinegar' BonN silim, Kla silom 'sour'
*sunud	'sibling' cf. PPh *sunud 'to follow' BonE (Kadaklan), Itg sonod, Blw, Kla sunud 'sibling'

Three items may have diffused from NC to KI or the reverse:

*ʔáyus	'waterfall' cf. PC *ʔa:yus 'to flow' Blw ʔáyoh, KlaC (Talococ) ʔayʔos 'waterfall'
*pakiw	'ladle' cf. PAn(B) *pakaw 'handle' Blw penaʔaw, KlaC pinakaw, KlaSE pinaʔaw 'ladle'
*silij	'smooth' cf. PC *si:liŋ 'shiny' BonE, KlaSE silij 'smooth'

3.3. PHONOLOGICAL/MORPHOLOGICAL CHANGE

3.3.1. Items previously established, borrowing unlikely

*ʔakit	'few' cf. PNCC *ʔakittjiuly 'few, small'
*ʔikdag	'to fall' cf. PMC(R) *tek[nd]ag 'to fall'
*ʔijil	'nose' cf. PSCC(R) *ʔiŋil 'nose'
*ʔija	'ear' cf. PAn(Dy) *taliŋa 'ear'
*ʔutu	'to cook' cf. PAn(D) *lu(n)[t]uh 'to cook'
*dawwaŋ	'river' cf. PCC(R) *waŋwaŋ 'river'
*kuglit	'skin' cf. PPh *kublil 'skin'
*kukʔuljiulj	'fingernail' cf. PPh *kulkulhun 'fingernail'
*kulapʔiy	'butterfly' cf. PSCC *ku(m)paʔpiy 'butterfly'
*lamiʔis	'sweet' cf. PAn(D) *mamit 'sweet'
*maʔid	'there is none' cf. PCC(R) *naʔid 'there is none' ¹⁵
*tulkud	'housepost' cf. PPh(Z) *tukud 'post'
*tuppa	'to spit, saliva' cf. PMC(R) *tuppa 'to spit'

3.3.2. Items previously established, borrowing likely

Two items with limited distribution in Kla may have been borrowed from BonN:

*ʔakiyjiult	'few' cf. PNCC *ʔakittjiuly 'few, small'
*galabi	'yesterday' cf. PPh(R) *ka- Rabi'i 'yesterday'

¹⁵Cf. North Catanduanes Bikol maʔ 'none'.

One item which is almost universal within KI appears with very limited distribution in KknN:

*ʔata 'eye' cf. PAn(Dy) *maCáʔ 'eye'

3.3.3. Corrigenda

In the light of its occurrence in Malaweg, one item should be raised to the level of PC:

*guyguy 'to pull' cf. PPh(Z) *guyud 'to pull'
Bon, KknN goygoy, KlaC, KlaS, Malaweg
guyguy 'to pull'

Another item can be accounted for by a reconstruction of PAn:

*típa 'to winnow' cf. PAn(B) *(Cʔ)ʔaSep + a 'to winnow'

On the basis of data from Kln, Reid (1989a) has raised a third item to the level of PSCC:

*tuʔʔal 'bone' cf. PAn(B) *CuqelaN 'bone'

3.3.4. Addenda

Items whose distribution argues against their diffusion include:

- *ʔaNpat 'chicken louse' cf. PC *ʔaNpas 'chicken louse', BonN, KlaC, KlaSE ʔampat, Blw (Aliawan) ʔaʔpat 'chicken louse' (but cf. DgtC ʔampat 'for the biting, painful sting of a bug bite to subside')
- *ʔáip 'roof' cf. PAn(Dy) *qatep 'roofing thatch' Ifg, Kla ʔotop 'roof'
- *ʔudig 'back (of person)' cf. PHn(Z) *ədág 'back' Bon (Dallikan), KknN (Madongo), ʔodig, Kla ʔudog 'back'
- *báiy 'house' cf. PAn(Dy) *baláy 'house' KknN, KknS biʔiy, IfgN, Kla boloy 'house'
- *báli 'typhoon' cf. PPh(Z) *baRyu(h) 'typhoon' KknN, Blw, Itg, Kla báli 'typhoon'¹⁶

¹⁶Isg also has *balt* 'strong wind, typhoon'. This is most likely a borrowing from Itg or Kla; if the provenience is correct, the expected reflex of *baRyu(h) in Isg would be *bagyu* or *baxiyá*.

*biʔik	'to split, halve' cf. PAn(Dy) *biqak 'to split' Bon biʔik 'half of a butchered pig or water buffalo', KnkN biʔik 'a half, to cut into two parts', Ifg biʔik 'one half of what has been butchered', KlaN biʔik 'to split'
*biʔin	'shame' cf. PC *baʔin 'shame' BonS, Blw, Kla biʔin 'shame'
*digit	'pretty' cf. PPh *dikit 'pretty' IfgN digit, KlaS (Bangad) maggit 'pretty', Bon magmaggit 'young woman' ¹⁷
*dikit	'red' cf. PCC *ditik 'red' BonN (Saclit), BonC (Maligcong) dikit, Itg dikit, Kla dokot 'red' ¹⁸
*kamunakin	'nephew, niece' cf. PPh(C) *kamanaken 'nephew, niece', Bon, KnkN, KnkS kamonakin, Blw ʔamunaʔin, Ifg ʔamunaʔon, Kla kamunakon, ʔamunaʔon 'nephew, niece'
*kilit	'louse egg' cf. PPh *ʔiRit 'louse egg' Knk, Itg, Kla ʔilit 'louse egg'
*lawaj	'bad' cf. PNCC *lawij, PPh(C) *la(q0)in 'bad' BonS (Talubin), KlaN (Manabo) lawaj 'bad'
*lawij	'bad, ugly' cf. PPh(C) *la(q0)in 'bad' Bon, Blw, Kla lawij, Bon, Kla lawwij, Blw lawej 'bad, ugly'
*liʔiw	'fly, fruit fly' cf. PAn(Dy) laʔaw 'blowfly' KnkN liʔiw 'a kind of small fruit fly', Kla liʔaw 'housefly'
*piʔit	'bitter' cf. PAn(D) *paqit 'bitter' BonS, Kla piʔit, KnkN pi:t 'bitter'
*pilak	'frog' cf. PC *pilat 'species of toad' BonN (Saclit) pilak, KlaN (Pinukpuk) pila? 'frog'

¹⁷With syncope and subsequent assimilation of the root-initial stop in Kla and Bon.

¹⁸With subsequent vowel harmony in Itg and Kla.

*sakkud 'horn (of animal)' cf. PC *sakRud 'horn'
IfgE haʔʔud, Kla sakkud 'horn'¹⁹

Innovations which may have spread into KI from NC languages are:

- *ʔagliy 'testicles' cf. PPh(Z) *laGay 'testicles'
Bon, KnkN ʔagʔagliy, IfgE ʔagʔakiy, KlaC
(Dangtalan) ʔagʔagloy 'testicles'
- *ʔisaŋ 'one' cf. PAn(Dy) *ʔesáʔ 'one'
Bon, KnkN ʔisaŋ, KlaN (Daguoman) ʔosaŋ
'one'
- *ʔissu 'urine' cf. PPh(He) *qisbu 'urine'
Bon, Blw ʔisso, KlaS ʔissu 'urine'
- *dálik 'inside, deep' cf. PAn(Dy) *Dálem 'deep'
Bon dálik, Kla dáloʔ 'inside,' Bon ʔadálik,
KnkN ʔadáʔik, KlaC, KlaS ʔadáloʔ 'deep'
- *saggud 'horn (of animal)' cf. PC *sakRud 'horn'
Bon saggod, Ifg haggud, KlaC (Talococ)
saggud 'horn'
- *suki 'foot, leg' cf. PPh(Z) *sikiʔ 'foot'
BonE soki, Ifg huki, huʔi, KlaSE suki 'foot,
leg'
- *tikdag 'to fall' cf. PC *teknag 'to fall'
Bon, KnkN, KnkS tikdag, Blw tʔʔdag, KlaC
toʔdag, KlaSE totdag 'to fall'²⁰
- *tipkan 'mosquito' cf. PSCC *tupkan 'mosquito'
BonN, Knk tipkan, KlaS tipʔan 'mosquito',
Bon tipkan 'a kind of small biting fly'

And two items which may have been borrowed into NC languages from KI include:

- *ʔalwa 'wide' cf. PC *lawá 'wide'
BonN (Saclit), Kla ʔalwa 'wide'

¹⁹This item, as well as *saggud (below) most likely developed via *sakgud*, which most CC languages have borrowed from Northern Cordilleran or some language wherein *R regularly goes to *g*.

²⁰Reid (1989a) reconstructed the PMC item *teknag 'to fall', but the evidence from Isnag (tʔʔdag) and Itawis (tʔʔnʔag, tanag) indicates that the item *teknag 'to fall' may be assigned to PC.

*ʔiki	'foot' cf. PPh(Z) *stik ^o 'foot' KrkN (Luba), Kla ʔiki 'foot,' KrkN (Bauko) ʔikʔiki 'foot, leg, claw, paw (used only in tales)'
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Three items may have diffused from KI to NC or vice versa:

*ʔsáʔan	'one' cf. PAn(Dy) *ʔesáʔ 'one' Blw ʔhiʔʔin, ʔháʔan, Kla ʔossáʔan, KlaSE ʔosáʔan, saʔan 'one'
*ʔaslisigim	'ant' cf. PAn(D) *t'eg'em 'ant' BonE (Lias), KlaSE (Maducayan) ʔasisigom 'ant'
*libin	'to bury' cf. PPh(Z) *lebeŋ 'to bury' BonN (Sadanga) libin, KlaS, KlaSE libon 'to bury'

4. INNOVATIONS EXCLUSIVELY SHARED BY NC LANGUAGES

Innovative items which are widely distributed are assigned to the level of PNC. This includes those which have a reflex in all three branches of the subgroup, and it includes as well those occurring in two speech communities if their distribution indicates that borrowing was probably not a factor in their sharing the item. Suspicious items are those which are found only in contiguous dialect areas in which diffusion is likely to have operated, for example, in the areas where BonE, Blw and IfgN come together.

4.1. LEXICAL INNOVATIONS

4.1.1. Items previously established, widespread

*ʔadil	'body'
*ʔágid	'to sharpen to a point, as a stick'
*ʔad[ʔu]wáni	'today'
*ʔaklit	'bitter'
*ʔakud	'ladle, spatula'
*ʔamliŋ	'to laugh'
*ʔanibat	'kind of fence' ²¹
*ʔápis	'sleeping mat'
*ʔidat	'to give'
*ʔubud	'fine sand'
*ʔugga	'yesterday'
*bagsay	'kind of spear'

²¹This item also occurs in Kln (Kel) as *ʔanibat* 'fence', but it is most likely borrowed from Ifg.

*baktad	'to lie down' ²²
*bátaŋ	'afternoon' ²³
*baʔun	'debt'
*bɪlal	'to swell'
*bídaŋ	'to be burning'
*da(k)liŋ	'wall'
*dáʔul	'space-under-house, below'
*dukug	'to turn one's back'
*gɪnnaw	'stream'
*gisa	'to split (wood)'
*kaʔat	'how many?' ²⁴
*kugʔuŋ	'to hit with the fist'
*latʔd	'to swell'
*lɪmlɪm	'rain storm, typhoon'
*lúlik	'deaf'
*páduŋ	'similar'
*pagat	'thorn'
*púkil	'shoulder'
*púʔus	'hot'
*sagúguŋ	'neighbor'
*sakyat	'to climb, to go home (upwards)'
*sɪkaw	'headcold, to feel cold'
*sikit	'sheath (for bolo)'
*silap	'dream, bad dream'
*sudpak	'to hit, slap'
*tantan	'needle (usually of bamboo)'
*tɪŋgɪ	'skirt'
*tikid	'to ascend, climb'
*tuduk	'dry (fields)'
*wanis	'G-string'

4.1.2. Items previously established, limited distribution

*ʔam(m)ay	'good, pretty'
*ʔimil	'round'
*ʔuplak	'bark (of tree)'
*bákag	'to slice, cut'
*daʔan	'not (negator of past verbs)'
*kanaykay	'itch'
*kasaʔud	'sibling-in-law (esp. brother-in-law)'
*kunut	'to scratch'

²²While this term also occurs in Kln (Ahn, Kel, Hng) it is very likely to have been borrowed from Iŋg.

²³Kln (Kel) *hambateŋanan* and Kln (Hng) *hambatoŋanan* 'afternoon' are probably loans from Iŋg.

²⁴Certain speech communities also have a metathesized form from *kacɔ: Blw (Alunugan) *ʔatána*, IŋgE *ʔatána* 'how many?'

* <i>ʔitig</i>	'black, dark'
* <i>pagpag</i>	'forest'
* <i>pitay</i>	'skirt'
* <i>saŋʔadum</i>	'day-before-yesterday, day-after-tomorrow'
* <i>sapʔud</i>	'to blow'
* <i>sináʔaŋ</i>	'hunger'
* <i>sulʔat</i>	'to cook, cooked rice'
* <i>tapi</i>	'rest, remainder, others'
* <i>tukag</i>	'monkey'
* <i>wanti</i>	'path'
* <i>wiʔit</i>	'morning, tomorrow'
* <i>yagpaw</i>	'light (weight)'
* <i>yawyaw</i>	'wind, breeze'

4.1.3. Corrigenda

What was reconstructed as **ʔa(n)gulim* 'ant' should be reassigned to PPh on the evidence of an item in Manobo:

* <i>gulem</i>	BonE ʔagogolom, Bon golim, KnkN ʔagogowin, Ifg gulom, IfgN ʔaŋgugulu:lom, ʔaŋguguloŋ 'ant', Manobo (B'lit) gulom mabula 'termite' (literally, 'white ant') (Yap 1977)
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Reid has raised one item to the level of PSCC:

* <i>gsgis</i>	'to slice, as camote leaves'
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Five other items assigned to the level of PNC should be raised to PSCC:

* <i>búyuy</i>	Bon, Knk boyoy, Ifg búyuy, Ibl bóyoy 'boil'
* <i>kalaŋjakaN</i>	KnkN kalaŋjakan, Kallaŋákaŋ, IfgN ʔalaŋjaʔan, Ibl (Itogon) ʔalaŋjahan 'throat'
* <i>liʔiw</i>	BonE liwʔan, liwan, KnkN liʔiwan, KnkS liwʔan, Blw ʔaliwʔan, Ifg liʔiw, kalʔiwan, Kln liwwan 'to forget'
* <i>pakdal</i>	KnkS pakda, Ifg, Kln (Ahn, Keh) pakdal 'bridge'
* <i>su(1)kud</i>	Bon solkod, IfgN hoʔud, huʔud, Kln (Keh) hulkud 'spear', Ifg hulkud 'spear shaft'

HIMES

The item reconstructed as **kawa* 'path' should be reconstructed differently:

*k[ai]wa	Bon (Gutnaang) kiwa, kawʔin 'to pass along; to take, as a trail', Bon (Bontoc Ili) ʔikwan, Ifg kawʔon, ʔawon, ʔawa 'path, trail'
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One item was inadvertently printed as **kiliŋ*:

*kain	BonE, Ifg maŋlon, Blw maŋlin, Ifg kolon 'to split'
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Also appearing in the previous list was an item reconstructed as **lajjis* 'to cut off, chop'. Evidence from Isnag, however, indicates that the item should be reconstructed at the PC level as:

*Raŋes	Bon laŋis 'to chop a felled tree into lengths', BonN, KnkN laŋis 'to cut off', Isnag xaŋat 'to cut up the trunks of young trees and the large boughs'
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The form **liŋis* represents a phonological innovation within NC (see below).

4.1.4. Addenda

Those items occurring in all three branches of NC include:

*ʔiwit	BonE, Ifg ʔiwit, Blw (Tonglayan) ʔewet 'tail (of animal)', KnkN ʔinniwitan, ʔiniwitan, Ifg ʔiwitan 'tail (of a G-string)'
*baŋit	BonE baŋton, BonS, KnkN baŋit, Blw baŋtan, Ifg baŋot 'to bite'
*kila	KnkN kila 'to cry out in pain', Blw kéla, Ifg kila 'to cry, weep'
*kultasi	BonE, BonN kultasi, Blw ʔolhe 'strong', Ifg kulhi 'hard' ²⁵
*lámag	Bon, KnkN, Ifg lámag 'to ascend', KnkN lámag, Blw (Aliawan) lamágin 'summit'
*pásiŋ	Bon pásing, Ifg páhiŋ 'portions of distributed meat', KnkN pásiŋ 'to distribute meat', Blw (Aliawan) pásiŋ 'meat'

²⁵Kln (Kel) *kelhi?* and Kln (Hng) *kolhi?* 'hard' are most likely borrowed from Ifg.

*sigga	BonN sisigʔan, BonE sigga, KnkN sigsigʔaŋ, Blw sigga, Ifg higga, higa 'sad, lonely' ²⁶
*típiy	Bon, KnkN Blw tipiy, IfgE tipoy 'taro (esp. taro leaves)'

Innovations occurring in two of the three branches of NC are:

*ʔaknut	Bon ʔaknot 'to tear with the teeth', KnkN ʔaknot 'to bite', Ifg ʔaknut 'to bite off'
*ʔambúli	Blw ʔabbubúli, ʔabbubúlli, Ifg ʔambubúli 'ant', KnkN bubúli 'kind of small white moth'
*ʔaniŋilŋil	BonN (Betwagan) ʔaniŋolŋol, Blw ʔaniŋalŋal 'anger'
*ʔat	Bon ʔat 'to happen', KnkN, Ifg ʔat 'to do', KnkN, KnkS ʔiyatna, IfgN ʔatna 'how?'
*ʔátag	Bon, Ifg ʔátag 'kind of mat'
*ʔáʔs	Bon, KnkN ʔáʔs, IfgE ʔoh 'yes'
*ʔibʔb	Bon, KnkN ʔibʔb, Ifg ʔobʔob 'spring (of water)'
*ʔi(d)yas	BonE ʔiyas, IfgN (Batad)ʔiah, IfgE ʔidya 'wind'
*ʔi(nŋ)wis	KnkS ʔinwis, IfgN (Batad) ʔeŋweh 'straight'
*ʔiklit	KnkS ʔiklit, IfgN (Batad) ʔiʔlit 'to delouse'
*ʔiŋaw	KnkN ʔiŋaw, Ifg ʔiŋo 'dirty'
*ʔiyul	BonC (Dallican) ʔiyol, IfgC (Bayninan) ʔiyul 'throat'
*bali	Bon, KnkN, Ifg bali 'to deceive'
*b[au]ŋal	BonN boŋal, Ifg baŋal 'buttocks', Ifg baŋʔal 'pelvic bones, lower part of the back'

²⁶Kln (Ahn, Kel) *ʔanhiŋigga*, *kayhiga* 'sad, lonely' are probably loans from Ifg.

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*bayyaʔuŋ	Bon, KnkN, Ifg bayyaʔoŋ, Ifg bayáʔoŋ 'kind of blanket'
*binal	BonN binal, ʔibnal, Ifg bonal 'to throw (esp. stones)'
*budʔuk	KnkN, KnKS bodʔok 'to blow', Ifg budʔuk 'to blow (into the fire)'
*bukis	KnkN bokis 'to breathe with fury', Blw (Aliawan) buʔbuʔoh 'to breathe'
*bunʔis	Bon, KnkN bonʔis, Ifg bunʔoh 'to breathe'
*buwis	Bon, KnkN bowis, KnkS bobowis, IfgC buwoh 'ant'
*dalimus	Bon damilos 'to feel slippery', KnkN dalimósan, Ifg mulidámuh, ʔalidámuh 'smooth' ²⁷
*d[ai]nit	Bon, KnkN dinit, IfgC (Banawe) danot 'to light a fire'
*datʔ[ui]ŋ	BonE, Blw datʔoŋjan 'to kick'
*dimlag	KnkN dimmag 'dirty', Ifg domlag 'a dirty and crumpled hip-bag'
*ditag	BonE datag, IfgE čatag, Ifg dotag 'butchered meat' ²⁸
*duŋpup	KnkN doŋpop, Ifg (Banawe) duŋpop 'to hit, box', Ifg duŋpup 'to bump (one's head, etc.)'
*dunu	Bon, KnkN dono, Blw duno, dunu 'to work'
*dusnug	BonE, KnkN dosdosnog, Blw (Alunugan) duhduhnug 'shooting star'
*gabʔun	Bon gabʔon 'to cover,' BonC (Mainti), KnkN gabʔon 'to bury,' Ifg gabʔun 'to cover with earth'

²⁷Both Bon and Ifg show metathesis.

²⁸Kln (Kel) *detag* and Kln (Hng) *dotag* are probably Ifg loans.

*gawis	Bon, KnkN gawis 'good, healthy, peaceful', Ifg gaweh 'prosperity, health'
*gilaw	Bon gilaw 'to rotate one's bolo or spear', IfgE kilo 'to turn'
*kadiw	BonE kadiw, KnkN, KnkS kadiw, IfgN ?adew 'frog'
*káda	KnkN, KnkS káda, IfgE ?áčA 'forest'
*kámus	KnkN (Taccong) kámos, Blw (Alunugan) ?ámoh 'face'
*kánap	KnkN kánap 'dark', Ifg kánap 'complete darkness'
*kidyam	KnkN kidyam, Ifg kodyam 'lightning, flash of lightning' ²⁹
*kilaŋ	Bon kilaŋ, Ifg (Gohang) kokollaŋ 'child, young person'
*kítim	BonE kotom, naŋtom, Blw kaTAM 'to lie, falsehood'
*kibat	KnkN, Ifg kibat 'fence'
*kilig	BonC (Maligcong) ?ak?akilig, BonE kilgan 'fast', KnkN kilig, Ifg kilog 'strong, full grown'
*kilut	Bon, KnkN, Ifg kilot 'dirty', Ifg kilut 'polluted drinking water'
*kú?ug	Bon ko?okó?og, Ifg kú?ug 'skinny, emaciated', KnkN kó?og 'bulging out'
*kussili	BonE kossil, KnkS kossili, Blw kossel 'bird' ³⁰
*IVmuy	BonN limoy 'clothes', Ifg lamuy, lomoy 'skirt'

²⁹Kln (Kel) *kedyam* and Kln (Hng) *kodyam* 'lightning' are likely loans from Ifg.

³⁰With apocope in BonE and Blw.

HIMES

*lagbu	Bon labbo, KnkN lagbo, Ifg lagbu '(to work for) wages' ³¹
*lasʃuly	BonE (Kadaklan) lasoy, Blw (Tonglayan) lahoy 'to flow'
*lidiŋ	Bon, KnkN lidiŋ 'finger', Ifg lodoŋ 'to point', lodlodoŋ 'index finger'
*ligud	Bon, KnkN ligod 'to steal, use stealth', Ifg ligud 'to use stealth'
*lúpag	BonE, BonS lópag, Blw lúpag 'to hit, box'
*lúpit	KnkN lópit, Ifg lúpit 'to repeat'
*luplup	Bon loplop 'to clean a child's nose by sucking it', KnkN loplop, Ifg luplup 'to suck'
*luya	Bon lóya 'sickening, tiresome', KnkN loya 'impaired, deteriorated', Ifg luya 'old, worn out'
*massiy	BonE massoy, Blw massay, massiy 'to sleep'
*múʔut	BonE (Barlig) ʔimóʔot, IfgN ʔumuʔúton 'widow, widower'
*muŋjaw	KnkN móŋjaw 'light, whitish', Ifg muŋjaw 'grayish'
*padli	Bon padpadli, KnkN padpaddi 'cassava', BonS padpadli, Blw (Tonglayan) padli 'yam' ³²
*palʔig	Bon, palʔig, IfgN (Batad) palgan 'to pay', Ifg palog 'exchange'
*pájas	BonE (Kadaklan) páŋas, Blw (Tonglayan) páŋah 'swidden', Ifg páŋah 'to clear an area of vegetation'
*pásuŋ	KnkN pásoŋ 'upper jawbone', Ifg páhoŋ 'cheek'

³¹With regressive assimilation of the velar stop in Bon.

³²The progressive assimilation of the *l* in Knk is unusual in this environment.

*páway	Bon páway 'to clear, as a trail or a field', Bon (Malgcong) ?ap?apáway, KnkN, Blw páway 'light (color)'
*pilak	Bon pilak 'property which is bought', IfgN (Batad) pola? 'to buy', Ifg polak 'buy or sell ricefields'
*piŋil	Bon piŋil, Ifg poŋol 'to hold'
*pitin	Bon, KnkN pitin 'to break, snap', BonS pitnín, Blw putnam, Ifg poton, potnon 'to cut off'
*pitluŋ	Bon (Poblacion) pitloŋ, Ifg potloŋ 'to cut off, cut in half'
*piy?an	KnkN piy?an 'scarred over', Ifg (Hapaw) poyan 'scar'
*pispis	BonN pispis, BonS, Ifg pihpith 'to squeeze' ³³
*punikit	KnkS ponikit 'to stick to', Ifg puníkot 'stickiness'
*púsi	Bon pósi 'poor', BonE pósi, IfgN pupúhi 'ugly', Ifg napúhi 'bad'
*pusit	Blw poset, IfgN, IfgE puhit 'to throw, toss'
*putliŋ	BonE potliŋ 'to cut off', KnkN potliŋ 'to tear off, pull off', Ifg putliŋ 'to break by snapping'
*sábaŋ	KnkN sábaŋ, Ifg (Hapaw) hábaŋ 'flood' (but cf. Iloko sabáŋan 'mouth of a river')
*sablík	BonS hablík 'wet', Ifg hablok 'constant dripping'
*sakʔip	KnkN sakʔip 'to lower', KnkN ?asakʔip, IfgC nahaʔop, ?ahakʔop 'low'
*sakyab	Bon, KnkN sakyab, Ifg hakyab 'to fly up (usually said of chickens)'
*s/al/ibud	Bon, KnkN salibod, salibʔod 'to tie together, to knot', Ifg hibod 'to tie something around'

³³Kln (Kel) *pʰpʰ* 'to squeeze' is probably a loan from Ifg.

*sáma	BonC (Tocucan) masamʔan, BonS hamaʔan, Ifg háma 'to forget', KnkN sáma 'to be mistaken'
*samal	Bon samal, KnkN sama, Blw hamal 'to plant, to work ricefields'
*sandi	Bon ʔasandi, Ifg handi 'long (time), long ago'
*sáni	BonC sáni, Ifg háni 'to hide, shelter'
*sasa	KnkN sasa, Ifg haha 'to laugh'
*siklit	KnkN siklit, IfgN (Kambulo) hiʔlit 'to delouse'
*siŋul	KnkN (Gonogon) siŋo, IfgN hiŋul 'elbow'
*sipakduy	KnkN (Namatec) sipakdoy, IfgE hipadcoy 'to kick' ³⁴
*sipal	BonE sipol, BonS hipálin, Blw (Tonglayan) hépol 'to cut off'
*suyʔup	KnkN soyʔop 'to sip', Ifg huyʔup 'to suck'
*t[ai]bil	KnkN tibi, tombi, Ifg tábol 'wet'
*taʔŋtiŋ	KnkN taʔŋtiŋ, Ifg tayoŋtoŋ 'noon'
*tabug	KnkN tabog, Ifg tabug 'to bathe'
*timʔaŋ	Bon timʔaŋ 'to break in half', BonE, Ifg tomʔaŋ, KnkN timʔaŋ 'to split'
*tiba	Blw (Tonglayan) tibbáʔan 'green', IfgN, IfgE titiba, titiba 'yellow'
*tibus	BonE manibok, Blw tibusʔ 'to swim', Ifg tibuk 'to plunge into deep water'
*tigʔil	KnkN tigʔil 'hill', Ifg tiggil 'crest, ridge'
*tipʔak	KnkN tipak, Ifg tipʔak 'to slap in the face'
*tiyaw	BonE (Kadaklan) titʔiyaw, Blw (Botac) titiyáwan 'dragonfly'

³⁴With regressive assimilation of the velar stop in Ifg

*tuʔan	Bon, KnkN, Ifg toʔan 'I don't know' ³⁵
*túbak	Bon, KnkN túbak 'to chop a large piece of wood from a log', KnkN, KnkS túbak, Ifg túbak 'to split (wood)'
*tuliguŋgug	BonE toligoŋgoŋ, Blw tuliguŋgug, Ifg tuligoŋgoŋ 'round' ³⁶
*tumug	Blw tumug, IfgE tumog 'mosquito'
*wagga	BonE, BonS, Blw wagga 'to throw away'
*witaŋ	KnkN, Ifg witaŋ 'skinny, slender'
*yabuk	Bon, KnkN yabok, Ifg (Amganad) yabbug 'to swim' ³⁷

4.2. SEMANTIC SHIFT

4.2.1. Items previously established, widespread

*ʔila	'to know' cf. PSCC(R) *ʔi:la 'to see'
*buwa	'seed' cf. PAN(Dy) *buwaq 'fruit'
*daya	'above, sky' cf. PPh(C) *daya 'upstream'
*dila	'outside' cf. PCC *dila 'below'
*sampit	'rough (touch)' cf. PNCC *sampit 'rough (taste)'

4.2.2. Items previously established, limited distribution

*ʔinl[ai]kas	'widow' cf. PC *lekas 'to undo, untie'
*ʔudu	'sky' cf. PPh(Z) *quDtu 'directly above'
*b[iu]kaŋ	'rainbow' cf. PSCC *bika[kŋ] 'bow (weapon)'
*gayaŋ	'to throw' cf. PC *gayaŋ 'spear'

³⁵Reid (1993) suggests that this is related to Bon *ʔay ūwaʔan* 'I don't know', from the root *ūwa* 'true'; cf. also Ifg *toʔwa* 'I almost forgot it'.

³⁶Kln (Kel) *natulligeŋgeŋ* 'round' is almost certainly a borrowing from Ifg.

³⁷With unexplained voicing of the final stop in Ifg.

HIMES

*kali	'to call' cf. PAn(B) *kaRi 'to speak'
*payak	'leaf' cf. PC *payak 'wing'

4.2.3. Corrigenda

Two items have been raised tentatively to the level of PNCC:

*lakuwan	'to buy'
*sidim	'afternoon, night'

Another item may be assigned to the level of PSCC on the basis of its occurrence in I-wak:³⁸

*lakat	Bon, KnkN lákat, Ifg lá?at 'taro tops', Bon, KnkN, Blw (Tonglayan) lákat, KJaC (Talocot), I-wak lakat, Ifg lá?at 'taro'
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4.2.4. Addenda

*?álig	'honey' cf. PC *?a:lig 'bee' Bon, KnkN (Alab), Ifg ?álig 'honey'
*?ípít	'narrow' cf. PC *?i:pít 'pincers' BonE, BonS, Blw ?ípít, KnkN (Balili) ?ípít 'narrow'
*?úlat	'skinny' cf. PAn(B) *uR ₂ at 'vein' and PC *?u:lat 'hunger', BonE ?úlat, Blw ?úlat 'skinny'
*baŷy	'inside' cf. PAn(Dy) *baláy 'house' BonE ?as baloy, BonC (Caneo) ?is baliy, KnkN ?is bi?iy, Blw (Tonglayan) ?ad baloy, IfgN (Kambulo) boloy 'inside'
*báyuyŷ	'termite' cf. PCC *ba:yuŷ 'bumblebee' Bon (Caneo) ?atinbabáyoyŷ, IfgE (Mayoyaw) babbáyoyŷ 'termite'
*buwaŷ	'intestines' cf. PNCC *buwaŷ 'belly' Bon, KnkN, KnkS bowaŷ, Ifg buwaŷ 'intestines'

³⁸Since taro constitutes the subsistence base for the I-wak, and since they pre-date the Kallahan speakers on the eastern slopes of the Cordillera in Nueva Vizcaya (Añable 1989, Peralta 1982), this must be an inherited rather than a borrowed term.

*dála	'red' cf. PAn(Dy) *[dD]aRaŋ 'blood' BonE, BonS, Ifg dadála, KnkN dála, dáʔa, da, KnkS dada 'red'
*dálím	'belly' cf. PC *da:lem 'internal organs', IfgN (Kambulo) dálom, Itg daʔím 'belly', KnkN dináʔím 'intestines, viscera' ³⁹
*d[ai]ŋja	'flower' cf. PC *d[ai]ŋja 'kind of plant' KnkN dadʔaŋja, Ifg (Hapaw) doŋoah 'flower'
*kamálig	'wooden floor' cf. PPh *kama:lig 'granary' KnkN, Ifg kamálig 'wooden floor'
*katlu-na	'the third of it; i.e. day-after-tomorrow' cf. PAn(Dy) *telu 'three' Bon (Dallican), KnkN katlona, IfgC (Amganad) ʔatluna 'day-after-tomorrow'
*kukʔu	'to scratch' cf. PSCC *kuʔku 'to dig up' Bon, KnkN kokʔo, Ifg kukʔu 'to scratch'
*kupkup	'bark' cf. PCC(R) *kupkup 'skin (of human)' Bon, KnkN, KnkS, Ifg kopkop, Ifg ʔupʔup 'bark'
*líkna	'fear' cf. PC *Rikna 'feeling, sense, to hear' BonS (Talubin) líkna, IfgE leʔna 'to fear'
*puwik	'wind' cf. PSCC *puwik 'storm, typhoon' BonE powak, BonS powik, IfgC (Cababuyan) puwoʔ 'wind'
*sinʔudum	'two days removed' cf. PCC *ʔudum 'other' BonN ʔad sinʔodom, Blw ʔad hinʔudum 'day-before-yesterday', BonN ʔas sinʔodom, KnkN (Santol) ʔis ʔodom ʔagiw, Blw ʔah hinʔudum 'day-after-tomorrow'
*t[ai]yʔak	'waterfall' cf. PPh *tayak 'drip' KnkN tiytiyʔak, Ifg (Hapaw) tayʔak 'waterfall'
*talikud	'to hide' cf. PPh *likud 'to turn one's back', PAn(Dy) *likúDe 'back' KnkN, Ifg talikod 'to hide'

³⁹This item is most likely a PC innovation **dalem* with the meaning 'internal organs', the Itg form *dalem* semantically narrowing to 'liver', while the PNC meaning remained that of 'viscera'. The Itg form is borrowed from Knk, although it is unattested in Knk of Abra.

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*tamil	'face' cf. PSCC *tamil 'cheek' KrkS tamil, Ifg tamel 'face'
*tímil	'chicken louse' cf. PC *ti:mel 'flea' Blw témol, Ifg timol 'chicken louse'
*tVniw	'rice wine' cf. PPh(Z) *tunaw 'to melt' BonS tiniw, Blw (Aliawan) tonaw, Ifg tono 'rice wine'
*wásay	'mosquito' cf. PAn(B) *wasay 'axe' Bon waswasayyan, KrkS wasáyan, waswasáyan, Blw, IfgN wahwaháyan, Ifg wahhewahhe, wawwahe 'mosquito' ⁴⁰

4.3. MORPHOLOGICAL/PHONOLOGICAL CHANGE

4.3.1. Items previously established, widespread

*ʔalugúʔug	'throat' cf. PNCC *ʔalukúʔuk 'throat' ⁴¹
*ʔawan	'right (side)' cf. PCC *waw(w)an 'right'
*bilat	'scar' cf. PPh *pi:lat 'scar'

4.3.2. Items previously established, limited distribution

*ʔadawwíy	'far' cf. PPh(C) *hadawi 'far'
*ʔaptik	'short' cf. PCC *ʔaptikáy 'short'
*ʔibsu	'urine' cf. PPh(He) *qisbu 'urine'
*kittaj	'few' cf. PNCC *ʔakittiy 'few'

4.3.3. Corrigenda

One item previously assigned to this category should probably be raised to the level of PPh:

*ti:li	'vagina' cf. PAn(B) *(i)l(C)l'il 'clitoris' Bon, KrkN, Ifg tili, Blw (Tonglayan) téli 'vagina', Tagalog tillin 'clitoris'
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4.3.4. Addenda

*ʔalitáʔu	'uncle' cf. PSCC *ʔulita:ʔu 'uncle' Bon, KrkN ʔalitáʔo, IfgC ʔalitáʔu 'uncle'
*b[au]liŋawŋaw	'round' cf. PNCC *balikawkaw 'round' KrkS bolŋawŋaw, Blw baleŋawŋaw 'round, circular'

⁴⁰Kln (Kel, Hng) *wawwahhay* 'mosquito' is a likely borrowing from Ifg.

⁴¹Kln (Kel) *ʔeŋguʔug* 'throat' is probably a loan from Ifg.

- *bal(a)big 'spear' cf. PAn(B) *b(ae)lebag 'spear'
BonE bolbog, balbog, BonS (Talubin) bo:big,
KnKN balbig, babig, Blw (Tonglayan) bolbug,
Ifg balabog 'spear'
- *baŋid 'bolo' cf. PC *baŋig 'bolo'
Bon baŋid 'short-bladed digging tool', Blw,
IfgN (Dukligan) baŋid 'bolo'
- *bidak 'mud' cf. PPh(C) *pitak 'mud'
KnKN, Ifg bidak 'mud'
- *dāʔit 'companion' cf. PSCC *ga(:)ʔit 'companion'
Bon, KnKN (Balili), Ifg dāʔit 'companion'
- *dildil 'to push' cf. PPh(Z) *zulzul 'to shove'
Bon dildil, KnKN ʔididi, Ifg doidol 'to push'
- *disim 'night' cf. PNCC *sidim 'night'
KnKN madsim, Blw madhim, nadhim, IfgN,
IfgE madhom, nadhom 'night'
- *gadigad 'to rub' cf. PC *gadgad 'to rub'
Bon, KnKN, Ifg gadigad 'to rub'
- *gamil 'to squeeze' cf. PMP(B) *gemel 'clasp, grasp'
BonE (Kadaklan) gamlon, IfgN gamolon 'to
squeeze'
- *gisib 'to burn' cf. PPh(Z) *səjəb 'to burn'
Blw gAhAb, Ifg guhub, gohob 'to burn'
- *liŋis 'to cut off' cf. PC *Raŋes 'to cut off'
Blw, Ifg loŋhon, Ifg loŋoh 'to cut off'
- *li(lu)ptu 'yam' cf. PC *luku 'sweet potato'
BonC (Maligeong) lipto, Ifg (Burnay) lupto
'yam'
- *lúsuŋ 'deep' cf. PPh(Z) *Lusuk 'deep in/under'
KnKS lósoŋ, Ifg ʔalúhuŋ, malúhuŋ 'deep'
- *ŋáʔis 'to breathe' cf. PPh(R) *qa:ŋes 'to breathe'
BonE, Blw (Tonglayan) ŋáʔos, Bon, KnKN
ŋáʔis, Blw (Alunugan) ŋáʔih 'to breathe'
- *pigwa 'to repeat' cf. PPh(C) *pi/dewha 'to do twice'
Blw ʔepewA, IfgE pigwon 'to repeat'

*púkit	'to stick to' cf. PHn(Z) *pókót 'stick(y)' Bon, KnkN pókít, IfgC púkot 'to stick to'
*púsíg	'navel' cf. PAN(Dy) *pús ₁ eje 'navel' BonE, BonN, KnkS púsíg, Blw (Tonglayan) púhig 'navel'
*sádíl	'strong' cf. PCC *sídíl 'strong' Bon sádíl, Ifg hadól 'strong'
*suplít	'to whip' cf. PPh *saplít 'to whip' BonE, KnkS soplít, Ifg huplít 'to whip'
*taktak	'to run' cf. PC *tagtag 'to run' Bon (Maligcong) taktak 'to run,' Ifg taktak 'to run away quickly'
*tapak	'mouth' cf. PNCC *tupík 'mouth' BonE tapak, Blw tapa? 'mouth'

5. CONCLUSION

Continuing research in Philippine languages, as well as in non-Philippine Austronesian areas, will undoubtedly necessitate reconsideration of many of the items reconstructed here. This has certainly been the experience of the past. It is hoped, nevertheless, that the growing corpus of reconstructed vocabularies throughout the region will ultimately contribute to our knowledge of the culture of modern speakers of Austronesian languages.

ABBREVIATIONS

Ahn	Kallahan (Kalanguya) of Ahin	NC	Nuclear Cordilleran
Blw	Balangaw	NCC	North Central
Bon	Bontok		Cordilleran
CC	Central Cordilleran	PAn	Proto-Austronesian
DgtC	Casiguran Dumagat	PC	Proto-Cordilleran
Hng	Kallahan (Hanglulaw)	PCC	Proto-Central
Ibl	Ibaloy		Cordilleran
Ifg	Ifugaw	PHn	Proto-Hesperonesian
Isi	Isinai	PMC	Proto-Meso-
IsiA	Isinai of Aritao		Cordilleran
IsiB	Isinai of Bambang	PMP	Proto-Malayo-
IsiD	Isinai of Dupax		Polynesian
Itg	Itneg	PNC	Proto-Nuclear Central
Kay	Kallahan of Kayapa Proper		Cordilleran
Keh	Kallahan (Kehang) of Kabayan	PNCC	Proto-North Central
Kel	Kallahan of Keleyqi		Cordilleran
Kl	Kalinga-Itneg	PNPh	Proto-Northern
Kla	Kalinga		Philippine
Kln	Kallahan	PPh	Proto-Philippine
Knk	Kankanaey	PSCC	Proto-South-Central
			Cordilleran

APPENDIX

Most of the data used in this paper were collected in the field during the years 1962-64, 1966-68, 1977, 1981 and 1989. Additional data are taken from Allen (1975, 1980), Chandler (1974), Gieser (1958, 1970, 1972), Headland and Headland (1974), Lambrecht (1978), McFarland (1977), Newell (1968, 1970), Reid (1971, 1976), Scott (1957), Shetler (1976), Vanoverbergh (1933, 1956), Walton (1975), and Yap (1977).

An item which is widespread within a language and/or is reported in the literature is referred to simply as Ifg, KknN, etc. Otherwise its distribution is indicated by the barangay where it occurs (in parentheses) or the restricted region wherein it appears, e.g., BonE, KlA_N.

The regions used here for ease of reference are:

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

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

Central Bontok (BonC): Mainit, Maltgeong, Guinaang, Dallican, Bontoc III, Bontoc Poblacion, Samoki, Tocucan, and Caneo, all in Bontoc.

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

Northern Kankanaey (KknN): Luba, Abra; Alab, Balili, and Gonogon, Bontoc; all barangays of Sagada; Dangdanac, Agawa, and Besao Poblacion, Besao; Sumadel and Duwagan, Tadian; Bila, Otucan, and Bauko Poblacion, Bauko; Namatec, Sabangan; Santol, La Union.

Southern Kankanaey (KknS): Cabitin, Mankayan; Loo, Bugulas; Ampusungan, Bakun; Palina, Danap, and Kibungan Poblacion, Kibungan; Cabilisan and Kapangan Poblacion, Kapangan.

Northern Ifugaw (IfgN): Batad, Kambulo, and Dukligan, Banawe.

Eastern Ifugaw (IfgE): Guinhon and Mayoyaw Proper, Mayoyaw; Nayon, Lamut.

Central Ifugaw (IfgC): Hapaw, Cababuyan, Amganad, Gohang, Banawe Poblacion, and Bayninan, all in Banaue; Bacong, Hungduan; Kiangnan Poblacion, Kiangnan; Burnay, Lagawe.

Balangaw (Blw): Botac, Aliawan, Tonglayan, and Alunugan, Natonin.

Itneg (Itg): Poblacion, Pefiarrubia; Binongan, Baay-Licuan; Poblacion, Lacub; Tangadan, San Quentin, all in Abra.

Northern Kalinga (KlA_N): Manabo, Daguioman, and Malibeong, all in Abra; Talalang and Balbalan, Balbalasang; Ammactan, Pinukpuk; Magnao and Poblacion, Tabuk.

Central Kalinga (KlA_C): Guinaang, Galdang, Balencagao, and Dangtalan, Pasil; Manangol and Poblacion, Lubuagan; Taloctoc, Tanudan.

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

Southeastern Kalinga (KlA_{SE}): Mangali and Lubo, Tanudan; Dalipoy (Paracilis) and Maducayan (Natonin), Mountain Province.

Istnal (Isi): Poblacion, Aritao; Poblacion, Bambang; Dopaj, Dupax del Norte, all in Nueva Vizcaya.

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