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On Reconstructing the Morphosyntax of Proto-Northern Luzon

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Abstract

The subgroup of Philippine languages here called Northern Luzon (earlier descriptions called it Cordilleran), is slowly becoming better understood as new descriptions of its constituent languages are being published. This paper draws on the material that is now available to reconstruct various features of the morphosyntax of the parent of the group, Proto-Northern Luzon. Evidence for the unity of the group will first be examined, noting that there is little phonological evidence to unite the family, although the largest group of languages within the family, those which comprise what has been called Meso-Cordilleran does share certain phonological innovations. There is however a fairly substantial body of exclusively-shared lexical innovations which have been claimed to be reconstructible to Proto-Northern Luzon. The general typological features of clausal constructions, both transitive and intransitive, as well as non-verbal, found throughout Northern Luzon will be considered to be reconstructible to the parent language. Two major sections of the paper will deal with the reconstruction of the case relations of NP complements of these clause types, one dealing with pronominal exponents of NPs and the other dealing with nominal specifiers, sometimes referred to in the literature as determiners. A bottom-up approach to reconstruction will be utilized, moving from reconstruction of the lower-level groupings to the parent, Proto-Northern Luzon, but a top-down approach will also be integrated, especially when dealing with various, commonly-occurring grammaticalization processes.

1 Introduction

This paper is an attempt to discover more about the structure of Proto-Northern Luzon (P-NLZN). Specifically, I shall examine the internal structure of the set of morphemes which introduce noun phrases in a number of the daughter languages of the group to determine which forms and which functions are reconstructible to the parent language. I shall also examine the forms and functions of the pronoun sets in the family and revise earlier reconstructions that I have made (Reid 1979).

The daughter languages of P-NLZN are spoken in the mountains and valleys of the Cordillera Central of the northern Philippines (hence the earlier common name Proto-Cordilleran), but they also include languages of the Sierra Madre and the coastal regions to the east of the Sierra Madre, the languages of the Cagayan Valley between the Sierra Madre and the Cordillera Central, as well as those spoken along the north and north-west coastal areas of northern Luzon. Recent archaeological research (Bellwood *et al.* 2003, Bellwood and Dizon 2005) confirms that Northern Luzon was probably the site of the first Austronesian settlements in the Philippines following their movement south from Formosa and the Batanes Islands, perhaps as recently as 3600-4000 BP, and hence suggest that understanding the nature of P-NLZN is very important to an understanding of Proto-Extra-Formosan (PEF), the language of the original migrants into the Philippines.

The Ethnologue (Gordon 2005) includes fifty-six languages in the group, although recent research suggests that at least a few of them are incorrectly subgrouped. The position of Umiray Dumaget, for example, one of the three languages classified in the Ethnologue as Southern Dumagat is probably a Central Philippine language (see Himes (2004:29)), and if more were known about the other two Negrito languages of this small group, they would probably also be shown to be Central Philippine. In previous work I have done on the Negrito languages of the northern Philippines, I have suggested that it is a fallacy to include them within subgrouping hypotheses of Philippine Austronesian languages in that they probably all developed as creoles and have no direct genetic relationship with non-Negrito Philippine languages. It is as much a fallacy as it would be to include Chabacano, the Philippine Spanish creole, as an Austronesian language of the Philippines, despite its lexical, morphological and syntactic similarities to other Philippine languages. Nevertheless, it is clear that in many respects the Negrito languages have retained a number of conservative features of the Austronesian languages that they first acquired, features which have been lost in most non-Negrito languages. It is for this reason that I continue to include them in my subgrouping of the Northern Luzon languages. The family tree given in Figure 1 is based on our current understanding of the relationships between the languages. The Northern Cordilleran branch generally follows Tharp's tentative subgrouping of the languages, which was based on his analysis of the phonological developments in the family. However, I have removed Ilokano from his Northern Cordilleran on the basis of its different reflex of PAN *R, from the other members of that group.

2 On the Validity of Proto-Northern Luzon as a Subgroup

The validity of this subgroup of Philippine languages has generally been accepted by linguists (Zorc 1986, Mcfarland 1980, and Blust 1991, etc.). Blust (1991:78-79) summarizes the major publications that have appeared in which such a subgroup has been proposed, noting the languages which have been included within or excluded from the group. However each of the publications he refers to are primarily lexicostatistical classifications,¹ and as Blust notes,

¹ See Thomas and Healey (1962), Dyen (1965), and Walton (1979).

have generally given somewhat different results from classifications based on qualitative evidence. Although there have been a number of articles which provide qualitative evidence for the inclusion or exclusion of individual languages or groups of languages in one or another of the major subgroups of NLZN (see, for example, Himes (1996, 1998, 2004, etc.)), the only attempt to provide qualitative evidence for NLZN as a whole has been that of Llamzon and Martin (1976). Unfortunately, although Llamzon and Martin attempted to find exclusively shared innovations, the features they discussed were discovered without the benefit of any reconstructed protolanguage, and were as likely to be retentions as they were to be innovations. Moreover the distribution of the features that supposedly characterize Proto-Northern Luzon (Proto-Northern Philippines in their terms), were typically not found only in this subgroup but also turned up sporadically in other subgroups.

Tharp (1974:54) states, “Classification of the Northern Luzon languages into a distinct subgroup is based upon their pronominal systems, aspect-mode systems, lexicons, and on lexico-statistical evidence.” But the only published reconstruction of Proto-Philippine pronominal systems (Reid 1979), is a bottom-up reconstruction which does not provide comparative evidence for innovations which might distinguish this group from other Philippine languages, and there has been no attempt to reconstruct the tense-aspect system of Proto-Northern Luzon (henceforth P-NLZN.)

In terms of phonology, Charles (1974:479) notes, “The most significant phonological difference between the Philippine languages is that the Cordilleran languages of North Luzon like Iloko, Isneg, the Central Cordilleran languages, and Pangasinan have not merged PPH *j and *d together whereas apparently all the non-Cordilleran languages have merged these two proto-phonemes in a voiced apical obstruent”. While it is true that most NLZN languages distinguish the reflexes PPH *j and *d, with *j generally falling together with the reflex of P-NLZN *g,² there are several languages that appear to reflect PPH *j as /d/, like all non-Northern Luzon languages. One of the languages is the highly endangered Arta, an isolate in the NLZN family. Two other languages (Northern and Southern Alta) are coordinate with the South-Central Cordilleran branch of the family, while the others include the Negrito groups who live along the narrow coastal strip of north-eastern Luzon and its vicinity. These languages also include the non-Negrito Paranan and Kasiguranin, which appear to have their ancestry in some early form of Tagalog (in which *j > /d/, and subsequently /l/ intervocalically), but which have been heavily influenced by the languages of their Negrito neighbors, to the extent that they are now generally classified as belonging to Northern Cordilleran. (Vanoverbergh 1937:11, Tharp 1974:61). This may account for some (for example the forms marked in the table which are also found in Tagalog), but not all of the aberrant forms, as will be discussed in Section AA, below. Table 1 lists some of the forms which show the reflexes of P-NLZN *j as /d/, both in intervocalic and word final positions.

² In the languages of the South-Central Cordilleran family, *j became /d/ rather than the expected /g/ in forms that had either an initial or final velar nasal, specifically the forms for ‘charcoal’ (*ʔujin) and ‘name’ (*ŋ-ajan) (Conant 1911:84-85).

Table 1. *j > /d/ in some languages of Northern Luzon

English Gloss	ALTS	ALTN	ART	PRN	CSG	DGTC	P-NLZN
betel leaf			god		gawəd	ga'wid	*Rawəj
charcoal		ʔu'diŋ	u'diŋ				*ʔujŋ
dry		maddi		mamadi		məma'deq	*maja
dry in sun	'bilad	'bilad					*bilaj (TAG)
gall	ʔapdu	ʔapduʔ	apdu				*ʔapju (TAG)
name	ŋadon	ŋaddin	ŋa'din	ŋaran	ŋaran		*ŋajan*
navel			pusəd				*pusəj
nose			aduŋ	ədduŋ	ədoŋ	(du'ŋos)	*ʔajuŋ
palm (of hand)			palad	palad	palad	palad	*palaj** (TAG)
rice (unhusked)				paray			*pajəy
sibling			wadi			patwa'diʔ	*w-aji
weave (cloth)		laddi		ladi	ladi	la'dey	*laja
when							*pija
wind				parəs	paras		*pajes

* Himes (pers. comm.) notes that the Alta forms, with Isinai *ŋaron* and Ilongot *ŋadin*, imply a PMCo **ŋadən*, a doublet with PMCo **ŋadan* 'name'.

** This form appears with a /d/ reflex of *j in all languages of the northern Philippines, and may also be a borrowing in these languages as well.

However there are two phonological innovations which are consistently found throughout NLZN languages and which provide the strongest evidence for the unity of the group. One is the loss of word-final glottal stop, e.g., PEF **pa'naʔ* > P-NLZN **pa'na* 'shoot an arrow'.

Northern Cordilleran languages also lost syllable-final glottal stop, e.g., P-NLZN **tuʔlaŋ* > ILK /*tu'laŋ*/ 'bone', while Central Cordilleran languages metathesized medial *-ʔC- sequences to become *-Cʔ-, e.g., ITGBI /*tulʔaŋ*/ 'bone'. Southern Cordilleran languages retained the P-NLZN glottal stop - consonant sequence.

The other innovation, and one which carries considerable weight for the genetic unity of the family is a unique metathesis, apparently found in all branches of the family but not elsewhere, by which reconstructed forms having a reflex of PEF **t* and a following sibilant, reversed the order of the two consonants, such as PEF **ʔaŋis* > P-NLZN **ʔaŋit* 'cry'; and PEF **Ra'tus* > P-NLZN **Ra'sut* 'hundred'.³ Apart from the phonological (and lexicostatistical evidence) for NLZN, there is large body of exclusively shared lexical evidence. Himes (pers. comm.) has a database of over 750 items which are either unique forms, or have undergone some formal or semantic shift from earlier reconstructed forms. The reconstructed phonological system of P-NLZN is given in **Error! Not a valid bookmark self-reference.**

³ This metathesis was first described in Conant (1912), and further discussed in Dyen (1972).

Table 2 Proto-Northern Luzon phonological system

p	t	k	ʔ	i	i	u
b	d	j	g		a	
m	n	ŋ				
	s					
	l			'CV	(contrastive stress)	
	r	R				
w	y					

There is also clear phonological, morphological and lexical evidence for each of the constituent subgroups of NLZN, such as each of the groups that constitute Northern Cordilleran (Tharp 1974), and Meso-Cordilleran, that is Altan (Reid 1991), and Central and Southern Cordilleran (Reid 1974, Zorc 1986, Himes 1998).

3 Clause Structure in Proto-Northern Luzon

The purpose of this section is merely to provide a summary statement of the clause structure of P-NLZN in order to provide a context for the discussion in the following sections. Little is said here of verbal morphology, a topic which would require a paper double the length of this one.

The general typological features of clausal constructions, both transitive and intransitive, as well as non-verbal, found throughout Northern Luzon are considered to be reconstructible to the parent language. These features have been discussed and exemplified in Reid and Liao (2004) generally for the Philippines, and are typical also of the structures found in Northern Luzon languages.

P-NLZN was a predicate-initial, ergative language,⁴ typically only allowing topicalized NPs and some adverbs to appear before the clause predicate. Clauses could have either a nominal or a verbal predicate. Nominal predicates could be either definite or indefinite and did not require a copula verb. Verbal predicates were either atransitive, intransitive or transitive.

Atransitive predicates were impersonal, having no nominal complement. Intransitive predicates were either monadic, expecting only a single core argument, labeled throughout this paper as NOMINATIVE;⁵ or dyadic, expecting two core arguments, a nominative and an OBLIQUE. The nominative phrase of a monadic intransitive verbal clause could express either an actor, or an undergoer, depending on the morphology of the verb. The nominative phrase of a dyadic intransitive verbal clause expressed the actor, while the oblique phrase expressed the undergoer, forming an antipassive or pseudo-transitive construction. Unless otherwise marked, the nominative phrase was definite, or at least specific, while the oblique phrase was indefinite.

Atransitive verbs were marked by the infix reconstructed as PEF *<um>. When the nominative phrase of either a monadic or a dyadic intransitive clauses expressed an actor, the

⁴ For a full discussion of transitivity and ergativity in Philippine languages, see Liao (2004).

⁵ This term is preferred over the alternate term, Absolutive, in that it captures more linguistic generalities. The functions of nominative NPs in accusative languages, are little different from those in ergative languages.

verbal morphology reflected one of the prefixes reconstructed as PEF *maR-, and *maN-,⁶ or the infix *<um> following the first consonant of the base. When the nominative phrase expressed an undergoer, the verbal morphology reflected the prefix reconstructed as PEF *ma-, deriving an agentless passive construction. The reflex of PEF *ma- also derived a set of stative verbs.

There were in addition a limited set of monadic intransitive verbs which carried reflexes of the affixes typically appearing on syntactically transitive verbs. The nominative phrase of such verbs expressed the undergoer, affected (often in a negative way) by an agent, the referent of which is expressed in the verb (Vanoverbergh 1955:147, Liao 2004:Ch. 2, 31-33).

Transitive predicates were either dyadic or triadic. Dyadic transitive predicates expected two core arguments, a nominative phrase and a GENITIVE phrase.⁷ As an ergative language, the nominative expressed the undergoer, and the genitive phrase expressed the actor. A triadic transitive predicate, such as a causative verb, expected an additional core argument, typically expressing either a recipient or a source. An oblique phrase expressed the referent when it was common noun; a DATIVE⁸ phrase expressed the referent when it was a personal noun.

Transitive verb morphology reflected either the PEF prefix reconstructed as *ʔi-, or one of the reconstructed PEF suffixes *-in or *-an, specifying the semantic role of the nominative phrase. Verbs carrying any of the affixes listed above could be further derived with a reflex of the completive aspect infix, reconstructed as PEF *<in>, following the first consonant of the base, forming combinations such as *minaR-, and *minaN-, *<inum>, *mina-, *ʔini-, *<in>-an, and simply *<in> on bases that carried *-in when non-completive.

In addition to nominative, genitive, oblique and dative phrases, distinctively marked LOCATIVE phrases also occurred. Case-marking was not necessarily morphological. Word order and the semantics of the lexical head of phrases functioned broadly to disambiguate phrases whose case was not morphologically marked. I use the term OBLIQUE in this paper to label the case of the ‘extended’ core arguments of dyadic intransitive verbs and triadic transitive verbs, as well as adjuncts which are marked in the same way, either morphologically or by word order. Typically these include certain types of location and time phrases (to be discussed below) which are recognized as such not by their morphological marking but by the lexical items which constitute them. Similarly I use the term LOCATIVE to label adjuncts that are distinctively marked from obliques and whose lexical items have either location or time reference.

There was a class of typically monosyllabic morphemes that preceded the lexical heads of most noun phrases in P-NLZN. These morphemes are here labeled NOMINAL SPECIFIERS for reasons that I discuss in Reid (2002). This term is considered to be more appropriate than the more common term ‘determiner’ which I used in some of my earlier publications, and which is frequently found in the literature on Philippine languages. In summary, determiners are typically dependent on their head nouns, and in right-branching languages such as those found

⁶ The final nasal of this form represents an assimilating nasal the characteristics of which are discussed in Blust (2004).

⁷ The term genitive is used here, rather than the alternate term ergative, in that the forms which mark the actor in a transitive clause are identical to those which mark nominal possessors within a noun phrase.

⁸ The term dative is used here because of its general use for phrases expressing recipients. However in these languages the same form is used for a wide range of semantic roles, including agent ‘by’, source ‘from’, goal ‘to’, and concomitant ‘with’.

in the Philippines and in other language families throughout Southeast Asia, they occur at the outer (right-hand) edge of their noun phrase (Reid and Savetamalya (1997).⁹

The term ‘nominal specifier’ is purposefully ambiguous, in that I consider that specifiers are themselves a subclass of the syntactic category of nouns. They are non-referential EXTENSION nouns,¹⁰ but they also function to identify, or specify, various features of their nominal complements. Nominal specifiers are considered to be the heads of the NPs which they introduce.¹¹ They carry a number of semantic features, especially of a deictic kind, some of which appear to be reconstructible to Proto-Northern Luzon.

In the discussion which follows, I intend to demonstrate that not all forms which appear to be nominal specifiers in fact are. I will claim that nominal specifiers do not mark case, but instead when case is morphologically marked, the forms that do so are prepositional, not nominal. For ease of presentation, however, following Ross (2002), I will initially call all forms that introduce NPs as ‘phrase markers’ or PMs. These forms were typically unstressed and encliticized to any vowel-final form which immediately preceded them, whether verb, noun, pronoun, adverb, or preposition, in some cases fusing with the preceding form.

Since case-marking prepositional forms, and the nominal specifiers from which they developed are probably in all cases homophonous with forms that can unambiguously be reconstructed as demonstratives, I will claim that each of the forms historically descended from a demonstrative. This is a claim that has been challenged in the literature, in that the deictic features of a given demonstrative may differ from those of its homophonous nominal specifier. Nevertheless in many cases the deictic features are clearly relatable, as for example where a distal demonstrative (referring to a referent that is far from speaker and addressee) has become a nominal specifier marking a noun as having past reference, or as referring to a deceased person; or a medial demonstrative (referring to a referent that is close to the addressee) has become a nominal specifier that marks a noun as being RECOGNITIONAL,¹² that is, within the recent common experience of speaker and addressee (“the one that you and I have just been talking about, or experienced”).

That in some cases the deictic features of a nominal specifier and its homophonous demonstrative are clearly different is not surprising in that the paths of their semantic development become independent of one another once the morphological split has taken place. I find it inconceivable that such broad homophony could possibly have existed without the pairs of forms having ultimately a common phylogeny. Since the grammaticalization of demonstrative to nominal specifier (and case-marking preposition) is an on-going process, it will be useful to distinguish not only between prepositions and nominal specifiers, but also between these and the deictic forms which constitute part of the sequence of forms which now introduce the lexical heads of phrases.

4 On Reconstructing the Nominal Specifiers of Proto-Northern Luzon

Blust (2005:218) notes that “the reconstruction of the meanings or functions of PAN/PMP phrase markers presents one of the most daunting challenges that a comparativist face[s] in this

⁹ In a number of Philippine languages (Ivatan, Kagayanen Manobo, Isinai, Casiguran Dumagat Agta, and various other Negrito languages, such as Northern Alta) that is precisely where determiners can often be found, see examples (42).

¹⁰ Extension nouns require a (following) nominal complement predicate.

¹¹ Ruffolo (2005:316) retains the label ‘Determiner’ for these forms, while noting that they are the heads of their phrases, and require a following complement.

¹² The term ‘recognitional’ is taken from (Ruffolo 2005:167), who acknowledges her sources for the term as Himmelmann (1996) and Diessel (1999).

language family...the attested systems of PMs exhibit an exuberant variety of structural differences...” This is true also for the reconstruction of the meanings and functions of PMs at lower-level subgroups in the family, as well. As Blust (2005) also notes in critiquing his own early work on reconstructing genitive forms in Austronesian, choosing homophonous and homosemantic forms from different subgroups in Austronesian and claiming them to be reconstructible to the parent language runs the risk of mistaking convergent development for inheritance. The only way to approach an understanding of the complexity of the system is to do a bottom-up reconstruction, comparing the forms and functions of PMs of closely related languages, and comparing the results with those of other low-level subgroups, and making step-by-step decisions regarding whether the forms under consideration are retentions, or are innovations.

Apart from the “exuberant variety” of forms and structural differences noted by Blust as creating problems for the comparativist, there are also the array of grammaticalization processes by which nominal demonstratives move from being nominal heads of their noun phrases into nominal specifier positions with deictic functions, and ultimately into prepositional case-marking positions without deictic function, before being dispossessed of even the case-marking functions and being lost altogether. Some of these processes will be demonstrated in the sections to follow.

4.1 Central Cordilleran

One has to begin somewhere, and I choose to begin with the language area with which I am most familiar, Nuclear Cordilleran, a relatively closely related set of languages within the Central Cordilleran subgroup. The Central Cordilleran subgroup and the Southern Cordilleran subgroup form a group coordinate with the Altan languages within Meso-Cordilleran (see Figure 1). The phonologies of all these languages developed from a system in which *R, *r, and *l fell together, to produce a phonology as shown in Table 3.

Table 3 Proto-Meso-Cordilleran phonological system

p	t	k	ʔ	i	ɨ	u
b	d	g		a		
m	n	ŋ				
	s					
	l					
						'CV (contrastive stress)
w	y					

4.1.1 Nuclear Cordilleran

The Ethnologue (Gordon 2005) lists nine Nuclear Cordilleran languages grouped into four groups, Bontok-Kankanaey, Balangao and Ifugao. No two of these languages has an identical set of PMs. To simplify the presentation, I shall restrict myself at this point to discussing only those forms which introduce phrases with singular, common noun lexical heads. Phrases having plural marking and those with personal noun lexical heads will be discussed in section 4.1.2.3. At the end of each section, the forms that need to be reconstructed for the parent of each group will be presented.

4.1.1.1 Bontok-Kankanaey

The Bontok-Kankanaey languages included here are the Bontok languages, Central Bontok as spoken in Guinaang (sec. 4.1.1.1.1), Southern Bontok as spoken in Talubin (sec. 4.1.1.1.2); Eastern Bontok as spoken in Kadaklan, and Barlig (sec.4.1.1.1.3); and two Kankanaey

languages, Northern Kankanaey as spoken in Balugang (Sagada) (sec. 4.1.1.1.4), and Central Kankanaey as spoken in Kibungan, Benguet (sec. 4.1.1.1.5).

4.1.1.1.1 Central Bontok (Guinaang)

The first fact to be noted about PMs is that they typically do not necessarily form a case-marking system. In Guinaang Bontok, for example, the form *nan* occurs as a PM introducing certain nominal predicates, topics, as well as nominative and genitive NPs. Similarly it can appear as part of a sequence of forms functioning as a PM in both genitive and oblique phrases (see Table 4).

Table 4 Bontok definite common noun phrase markers

UNM		GEN	OBL	LOC
nan ~ na=[?V	V]	= n nan	= s nan	= d
	C]	nan	si nan ~ ?as nan / ?is nan	?ad

The second fact to be noted is that PMs do not fit neatly into any systematic set of semantic categories. Thus although there seems to be a systematic distinction between forms which are followed by common nouns from those which are followed by personal nouns, as in (1)a, in which it appears that *nan* marks a common nominative NP, and (1)b, in which *si* marks a syntactically equivalent personal NP, the same forms can appear with quite different functions. Thus in (1)c and (1)d, *si* introduces common noun phrases with a variety of cases (nominative, oblique), and in (1)e *nan* introduces a genitive common NP, while in (1)f its corresponding personal noun has no PM.

(1) Guinaang Bontok¹³

- a. *Kinmaan nan laráki.*¹⁴
 departed [PM.-PRSN man]_{NOM}
 ‘The man departed.’
- b. *Kinmaan si Takcheg.*
 departed [PM.+PRSN Takcheg]_{NOM}
 ‘Takcheg departed.’

¹³ Guinaang Bontok examples are taken from, or based on, sentences found in Reid (1976, and 1992).

¹⁴ Sentence examples are typically cited as they appear in their sources, or in the commonly accepted orthographic conventions used in the published literature on each language, with the exception that enclitic forms are connected to their phonological host by an equals sign (=), regardless of whether the source writes them as separate words, or as part of the preceding word. The second line of each example provides an analyzed, word for word translation of the text, with each nominal phrase surrounded by square brackets. Where the case of such a phrase is morphologically marked, either by a pronoun or by a separate morpheme, the case of the phrase is given directly beneath the appropriate morpheme. Where the case of a phrase is not morphologically marked, but is determined by word order or lexical means, the case of the phrase is marked with a subscript label after its closing square bracket. The free translations given in the third line are typically taken from the source, but are sometimes modified to provide a clearer explanation of the meaning of the text.

- c. *Chaan omey sí esa=y minotos, ...*
 NEG.-PAST go [PM.-SPFC one=LG minute]_{NOM}
 ‘A minute had not yet gone by, ...’
- d. *Omára=ak sí pákhey sí árang sí kasi.*
 get=NOM.1S [PM.-SPFC rice]_{OBL} [PM.-REMT granary]_{OBL} [PM.-PAST again]_{OBL}
 ‘I will get some unhusked rice from (my) granary the day after tomorrow.’
- e. *Sin-ed nan laráki sak-en.*
 waited [PM.-PRSN man]_{GEN} [1S]_{NOM}
 ‘The man waited for me.’
- f. *Sin-ed Takcheg sak-en.*
 waited [Takcheg]_{GEN} [1S]_{NOM}
 ‘Takcheg waited for me.’
- g. *Kanan kano Lomawikh=en “Sana=s chanom!”*
 said report Lomawig=QUOT [there]_{PRD}=[PM.-SPFC water]_{NOM}
 ‘Lomawig reportedly said, “There’s water there!”’
- h. *Kinnan sí ótot na=ófi.*
 ate [PM.-SPFC rat]_{GEN} [PM.-PRSN=sweet.potato]_{NOM}
 ‘Rats / A rat / Some rats ate the sweet potato.’

It should also be noted that the semantic features that are carried by PMs differ depending on the case of the noun phrase that they introduce. Thus in (1)c, in which *sí* introduces a nominative NP (‘one minute’), and (1)d, in which it introduces the oblique NP (‘rice’) which is a core argument of the dyadic intransitive verb ‘get’, *sí* appears to carry the feature [-SPFC]. In such an oblique NP, the exponent of the NP which follows *sí* can only be interpreted in a general (partitive) sense, somewhat equivalent to English *of*. In an oblique NP expressing a location, *sí* carries the feature [-REMT], so that the exponent of the NP can only be interpreted as a location which is in the general vicinity, or is closely associated with the speaker. In a genitive NP, the *sí* which introduces the phrase, as in (1)h, also carries the feature [-SPFC], but it doesn’t have a partitive sense; finally the *sí* which introduces an oblique adjunct expressing a location in time carries the feature [-PAST], agreeing with the non-past form of the verb, and marking the following noun as a future time word.

Some generalizations can be made however. First, *sí* carries the feature [+PERS] only when it occurs with NPs which are not morphologically case-marked, that is in nominal predicates, topics and nominative NPs, and only when it precedes a singular, personal name or kinship term of address. Elsewhere, *sí* carries the feature [-PERS]. When *sí* occurs with nominative, genitive and core oblique NPs, it also carries the feature [-SPFC], as in (1)c, d, and h, while in oblique adjuncts expressing location and time, it carries the features [-REMT] and [-PAST] respectively, as in (1)c.

The feature term [REMT] that I use to distinguish the marking of locative phrases does not adequately represent the range of meanings that are carried by the PM involved. Nearly all place names are marked as [+REMT], including the name of the village itself, although some place names within the village are marked as [-REMT]. All common, location nouns, such as *áfong* ‘house’, *árang* ‘granary’, *ab-afóngan* ‘men’s ward house’, and *pángis* ‘young women’s

dormitory’, etc., when preceded by the [-REMT] PM *si*, are interpreted as place names closely associated with the speaker, as ‘granary’ in (1)d.

Table 5 provides further information about non-specific ([-SPFC]) PMs in Bontok, in phrases that are morphologically unmarked as well as in genitive and oblique phrases.

Table 5 Bontok non-specific phrase markers

	UNM	GEN	OBL
V]	=s	=n si	=s
C]	si / ʔas ~ ʔis	si	si / ʔas ~ ʔis

Although I have been referring to the form *si*, this form only occurs in Bontok following words ending in a consonant. When a non-specific PM immediately follows a form ending in a vowel, regardless of its word class or function, the PM is reduced to =s. In deliberate speech, the PM is either *as* (/ʔas/) or *is* (/ʔis/), depending on the dialect.¹⁵ A genitive NP immediately following a form ending in a vowel, is morphologically case-marked; an enclitic =n attaches to the preceding word. A genitive [-DFNT] PM is thus always post-consonantal *si*. A further distinction between genitive and oblique PMs is that in genitive NPs, no deliberate speech form, distinct from *si*, occurs.

In Bontok, non-specific PMs do not occur in topicalized noun phrases, since all such phrases are interpreted as definite, and by extension, specific. Nominal predicates may be either definite or indefinite and non-specific. Indefinite nominal predicates are bare nouns, that is, without a PM. Nominative NPs maybe definite or indefinite although they are usually definite when they are preceded by a verbal predicate, and they may be either definite or indefinite when preceded by a positive existential verb, and are always indefinite when preceded by a negative existential verb. Today, indefinite nominative NPs of existential verbs typically occur without a PM, although there is evidence that such NPs were earlier marked with either =y or *i*.

At this point let us further consider the Bontok definite PMs given in Table 4.

It should be immediately apparent that the form which marks an NP as definite is *nan* (or optionally preclitic *na=* before glottal stop initial words). This PM introduces morphologically unmarked common noun NPs (i.e., topics, nominal predicates and nominative NPs). It may also introduce genitive NPs that are either morphologically case-marked (following a vowel-final word) or not. In a genitive NP, the form *nan* commutes with the PM *si* (and its variants), whereas in core oblique NPs *nan* follows *si* (and its variants), creating a definite partitive interpretation, compare (2)a with (2)b.

(2) Guinaang Bontok

- a. *Inmára =ak si fótog.*
got=NOM.1S [PM.+PTTV pig]_{OBL}
‘I got a pig.’ Lit. ‘I got of a pig.’
- b. *Inmára =ak si nan fótog.*
got=NOM.1S [PM.+PTTV PM.+DFNT pig]_{OBL}
‘I got some of the pigs.’

¹⁵ All dialects of Central Bontok use *as*, except Bontok Poblacion and Samoki which use *is*.

Distributed in the same positions as the definite *nan* is the recognitional PM *san*, shown in Table 6. By utilizing this form, the speaker is making explicit his assumption that the referent is in the recent shared experience of the speaker and hearer, or is something that has just been talked about, as in (3)a,b. In oblique temporal expressions, words which refer to time periods within a day, when preceded by the PM *san*, refer explicitly to that period which has already been passed through on that day, while without *san* they refer to a future time period, as in (6)a,b.

Table 6 Bontok recognitional phrase markers

	UNM	GEN	OBL
V]	san	= n san	= s san
C]		san	si san ~ ʔas san / ʔis san

(3) Guinaang Bontok

- a. *Ay inlam san fótog?*
 QUES saw.2S [PM. REC pig]_{NOM}
 ‘Have you seen the pig (we have just been talking about)?’
- b. *Inmára =ak si san fótog.*
 got=NOM.1S [PM.+PTTV PM. REC pig]_{OBL}
 ‘I got some of the pigs (we have just been talking about).’

The description as outlined above points up another problem with analyzing PMs. I noted above that in a genitive NP, the form *nan* commutes with *si* (and its variants), whereas in oblique NPs *nan* follows *si* (and its variants). I noted also that there is a further distinction between genitive and oblique forms in that no deliberate speech form, distinct from *si* occurs in the genitive.

Why is this so? The evidence suggests that in oblique NPs, the PM *si* (and its variants) are prepositions that mark the NPs which follow them as neither nominative nor genitive (or locative).¹⁶ In a core oblique NP, where no PM follows the preposition the noun can only be interpreted indefinitely, in the same way that an unmarked predicate noun, or an unmarked nominative in an existential sentence can only be interpreted indefinitely, as in the reanalyzed examples shown in (4)a,b. In genitive NPs, however, *si* is not a preposition, but a nominal specifier. It commutes with *nan* and *san*, and follows the enclitic preposition =*n*, which marks the NP as genitive. Similarly, nominative NPs are like oblique NPs in this respect, *nan* and *san* commute with each other, and are nominal specifiers. In Bontok, nominative NPs are not marked by any preposition, the nominal specifiers that occur mark semantic features of the following noun, but not its syntactic case. Throughout the rest of the paper, I will now forego the use of the term ‘phrase markers’ in favor of what I believe to be their true class membership, either preposition (P) or nominal specifier (NS).

¹⁶ This analysis was first suggested in Kikusawa and Reid (2003), in their description of Talubin Bontok.

(4) Guinaang Bontok

- a. *Inmára = ak si fótog.*
 got=[NOM.1S] [P [pig]_{NP}]_{OBL}
 ‘I got a pig.’ Lit. ‘I will get of a pig.’
- b. *Inmára = ak si nan fótog.*
 got=[NOM.1S] [P [NS.+DFNT pig]_{NP}]_{OBL}
 ‘I got some of the pigs.’
- c. *Inára = n nan laráki san fótog.*
 got=[P_{GEN} [NS.+DFNT man]] [NS.REC pig]_{NOM}
 ‘The man got the pig (we were just talking about).’
- d. *Inára = n si ótot na = ófi.*
 got=[P_{GEN} [NS.-DFNT rat]] [NS.-PRSN=sweet.potato]_{NOM}
 ‘Rats / A rat / Some rats ate the sweet potato.’

If we look at phrases that express location and time and which carry the features [-REMT] and [-PAST] respectively, illustrated in (5) and (6), we notice that they are structured like core oblique NPs, i.e., *si* (and its variants) appear to be prepositional, allowing the NS forms *nan* and *san* to follow them when the following noun is a common locative or temporal noun, but not to commute with them, as shown in Table 7 and Table 8.

Table 7 Bontok oblique and locative prepositions

	OBL	LOC
	-REMT / -PAST	+REMT / +PAST
V]	= s	= d
C]	si ~ ʔas / ʔis	ʔad / ʔid

Table 8 Bontok oblique prepositions + nominal specifiers

	OBL
	-REMT / -PAST
V]	= s nan / = s san
C]	si nan ~ si san ʔas nan / ʔis nan ʔas san / ʔis san

(5) Guinaang Bontok (examples of oblique and locative phrases expressing location)

- a. *Somkhep = ka = s áfong!*
 enter=[NOM.2S]=[P [inside.of.a.house]_{NP}]_{OBL}
 ‘Come inside!’
- b. *Omey = ka = s chera!*
 go=[NOM.2S]=[P [outside]_{NP}]_{OBL}
 ‘Go outside!’
- c. *Omali = ka = s áfong!*
 come=[NOM.2S]=[P [house]_{NP}]_{OBL}
 ‘Come to (my) house!’

- d. *Ipaey = mo = s nan takfak!*
 enter=[GEN.2S]=[P [NS.+DFNT backpack.1S]_{NP}]_{OBL}
 ‘Put (it) in my backpack!’
- e. *Inára = na = s san árang.*
 got=[GEN.3S]=[P [NS.+REC granary]_{NP}]_{OBL}
 ‘He got (it) from the granary (we were just talking about)!’
- f. *Omali = ka = d Fabrey!*
 come=[NOM.2S]=[P_{LOC} [Village]_{NP}]
 ‘Come to (our) village!’
6. *Omey = ka = d Maynila!*
 go=[NOM.2S]=[P_{LOC} [Manila]_{NP}]
 ‘Go to Manila!’

(6) Guinaang Bontok (examples of oblique and locative phrases expressing time)

- a. *Omáli = ka = s wíit sí wákas!*
 come=NOM.2S=[P [early.morning]_{NP}]_{OBL} [P [morrow]_{NP}]_{OBL}
 ‘Come early tomorrow morning!’
- b. *Inílak as san wíit?*
 saw.1S [P [NS.+REC early.morning]_{OBL}]
 ‘I saw (it) this morning.’
- c. *Inára = cha = s san inmaliyan = cha.*
 got=[3P]_{GEN}=[P [NS.+REC came.NMLZ]=[3P]_{GEN}]_{NP}]_{OBL}
 ‘They got (it) when they came’
- d. *Oray as kafab-arok, maid inílak....*
 even [P [youth.1S]_{NP}]_{OBL} NEG.EXIST saw.1S
 ‘Even in my youth, I didn’t see anything ...’
- e. *As kaapowan = mi, ináfát = cha = s Lamángen.*
 [P [grandparent=GEN.1P]_{NP}]_{OBL} met=[3P]_{GEN}=[NS Lamángen]_{NOM}
 ‘When we had become grandparents, they met Lamángen.’
- f. *Inmáli = cha = d kasi.*
 come=[3P]_{NOM}=[P_{LOC} [again]_{NP}]
 ‘They came two days ago.’
- g. *Inmáli = cha = d khogkha.*
 come=[3P]_{NOM}=[P_{LOC} [yesterday]_{NP}]
 ‘They came yesterday.’

The situation is complicated by the fact that, in Bontok, *si* (and its variants) functions not only as a preposition and a nominal specifier, but also as a conjunction, conjoining comparable groups of non-specific human nouns, as in (7).

(7) Guinaang Bontok (examples of conjoined phrases)

- a. *iyAr-ar si iKhamoyo*
 person.A1-al CONJ person.Gamoyo
 ‘Al-al and Gamoyo people’

- b. *fáfarro = s mamagkhit*
 young.men=CONJ young,women
 ‘young men and women.’
- c. *inin-a = s amam-a*
 married.women=CONJ married,men
 ‘young men and women.’

In addition, the non-past feature carried by *as* has apparently motivated the development of a morphological split, by which the form now also functions as a NS introduces a nominative phrase in which the following noun has a future sense, as in (8)a. It also occurs as a preverbal adverb with a future sense, and functions somewhat like an auxiliary verb in this position, except that it does not attract second-position clitics, and in this position it does not alternate with *si*, as in (8)b,c. Various idiomatic expressions occur in Guinaang Bontok, which depend for their interpretation on the future sense of *as*, as in (8)d.

(8) Guinaang Bontok (examples of future nominal specifier, and adverb)

- a. *Nan sána nowang sí omar-am.*
 [NS that water.buffalo]_{PRD} [NS.FUTR get.NMNZ.2S]_{NOM}
 ‘That water buffalo is what you will get.’
- b. *Ay as omeý = cha = s wákas?*
 QUES ADV.FUTR go=[3P]_{NOM} [=P [morrow]_{NP}]_{OBL}
 ‘Will they go tomorrow?’
- c. *As omára = ak si fótog.*
 ADV.FUTR get=NOM.1S [NS.+PTTV pig]_{OBL}
 ‘I will get a pig.’
- d. *As pay fótog?*
 ADV.FUTR moreover pig
 ‘What about pigs?’ or ‘Where shall we get a pig?’

The future sense of *as* may have developed from its common use as an oblique preposition with telic verbs, whose action results in the formation of an entity, as in (9).

(9) Guinaang Bontok

- a. *Lotowen = da = s fáron nan í omapoy.*
 cook =[3P]_{GEH}=[P [food [NS go fire.ceremony]_{GEH}]_{NP}]_{OBL}
 ‘They cook what will be lunch for those who go to perform the *apoy* ceremony.’
- b. *Pay-éna = s forrayaw.*
 put.3S=[P [shooting.star]_{NP}]_{OBL}
 ‘He put what would be a shooting star (in the sky).’
- c. *Eng = kayo omára = s kamey.*
 go=[NOM.2P] get=[P [wooden.spade]_{NP}]_{OBL}
 ‘Go and get what will be made into wooden spades.’
- d. *As mangob-ob = tako = s sisim.*
 FUTR collect=[1+2P]_{NOM}=[P [galvanized.iron.sheets]_{NP}]_{OBL}
 ‘Let’s collect (money) for buying galvanized iron sheets.’

4.1.1.1.2 Southern Bontok (Talubin)

Talubin is one of the dialects of Southern Bontok. Its system of prepositions and nominal specifiers is similar to those of the Central Bontok dialects, including Guinaang. However, in Talubin, the distinction between *nan* and *han* is being lost,¹⁷ with *han* (< **san*) becoming the unmarked member of the set, as in (10)a,b. One other difference found in this dialect is that both *nan* and *han* can occur as an enclitic =*n* following vowel-final words, as in (10)c,d.

(10) Talubin Bontok (Kikusawa and Reid 2003)

- a. *Agtana han iyAp-apuy hi apuy met.*
 give.to.3S [NS Ap-apuy.person]_{NOM} [P [fire]_{NP}]_{OBL} also
 ‘He also gave some fire to the Ap-apuy person.’
- b. *...jaet umali han janum.*
 then come [NS water]_{NOM}
 ‘... then the water came.’
- c. *Mavalin é umali=*n* janum.*
 probable LG come=[NS water]_{NOM}
 ‘Then the water was able to come.’
- d. *Henagen=*ja=n* hilé.*
 sent=[3P]_{GEN}= [NS wild.cat]_{NOM}
 ‘They sent the wild cat.’

4.1.1.1.3 Eastern Bontok (Kadaklan)

The examples given in (11) illustrate further developments from those discussed in the previous sections.¹⁸ Kadaklan, like the Central Bontok dialect in Guinaang, allows optional deletion of the final nasal of the definite NS *nan*, in effect making it a preclitic to a following form which begins with a glottal stop, as in (11)a, (compare (1)h). In addition to *nan*, Kadaklan uses *hen* (from **sin*), as a definite NS. This form is found as an oblique preposition plus NS sequence (*si=n*), in Southern Kankanaey (cf. (14)g), and has apparently spread from that function to become an un-analyzable NS in morphologically unmarked NPs, as in (11)a, as it has also in its closest neighbor to the east, Balangao (sec. 4.1.1.2.1). Kadaklan *hen* also occurs as an enclitic =*n* on preceding vowel-final words, as in (11)b.

In oblique phrases, the specific form *hen* (reduced to =*en*) has replaced *nan* and follows the preposition *ah*, as in (11)c, and the preposition itself is sometimes completely lost following vowel-final words (=h > Ø), leaving such phrases as bare lexical items.¹⁹ Following consonant-final words, the alternate preposition *he* (from **si*) occurs, as in (11)d.

Kadaklan allows non-specific marking of a genitive NP, as in Guinaang (compare (1)h), but with *chi* (from **di*), rather than *si*, as in (11)b. Kadaklan prepositions and nominal specifiers are shown in Table 9 and Table 10.

¹⁷ Among other sound changes that distinguish this dialect are **s* > /h/ and **k* > /ʔ/.

¹⁸ Among other sound changes that distinguish this dialect is **s* > /h/.

¹⁹ Shetler (pers. comm.) notes that in Hàgi, one hour (by walking trail) west of Natonin (the center of the Balangao-speaking area) and between Natonin and Kadaklan, the unreduced form *?ah hen* introduces oblique phrases.

Table 9 Kadaklan case-marking prepositions

	GEN	OBL	LOC
V]	=n	∅	=d
C]	=∅	he ~ ?ah	?ad

Table 10 Kadaklan common noun, non-deictic, nominal specifiers

Indefinite		chi
Definite	V]	=n
	C]	nan ~ na = [?V hen

(11) Eastern Bontok (Kadaklan) (Fukuda 1980:72, 76, 82)

- a. ...*ya eyoy na=onga hen onas.*
and bring [NS=child]_{GEN} [NS sugarcane]_{NOM}
'...and the child brings the sugarcane.'
- b. *Cha=cha tit-iwa omar-ali=n tolin.*
CNTV=[3P]_{NOM} true coming=[NS sparrow]_{NOM}
'The sparrows are truly coming.'
- c. *Inyoy=na=∅ kawad chi losong ay manginliwliwang ah=en losong.*
brought=[GEN.3S] [place [NS mortar]_{GEN}]_{OBL} LG go.around [P=[NS mortar]_{NP}]_{OBL}
'She brought the baby to the mortar place to go around the mortar.'
- d. *Adowan ngarud chan nomnonomnom he atona, ...*
now surely CNTV.3S thinking [P doing.3S]_{OBL}
'Now he is thinking what to do.'

4.1.1.1.4 Northern Kankanaey (Balugang, Sagada)

The analyses presented above for the Bontok languages are supported when we consider Bontok's closest relative, Northern Kankanaey (commonly referred to as Kankanay). The data (drawn primarily from Hettick and Kent (1967), and Hettick and Wallace (1978), and summarized in Table 11 and

Table 12) show a formal distinction between the prepositional form which introduces oblique phrases, namely *si* and its alternate *ʔis* (as in Bontok), as in 0a,b, and the nominal specifiers which introduce NPs. In Central Bontok, there are only three nominal specifiers which commute with one another, *si*, *nan*, and *san*. In Northern Kankanaey, there are four, *di*, *nan*, *san*, and *din*. These forms occur in morphologically unmarked NPs, such as topics, nominal predicates, nominatives, and genitive NPs following consonant-final forms, as in (13)a-c. Genitive phrases which follow vowel-final forms are, like Bontok, case-marked with a clitic preposition =*n*, as in (13)d-h. Case-marked phrases, such as the genitive, oblique and locative PPs, allow their following NPs to be introduced by any appropriate NS.

The KNKN form *din* introduces NPs which refer to an entity that the speaker characterizes as being in the relatively distant past. There is no equivalent for this form in Bontok, but because it has a similar form and function to NSs that are found in other Central Cordilleran languages, it will be reconstructed to P-CCO.

Table 11 Northern Kankanaey case-marking prepositions

	GEN	OBL	LOC
V]	= n	= s	= d
C]	= Ø	si ~ ?is	?id

Table 12 Northern Kankanaey common noun, non-deictic, nominal specifiers

Indefinite		di
Definite	default	nan
	recognitional	san
	antedated	din

(12) Northern Kankanaey

- a. *Mabalin ay omanay is menkatago=da*
 possible LG sufficient [P [livelihood=[3P]_{GEN}]_{NP}]_{OBL}
 ‘It would be sufficient for their livelihood.’
- b. *Dat komaeb si nan kaiw.*
 then climb [P [NS.+DFNT tree]_{NP}]_{OBL}
 ‘Then he climbed into the tree.’

(13) Northern Kankanaey

- a. *Naay di siping=mo*
 here [NS.-DFNT money=GEN.2S]_{NOM}
 ‘Here is your money (as change is handed over).’
- b. *Naay nan siping=mo*
 here [NS.+DFNT money=GEN.2S]_{NOM}
 ‘Here is your money (that has just been found).’
- c. *Adi=tako bokodan di gawis ta mensowako di dakes.*
 NEG=[1+2p]_{GEN} monopolize [NS.-DFNT goodness]_{NOM} so remove [NS.-DFNT badness]_{NOM}
 ‘Let’s not monopolize the good, so that the bad will be removed.’
- d. *tobo=n di baat*
 leaf=[P_{GEN} [NS.-DFNT banana]_{NP}]
 ‘banana leaves’
- e. *tap-i=n di agew*
 other=[P_{GEN} [NS.-DFNT day]_{NP}]
 ‘another day’
- f. *timpo=n di amam-a*
 time=[P_{GEN} [NS.-DFNT forefathers]_{NP}]
 ‘(our) forefathers’ time’
- g. *baey di gamig*
 house [NS.-DFNT bolo]_{GEN}
 ‘bolo-sheath’

- h. ...*tay pinatey di bango*
 because killed [NS.-DFNT wild.pig]_{GEN}
 ‘... because (he was) killed by a wild pig.’

4.1.1.1.5 Central Kankanaey (Kibungan, Benguet)

In the central dialects, commonly referred to simply as Kankanaey, the form *din* has generalized, apparently at the expense of the other definite NS forms, and seems to carry no prior reference as it does in Northern Kankanaey, as in (14)a-d.²⁰ Kankanaey also reduces *din* to =*n* following vowel-final forms, as in (14)e,f. However Kankanaey does not allow reduction of its oblique form *sin*, possibly to avoid structural ambiguity (Allen, L.P. 1977), as in (14)g. While the nominal specifier *din* probably has its source in a demonstrative with a frozen enclitic ligature (see discussion in section 4.1.1.2.1), *sin* appears to have its source in a reduction of the oblique preposition **si* + **nan* > *si=n*. A similar change is found in Balangao (4.1.1.2.1) and also in Ifugao.

(14) Southern Kankanaey (Allen, J. 1978)

- a. *Ipayag=mo din kaiw.*
 put.down=GEN.2S [NS.+DFNT wood]_{NOM}
 ‘Put down the stick!’
- b. *Kiniting=na din takkay=mo.*
 pinched=GEN.3S [NS.+DFNT hand=GEN.2S]_{NOM}
 ‘She pinched your hand.’
- c. *Ay innam din bola?*
 QUES take.2S [NS.+DFNT ball]_{NOM}
 ‘Did you take the ball?’
- d. *Lawa din am-amagen ay dooy.*
 bad [NS.+DFNT doing LG that]_{NOM}
 ‘What you are doing is bad.’
- e. *Ida’wat=mo din ma’nok=ko.*
 give=GEN.2S [NS.+DFNT chicken=GEN.1S]_{NOM}
 ‘Give my chicken (to someone).’
- f. *Ida’wat=mo=n ma’nok=ko.*
 give=GEN.2S=[NS.+DFNT chicken=GEN.1S]_{NOM}
 ‘Give my chicken (to someone).’
- g. *Ida’wat=mo si=n ma’nok=ko.*
 give=GEN.2S [P=[NS.+DFNT chicken=GEN.1S]_{NP}]_{OBL}
 ‘Give (something) to my chicken.’
- h. *Man-abat kanos da gayang en kiling is=san sebang di kaong.*
 met QUOT [NS.+PL crow with *kiling*.bird]_{NOM} [P=[NS.+DFNT trail [NS.-DFNT sow]_{GEN}]_{NP}]_{OBL}
 ‘The crow and *kiling* bird met on a sow’s trail.’

²⁰ Published material contains a few examples with *san*, as in (14)h,i (Allen, L.P. 1975:29).

- i. *Ay soot kayman san bagang=mo ay mandada?*
 QUES why in.fact [NS.+DFNT neck=GEN.2S LG bleeding]
 ‘Why, in fact, is your neck bleeding?’

4.1.1.2 Proto-Bontok-Kankanaey reconstructions

Table 13 and Table 14 show the reconstructions based on the forms presented in the foregoing discussion.

Table 13 Proto-Bontok-Kankanaey case-marking prepositions

	GEN	OBL	LOC
V]	=n	=s	=d
C]	=∅	si ʔis / ʔas	ʔid / ʔad

Table 14 Proto-Bontok-Kankanaey common noun specifiers

Indefinite		di
Definite	default	nan
	recognitional	san
	antedated	din

4.1.1.2.1 Sources of Proto-Bontok-Kankanaey nominal specifiers

In various papers (Reid 1974:526-546, 2000:38-40, 2002:301-302), I have discussed the origin of nominal specifiers in Philippine languages. In some of the papers, I claim that they originate from demonstratives still functioning as independent stressed nominals in some of the languages. In Bontok these only occur as nominative forms, while in Kankanaey they may occur in either nominative or genitive constructions. These are listed with their meanings in Table 15, and are exemplified in 21a-c. At the end of sec. 3 above, I discussed the fact that in some cases the connection between earlier demonstrative forms and nominal specifiers is transparent, while in other cases it is not. The Bontok and Kankanaey forms provide clear examples of both. While forms such as *san* and *din* carry deictic features that appear to have developed from demonstratives still in use in the language, other forms such as *nan* and the indefinite form *di* do not. The use of the demonstrative *na* as a proximal form is apparently fairly recent, replacing an earlier **tu*, and is one of the innovations that took place in P-BON-KNK. It is far more likely that the shift from demonstrative **na* to a nominal specifier must have taken place at a far more remote period in the history of these languages. The same is true of indefinite *di*.

I have also claimed that the final *-n* on the nominal specifiers is a frozen, reduced form of the ligature **na*, a preposition which occurred as *=*n* following vowel-final forms, but *=*a* following consonant-final forms in P-NLZN. In P-BON-KNK and BLW *=*a* following consonant-final forms was lost (Shetler 1976:117). There is independent evidence for this claim from various frozen constructions such as combined numerals which show this distribution, as in (16). It was retained however in some constructions in other Nuclear Cordilleran languages, such as Kiangán Ifugao, as in (17), and is still found in various languages throughout the Northern Luzon family.

Table 15 Proto-Bontok-Kankanay deictic forms

PROX	na
MED	sa
DIST	di

(15) Guinaang Bontok

- a. *Ala = m na!*
get.2S [NOM.PROX]
'Get this one!'
- b. *Ay iníla = m sa?*
QUES seen.2S [NOM.MED]
'Have you seen that one (near you)?'
- c. *Ay iníla = m chí?*
QUES seen.2S [NOM.DIST]
'Have you seen that one (distant)?'

(16) Guinaang Bontok

<i>chowan poro</i>	'20'	<i>enem poro</i>	'60'
<i>toron poro</i>	'30'	<i>piton poro</i>	'70'
<i>epat poro</i>	'40'	<i>waron poro</i>	'80'
<i>liman poro</i>	'50'	<i>siyam poro</i>	'90'

(17) Kiangán Ifugao (Lambrecht 1978:120)

- a. *Aligúyun = a = dí*
Aligúyun = LG = long.ago
'Aligúyun of long ago'
- b. *Aligáya = n = dí*
Aligáya = LG = long.ago
'Aligáya of long ago'
- c. *hi tóon = a = dí*
P [year = LG = long.ago]_{NP}
'in a year long gone'
- d. *mála = n = dí*
occurred = LG = long.ago
'it happened long ago'

4.1.1.3 Balangao

4.1.1.3.1 Balangao non-deictic nominal specifiers

The non-deictic forms which introduce phrases in Balangao are presented in Table 16 and Table 17 and are exemplified in (18) and (19). Balangao shows the same set of prepositions that are reconstructed for P-BON-KNK. However its definite NS shows the same innovation that was noted above for Eastern Bontok (Balangao's western neighbor). The form

hen which appears to have had its source in a sequence of preposition and definite NS, was probably as follows: *si + *nan > **si=n > *hen*. This form is no longer morphologically complex, since it occurs as a definite NS in morphologically unmarked phrases. In oblique phrases in which the form occurs, there is no evidence that it contains both a preposition as well as a NS, since *hi* (< *si) as an alternate of *?ah* has been lost, so these phrases are no longer case-marked when *hen* occurs, as in (18)d.

Table 16 Balangao case-marking prepositions

	GEN	OBL	LOC
V]	=n	=h	=d
C]	=Ø	?ah	?ad

Table 17 Balangao Common Noun Specifiers

Indefinite		di
Definite	V]	=n
	C]	hen

(18) Balangao genitive, nominative and core oblique phrases (Shetler 1976: 233-238)

- a. *Ayagan =yu di éha =y onga, ...*
 call=[GEN.2P] [NS one=LG child]_{NOM}
 ‘You (pl.) call a child, ...’
- b. *Enayagan =da hen éha =y onga, ...*
 call=[3P]_{GEN} [NS one=LG child]_{NOM}
 ‘They called a child, ...’
- c. *No wada-ay di agidol di okom, ...*
 if EXIST [NS cargo [NS élite]_{GEN}]_{NOM}
 ‘If any élite people have some cargo, ...’
- d. *Omenpabùnag =a hen pelak =no.*
 bring.out=NOM.2S [NS money=GEN.2S]_{OBL}
 ‘Bring out your money.’
- e. *Nampalte =da amin ah babuy ya manù, ...*
 kill=[3P all]_{NOM} [P pig CONJ chicken]_{OBL}
 ‘They all killed pigs and chickens, ...’
- f. *Ibilang =na =h sonod =na ya anà, hen tatagu...*
 count=[GEN.3S]=[P sibling=[GEN.3S] CONJ children]_{OBL} [NS people]_{NOM}
 ‘He counted the people as his siblings and children ...’
- g. *Ulay agé, heno =n ayan Panapan, ...*
 even also whatever=[NS destination Panapan]_{TOP}
 ‘Even also, wherever Panapan went, ...’
- h. *Yadi hen ap-apo =n hen ongtan.*
 that [NS lord=[P.GEN [NS spirit]_{NP}]_{NOM}
 ‘That is the lord of the spirits.’

(19) Balangao oblique and locative phrases (Shetler 1976: 233-238)

- a. *hen okom=ay mandawéh ah baléy=na...*
 [NS élite=LG stop.over [P_{OBL} [house=GEN.3S]_{NP}]
 ‘the élite people who stop over at his house ...’
- b. *Ah baléy Panapan hen ayan=da...*
 [P_{OBL} [house [Panapan]_{GEN}]_{NP}]_{PRD} [NS destination=[3P]_{GEN}]_{NOM}
 ‘To Panapan’s house is where they went ...’
- c. *Omente-ed=ayu antoy away hen bilig.*
 [climb.with=[NOM.2P] [this wood]_{OBL} [NS mountain]_{OBL}
 ‘You carry some of this wood up the mountain.’
- d. *Andi wa-al, nalpo=n lota yag émméy ad udu.*
 [NS vine]_{TOP} came=[P_{OBL} earth] CONJ went [P_{LOC} above]
 ‘As for the vine, it came from the earth and went to the sky.’
- e. *Hen andida=y baknang ad Saliyok...*
 [NS those=LG rich.ones [P_{LOC} Saliyok]]_{TOP}
 ‘As for the rich people at Saliyok ...’
- f. *Ad namenghan ano, i nanganop ah Amlalawiyén ah pagpag.*
 [P_{LOC} long.ago RPRT]_{TOP} go hunting [NS Amlalawiyén]_{NOM} [P forest]_{OBL}
 ‘Long ago, it is said, Amlalawiyén went hunting in the forest.’

4.1.1.3.2 Balangao deictic specifiers

Now if we examine the examples given as (20)a,b we notice that, as in Bontok, nominative phrases can consist entirely of a monosyllabic demonstrative. Table 18 and Table 19 display the basic demonstratives in Balangao. There is evidence (to be discussed in the following section) that the earlier medial form *=na, has been replaced by **=sa (> *ha*). The same forms appear in nominal predicate and topic positions, cliticized to *ya*, a reduced form or the unmarked third person singular form *hiya* (< *siya), as shown in (20)c,d,e.

In (20)f, following the NS, there is a multisyllabic demonstrative apparently containing the distal demonstrative *di*, occurring as the head of the NP and immediately followed by a sequence of ligature and referential noun. However in the examples which follow, the demonstratives occur as deictic nominal specifiers, with the ligature now fused as part of the nominal specifier.

(20) Balangao (Shetler 1976:148-149, 233-238)

- a. *Onga=to.*
 child=[NOM.this]
 ‘This is a child.’
- b. *Awa=n Ina=ha.*
 possession=[P_{GEN} [mother]]=[NOM.that]
 ‘That is mother’s.’
- c. *Ya=to hen onga.*
 [3S=this]_{PRD} [NS child]_{NOM}
 ‘The child is this one.’

- d. *Ya=ha, awa=n Ina.*
 [3S=that]_{TOP} [possession=[P_{GEN} [mother]]]_{PRD}
 ‘As for that one, it belongs to mother.’
- e. *Ammag ya=di hen da=da ekamakaman...*
 utterly [3S=that]_{PRD} [NS CNTV=[3p]_{GEN} keep.doing]_{NOM}
 ‘That is how they kept doing it.’
- f. *Hen andida=y baknang ad Saliyok ya hen andida=y tape=na, ...*
 [NS those=LG rich.ones [P_{LOC} Saliyok]]_{TOP} CONJ [NS those=LG rest=GEN.3S]_{TOP}
 ‘As for the rich people at Saliyok and those others, ...’
- g. *Da=da managtag andiday aho, ...*
 CNTV=[3P]_{NOM} run [NS.those dog]_{NOM}
 ‘Those dogs are running, ...’
- h. *No ilan andiday tatagu dida, ...*
 when see [NS.those people]_{GEN} [3S]_{NOM}
 ‘When those people see them, ...’
- i. *Andi wa-al, nalpo=n lota, ...*
 [NS.that vine]_{TOP} origin=[NS earth]_{OBL}
 ‘As for that vine, it came from the earth, ...’
- j. *Inyanamot=na andi opat=ay polgada=ay inala=na.*
 took.home=GEN.3S [NS.that four=LG inch=LG got=GEN.3S]_{NOM}
 ‘He took home the four inches that he had gotten.’
- k. *Ngem danaddi=yay tagu, ...*
 but [those=LG person]_{TOP}
 ‘But as for those people, ...’
- l. *Matéy amin hen tatagu=way netnod andi.*
 die all [NS people=LG [went.with that.one]_{REL}]_{NOM}
 ‘All the people died who went with that one.’
- m. *Kasen=yu gintapan annay oppeop=na.*
 again=[GEN.2P] cover [NS.that wrap=[GEN.3S]]_{NOM}
 ‘You wrap another layer on it.’

Table 18 Pre-Balangao basic demonstratives

PROX	tu
MED	na
DIST	di

Table 19 Balangao basic demonstratives

PROX	to
MED	ha
DIST	di

The complete set of marked deictic forms in Balangao is given in Table 20. Unmarked deictic forms are shown in Table 21, and deictic nominal specifiers are given in Table 22. That these forms are indeed deictic nominal specifiers and not demonstratives is most apparent with the medial forms which are based not on the current basic demonstrative *ha* (< **sa*), but on the pre-BLW medial form **na*. Furthermore the final consonant of these forms, although homophonous with the ligature occurring on demonstratives when preceding a referential noun can be shown to be frozen on the nominal specifiers. The various grammaticalization processes which have brought about each of the sets in Table 20 are described in the following section.

Table 20 Balangao marked demonstratives

		TOP / PRD	LOC PRD	NOM		GEN	OBL	LOC ADV
				clitic	free form			
-PLRL	PROX	yato	?antoyan	=to	?ahnatto	natto	?annatto	?ahto/heto
	MED	yaha	?annayan	=ha	?ahnahha	nahha	?annahha	?ahna/hena
	DIST	yadi	?andiyan	=di	?ahnaddi	naddi	?annaddi	?ahdi/hedi
+PLRL	PROX	danatto	?antodayan	dato	danatto	danatto	?andanatto	
	MED	danahha	?annadayan	daha	danahha	danahho	?andanahho	
	DIST	danaddi	?andidayan	dadi	danaddi	danaddi	?andanatto	

Table 21 Balangao unmarked demonstratives

		Pre-noun*	Post-noun
-PLRL	PROX	?anto=y N	N=anto
	MED	?anna=y N	N=anna
	DIST	?andi N	N=andi
+PLRL	PROX	?antoda=y N	
	MED	?annada=y N	
	DIST	?andida=y N	

*The pre-noun unmarked demonstratives occur following a nominal specifier (see example (20)f) and are linked to the following noun with a ligature).

Table 22 Balangao deictic nominal specifiers

-PLRL	PROX	?antoy
	MED	?annay
	DIST	?andi
+PLRL	PROX	?antoday
	MED	?annaday
	DIST	?andiday

4.1.1.3.3 Historical Development of Balangao Deictic Specifiers

The first set of changes resulted in the post-nominal enclitic deictics shown in Table 21. The ligature at this point in the history of the language was simply *=a. The basic demonstratives were apparently enclitic to either *na or *ni, probably the latter.

1. Reduction of post-nominal demonstratives; loss of old ligature

N=a	+	n(v)tu	>	N=a=ntu	>	N=anto	‘PROX’
N=a	+	n(v)na	>	N=a=nna	>	N=anna	‘MED’
N=a	+	n(v)di	>	N=a=ndi	>	N=andi	‘DIST’
N=LG	+	DMNS	>	N=LG=DMNS	>	N=DMNS	

The second set of changes resulted in the spread of the post-nominal demonstratives as free forms into pre-nominal position, where they would have initially required a nominal specifier to precede them, and a ligature to follow them. The new ligature =ay, was itself a reduced sequence of the old ligature *=a followed by *ya, itself an earlier distal demonstrative.

2. Spread of post-nominal forms to pre-nominal position; ligature reduction²¹

?anto	+	=[w]ay	>	?anto(da)y	‘PROX.(PLRL)’
?anna	+	=[ʔ]ay	>	?anna(da)y	‘MED.(PLRL)’
?andi	+	=[y]ay	>	?andi(day)	‘DIST.(PLRL)’
DMNS	+	=LG	>	NS	

The third change was the development of locational predicate forms by suffixing *-an* ‘locative’ to nominal specifiers. The retention of the final *y* on these forms, formerly part of the new ligature, is evidence that on the nominal specifier base it is no longer functioning as a ligature (the parenthetical *da* pluralizes the demonstrative).

3. Derivation of locational predicate forms

?anto(da)y	+	-an	>	?anto(da)yan	‘this place’ ‘PROX.(PLRL)’
?anna(da)y	+	-an	>	?anna(da)yan	‘that place (near addressee)’ ‘MED.(PLRL)’
?andi(day)	+	-an	>	?andi(da)yan	‘that place (away from speaker and addressee)’ ‘DIST.(PLRL)’

4. Locative adverb formation

This change, not necessarily sequential to those discussed above, was the formation of a set of locative adverbs, from an oblique preposition combining with the set of basic demonstratives. That these are no longer phrasal is clear from the fact that the medial demonstrative in these forms (*na*) has been replaced in phrasal constructions by the innovated basic medial demonstrative *ha* (from *sa). The earlier form remains as a frozen form also in linked demonstratives.

?as	+	=tu	>	?ahto	‘here’ ‘PROX’
?as	+	=na	>	?ahna	‘there, near addressee’ ‘MED’
?as	+	=di	>	?ahdi	‘there, away from speaker and addressee’ ‘DIST’

6. Formation of nominative, genitive and oblique demonstratives

All of these forms are case-marked and contain a set of basic deictics, which today function, without additional marking, as genitives. At an earlier stage of the language it is

²¹ Shetler (1976:43) lists the ligature as *way*. Its status as an enclitic is clear however from the following description, “Following a front vowel, the initial *w* of the particle is replaced by *y*; ... following a back vowel there is no change in the particle; ... following a consonant the *w* of the particle is dropped.”

probable that the same forms also functioned as nominatives. Pre-Balangao, like other members of the Central Cordilleran family had an unmarked nominal specifier *na which could introduce any definite common noun phrase, and it was to this form that earlier demonstrative forms were cliticized. However each of the resulting forms today has a geminated final consonant. The source of the gemination is suggested by the fact that there are some glottal stop initial forms in Balangao in which following deletion of an unstressed vowel, glottal stop assimilates to the following consonant. Thus: *ʔi- + *ʔə'bəg > **ʔiʔ'bəg > *ibbeg* 'to put to bed'.²²

Gemination of the final consonant in the nominative demonstratives may have developed from glottal stop initial demonstratives in the same way (the parenthetical *da* pluralizes the demonstrative):

(da)na* + *ʔi'tu > *(da)naʔ'tu* > *(da)natto* 'NOM.PROX'
 (da)na* + *i'sa > *(da)naʔ'sa* > *(da)nahha* 'NOM.MED'
 (da)na* + *ʔi'di > *(da)naʔ'di* > *(da)naddi* 'NOM.DIST'

7. Derivation of nominative and oblique demonstratives

These forms were derived by cliticizing the genitive singular demonstrative set to *ah* (from *as) for nominative singular and *da* for nominative plural; and *an* (from *kan) for oblique singular and *anda* for oblique plural. These forms were apparently originally personal demonstratives ('this person', etc.), but now carry general reference.

ʔah + natto	>	ʔahnatto	da + natto	>	danatto
ʔah + nahha	>	ʔahnahha	da + natto	>	danahha
ʔah + naddi	>	ʔahnaddi	da + naddi	>	danaddi
ʔan + natto	>	ʔannatto	ʔanda + natto	>	danatto
ʔan + nahha	>	ʔannahha	ʔanda + natto	>	danahha
ʔan + naddi	>	ʔannaddi	ʔanda + naddi	>	danaddi

4.1.1.4 Ifugao

Considerable data is available for at least two Ifugao languages that enable us to make a more-informed reconstruction for Proto-Ifugao than that offered in Reid (1979). The first is the extensive description of forms given for Batad Ifugao, in Newell (1993) and the other is that spoken in Kiangán (referred to as Tuwali Ifugao in the Ethnologue) (Lambrecht 1978, and Racho 1979).

4.1.1.4.1 Batad Ifugao

The description provided here is my best attempt to fit the material discussed by Newell (1993) into the framework given in this paper. Newell has noted numerous facts that support this analysis, not least of which is the recognition that some of what are here called nominal specifiers have their origin as deictics, and that the *-n* ending on them has its source in the enclitic form of a ligature (presently IFG *an*). Newell treats several of the forms as "common

²² Shetler (1976:42) cites the base of this verb as *ʔébbég* (where the vowel *é* represents /i/), however in the cognate Bontok form, the medial consonant of the equivalent form is not geminated, and the medial consonant cluster is metathesized: BON *ʔi- + *ʔə'bəg > **ʔibʔəg > /ʔibʔəg/ 'to put to bed'. Most Balangaw forms having an initial weak syllable with a glottal stop onset undergo metathesis of the medial consonant cluster, following weak vowel deletion, like Bontok.

noun determiners,” but also notes that they have a deictic component and calls such forms “demonstrative adjectives”. For a complete description of the distribution and functions of the various forms, see Newell (1993:12-14, 81).

The IFGBT prepositions presented in *Following *i* or *e*, no form appears; following other vowels, the form is =y.

Table 24, correspond in most details to those found both in Bontok and Kankanaey, and in Balangao, except that topic (and predicate) positions are (optionally) marked with the preposition *ha*, as in (21)a,b. Newell (1993:274) notes that the form *hay* (from earlier *say) is bimorphemic, being a sequence of *ha* + [the enclitic form of] *di*. Other prepositions are exemplified in (21)c-d. The same sequence of forms is found in Inibaloi. In that =y distinguishes indefinite nominative phrases from all others, it is here considered to be a case-marking prepositional form, with a different function from the =y that occurs as part of the form *hay*.

*Following *i* or *e*, no form appears; following other vowels, the form is =y.

Table 24 presents a summary of IFGBT common noun non-deictic specifiers.²³ Examples are provided in (21)e-i.

Table 23 Batad Ifugao case-marking prepositions

TOP/PRD		NOM	GEN	OBL	LOC
hay	V]	=y / =Ø*	=n	=h	=d
	C]	Ø	=Ø	hi	?ad

*Following *i* or *e*, no form appears; following other vowels, the form is =y.

Table 24 Batad Ifugao common noun specifiers

Indefinite	C]	di han*
Definite	default	nan**
	remote	din***

**“When not otherwise specified by context, *han* usually indicates an indefinite person or thing, *nan* a definite person or thing.” (Newell 1993:266).

**Newell reports stylistic variants *hanan* and *han din* for *nan* and *din*, respectively. Note that these forms correspond to the Kiangian Ifugao deictic specifiers, listed in Table 28.

***“If a named period of time is indicated, ... reference is to at least one period of time separated from the present [past or future]” (Newell 1993:216).

²³ Although I do not consider topics and nominal predicates to be ‘case-marked’, the prepositions that introduce them function in a similar way to those that case-mark other NPs, in that they identify the function of the NP, and particularly in the case of topics they serve also to foreground the phrase within a discourse.

Table 25 Batad Ifugao basic demonstratives

-plrl	proximal	(he)te
	medial	(he)ne
	distal	(he)de
+plrl	proximal	date / hātu
	medial	dane / hāna
	distal	dade / hādi

(21) Batad Ifugao (Newell 1993:13, 216, 274, 285)

- a. *Hay aton di linalā'i ya umuy = da = h wangwang an manālop.*
 [P [do]_{NP} [P [men]_{GEN,NP}]_{TOP} TOP.LG go=[3P]_{NOM}=[P_{OBL} [river]_{NP}] LG fishing
 'As for what the men do, they will go to the river to fish.'
- b. *Hay Higib di panayāwan = da = h mā'et.*
 [P [Higib]_{NP}]_{PRD} [P [dancing.place=[3P]_{GEN,NP}]_{NOM}=[P_{OBL} [tomorrow]_{NP}]
 'Higib is the place where they will dance tomorrow.'
- c. *Ngina = a' di lubung = 'u = h maphod.*
 buy=[NOM.1S] [NS shirt=GEN.1S]_{NP}=[P_{OBL} [nice]_{NP}]
 'I will buy a nice shirt for myself.'
- d. *Munggābut nan binabā'i hi mā'et hi = nan ūma = da.*
 weed [NS women]_{NOM} [P_{OBL} [tomorrow]_{NP}] [P_{OBL}=[NS upland.fields=[3P]_{GEN,NP}]
 'The women will weed tomorrow in their upland fields.'
- e. *Inah'upana han miyapat an mamungwit.*
 came.upon.3S [NS fourth]_{NOM} LG fishing
 'He came upon a fourth one fishing.'
- f. *Adi = yu ibāag nan wada = n Inlagwi.*
 NEG=GEN.2P tell [NS place=[P_{GEN} [Inlagwi]_{NP}]]_{NOM}
 'Do not tell the place where Inlagwi is.'
- g. *Penhod = 'u din patang ti tungnin.*
 enjoy= GEN.1S [NS.REMT planting.season]_{NOM} because cool
 'I enjoyed that planting season because it was cool.'
- h. *Natoy din manu' = 'u.*
 dead [NS.REMT chicken= GEN.1S]_{NOM}
 'Those chickens of mine (that I had before) died.'
- i. *Do'ol di ulha = h din nadnoy.*
 many [NS.-DFNT deer]_{NOM}=[P_{OBL} [NS long.ago]_{NP}]
 'There were many deer during that past long ago.'

4.1.1.4.2 Kiangnan Ifugao

As shown in Table 26, IFGKI marks topics with a distinct preposition, as does IFGBT, as in (22)a. Lambrecht (1978:10) notes that the oblique form *ah* is "exceptionally used after *maid* [i.e., as an indefinite marker following a negative existential verb] in *hudhúd* chant" and occurs frequently in the Banawe area, see (22)h. For similar types of construction in Bontok with the oblique preposition *as* / =s, see (9). Although Lambrecht considers *ah* to be a metathesized

form of *ha*, there is no evidence that it is. Table 27 shows the NS forms in IFGKI, with examples provided in (22)b-h. Although the description for Kiangán is not as detailed as that for Batad, it seems clear that the former language has lost a number of the semantic distinctions that are found in the latter. Neither of the forms appears with a final (ligature) nasal, although it is found on the end of the common noun specifiers, given in Table 27, and illustrated in 0. Lambrecht (1978:172) states “In *hudhúd* [epic poetry], and in the Kiangán and Hapaw areas, *ha* is the case marker *di*... or affixed -y if the previous word ends in a vowel. In other areas, *ha* is more often replaced by *nan* [see the description of Batad Ifugao above] (which somewhat implies a demonstrative meaning), or sometimes by the inverted form *ah*.”

Table 26 Kiangán Ifugao case-marking prepositions

TOP		NOM	GEN	OBL	LOC
hay	V]	=y	=n	=h	=d
	C]	∅	=∅	hi / ah	ad

Table 27 Kiangán Ifugao common noun specifiers

Definite	di / ha
-----------------	---------

(22) Kiangán Ifugao (Lambrecht 1978:viii, 10, 313, 205, 528)

- a. *Hay bablé=da ya uggék tiníbo.*
 [P_{TOP} [house=3P]_{GEN}]_{NP} and NEG.1S saw
 ‘(It was) their village and I didn’t see it.’
- b. *Linauhána=y balé=da.*
 passed.by.3S=[NS house=3P]_{NOM}
 ‘He passed by their house.’
- c. *Umáli=y únga.*
 come=[NS child]_{NOM}
 ‘The child will come.’
- d. *Munáhel di wangwáng.*
 strong.flowing [NS river]_{NOM}
 ‘The current of the river is strong.’
- e. *ampúyo=n di áki.*
 skirt=[P_{GEN} [NS river]_{NP}]
 ‘The current of the river is strong.’
- f. *Umé=ak hi payó.*
 go=[NOM.1S [P [rice.field]_{NP}]_{OBL}
 ‘I’m going to my ricefield.’
- g. *Maíd ah umáli.*
 NEG.EXIST [P [come]_{NP}]_{OBL}
 ‘Noone will come.’ Lit. ‘None are the ones who will come.’

- h. *Nalpó=ak ad Bontok ad kabigatán.*
 came=[NOM.1S [P_{LOC} [Bontok]_{NP}] [P_{LOC} [morning.time]_{NP}]
 ‘I came from Bontok this morning.’

Table 28 Kiangán Ifugao deictic nominal specifiers

-PLRL	PROX	hantu(=n) / hatu(=n)*
	MED	hanna(=n) / hana(=n)
	DIST	handi(=n) / hadi(=n)
+PLRL	PROX	hantuda(=n) / hatuda(=n)
	MED	hannada(=n) / hanada(=n)
	DIST	handida(=n) / hadida(=n)

*Lambrecht (1978:viii) states, “*n* of *han* is commonly omitted in Central Ifugao.”

(23) Kiangán Ifugao (Lambrecht 1978:viii)

Páyo=n han=ná=n babái.
 field=[P_{GEN} [NS=that=LG woman]_{NP}]_{PRD}
 ‘(It is) the rice field of that woman.’

4.1.1.5 Proto-Ifugao Reconstructions

The prepositional forms reconstructed for P-IFG (shown in Table 29) are cognate with those given in previous sections, with the addition of a topic marking preposition *ha*. Although the preposition *ah* apparently occurs only in ritual texts, its presence in earlier forms of the language is evidenced by the cognate forms in P-BON-KNK and in BLW. The presence in P-IFG of three different definite nominal specifiers (shown in Table 30), having their source in deictics is supported by the cognate forms in P-BON-KNK, although their functions differ. The basic demonstrative forms of P-IFG were different from those of P-BON-KNK, as can be seen by comparing Table 15 with Table 31, but are the same as are reconstructible for Pre-Balangao. It is interesting to note that among all the Central Cordilleran languages, it is only in Ifugao that=y is retained as an enclitic NS. Remnants of its former use are found in the other languages, but not as part of the system of nominal specifiers, as in Ifugao.

Table 29 Proto-Ifugao case-marking prepositions

TOP	GEN	OBL	LOC
ha(y)	=n	=h	=d
	=Ø	hi / ?ah	?ad

Table 30 Proto-Ifugao common noun specifiers

Indefinite		V]	=y
Definite	default	C]	di / nan / han
	distal		din

Table 31 Proto-Ifugao basic demonstrative forms

PROX	tu
MED	na
DIST	di

4.1.2 Proto-Nuclear Cordilleran Reconstructions

4.1.2.1 P-NUCO Prepositions and Singular Common Noun Specifiers

On the basis of the foregoing descriptions, it is possible to reconstruct P-NUCO marking prepositions and nominal specifiers which introduce singular common nouns as shown in Table 32 and Table 33.

Table 32 Proto-Nuclear Cordilleran case-marking prepositions

TOP	GEN	OBL	LOC
sa	Ø / =n	si / =s ʔis / ʔas	=d ʔid / ʔad

Table 33 Proto-Nuclear Cordilleran common noun specifiers

Indefinite		di / =y
Definite	default	nan
	recognitional	san
	antedated	din

4.1.2.2 P-NUCO Plural Common Noun Phrases

There is little difference between the Nuclear Cordilleran languages in the specifiers which mark plural common nouns and singular and plural personal nouns. Unmarked common noun phrases (topics, nominal predicates, nominatives, etc.) were pluralized by making them coreferential with a third person plural pronoun, a reflex of P-NLZN *=da, encliticized to the predicate, as exemplified with Bontok data in (24)b (compare (1)a, repeated here as (24)a), and for Balangao, with example (26)i; or by using a plural demonstrative as head of the following NP, either linked to a referential form as in (24)c, and (26)j, or not, as in (24)d. Genitive common noun phrases were pluralized in the same way, without a genitive preposition, as in (24)f (compare (4)a, repeated here as (24)e). Unmarked NPs which were not adjacent to the predicate (such as nominative NPs of transitive clauses) were pluralizable only by using a plural demonstrative as in (24)g (see also Balangao examples in (20)f). A core oblique NP with a definite NS (interpreted partitively), could be pluralized in the same way, as in (24)h (compare (4)b), and also adjunct oblique NPs expressing location, as in (24)i (compare (5)d). Indefinite nominal predicates and nominative NPs were not pluralizable, but could be interpreted in a generic sense. (compare (1)a, repeated here as (24)a), or by using a plural demonstrative as head of the following NP, either linked to a referential form (24)c, or not, as in (24)d.

(24) Guinaang Bontok (pluralization of common noun phrases)

- a. *Kinmaan nan laráki.*
 departed [PM.-PRSN man]_{NOM}
 ‘The man departed.’
- b. *Kinmaan = cha nan larraráki.*
 departed=[3P]_{NOM} [PM.-PRSN men]_{NOM}
 ‘The men departed.’
- c. *Kinmaan nan cheeycha = y larraráki.*
 departed [PM.-PRSN that.PLRL=LG men]_{NOM}
 ‘Those men departed.’
- d. *Kinmaan nan cheeycha.*
 departed [PM.-PRSN that.PLRL]_{NOM}
 ‘Those ones departed.’
- e. *Inára = n nan laráki san fótog.*
 got=[P_{GEN} [NS.+DFNT man]] [NS.REC pig]_{NOM}
 ‘The man got the pig (we were just talking about).’
- f. *Inára = cha nan larraráki san fótog.*
 got=[3P]_{GEN} [NS.+DFNT men]_{GEN} [NS.REC pig]_{NOM}
 ‘The man got the pig (we were just talking about).’
- g. *Inára = n nan laráki san cheeycha = y fótog.*
 got=[P_{GEN} [NS.+DFNT man]] [NS.REC that.PLRL=LG pig]_{NOM}
 ‘The man got those pigs (we were just talking about).’
- h. *Inmára = ak si nan sánacha = y fótog.*
 got=NOM.1S [P [NS.+DFNT that.PLRL=LG pig]_{NP}]_{OBL}
 ‘I got some of those pigs (near you).’
- i. *Ipaey = mo = s nan náaycha = y takfá!*
 enter=[GEN.2S]=[P [NS.+DFNT this.PLRL=LG backpack.1S]_{NP}]_{OBL}
 ‘Put (them) in those backpacks!’

4.1.2.3 P-NUCO Personal Noun Phrases

Unmarked singular personal noun phrases (topics, nominal predicates, and nominatives) can be reconstructed with the ubiquitous nominal specifier *si, and an enclitic variant *=s when part of a nominative phrase following a vowel-final word, as exemplified with Bontok data in (25)a,b,c. The only NUCO language which has an innovation (apart from regular sound change) is Balangao which retains a reflex of the clitic form *=s (as =h) as in (26)a, but which has replaced *si with ah, as in (26)b,c. Since, in Balangao, =h is homophonous with the enclitic form of the common noun oblique preposition ah (see Table 16 and (26)d), this form has been extended to replace the inherited personal noun phrase NS.

Genitive and oblique singular personal noun phrases had no nominal specifier between the preposition and the lexical head, exemplified in Balangao (26)c,d,h and Talubin Bontok (27)d.

Core oblique phrases in triadic transitive constructions with personal nouns were case-marked as datives by the preposition *kan, but did not allow any nominal specifier, as in (26)e (*k > BLW /ʔ/, and is not represented at the beginning of a word in the local orthography, hence an). The dative preposition also had an enclitic form, =n, as in (26)k.

Kankanaey and Talubin Bontok have changed the vowel of the Dative preposition to /ə/. Guinaang Bontok has replaced the personal oblique preposition *kan, with *an* (or =*n* following a vowel-final form), as in (25)d,e. There are two possible explanations for the change, either it was borrowed from a language in which *k > /ʔ/ (such as Guinaang Kalinga),²⁴ or the form has changed by analogy with the homophonous *an* which functions as a NS in Oblique phrases expressing a personal location. The nominal specifier is freely translated as ‘the place of’, as in (25)f, and is possibly a reduction of *kad-an* ‘place’ (/ka-ʔedán/ > /kadʔan/, cf. /ʔedan-an/ ‘to reach some place’). Support for the relatedness of the preposition and the nominal specifier, however, comes from other dialects of Bontok, such as Talubin, where both forms are *ken*, as in (27)a, and also from the Kankanaey dialects, which also reflect *kan as *ken*. Since *kan as a nominal specifier only occurs in Bontok and Kankanaey dialects, it is not reconstructible to P-NUCo.

Ifugao dialects are problematic in that like Balangao and Bontok the clitic form of the dative preposition is =*n*, implying an earlier *kan, but the non-clitic form is a reflex of *kay, i.e., IFGBT /ʔay/, IFGKI /ke/. Since the Ifugao languages are the only Nuclear Cordilleran languages to show this form, and Ifugao does not have *i* as a singular personal noun NS, as some Northern Cordilleran languages do, it cannot be considered to be a regular development, but is probably a borrowed form, however see further discussion on this form in sec. 4.1.6.

Plural personal noun phrases in P-NUCo all contained a NS *da. In unmarked NPs, the form substituted for the singular NS *si, as in (25)g. In case-marked phrases however, genitives and datives, the plural NS *da occurred between the preposition and the lexical head, as in (25)h and (27)b.

(25) Guinaang Bontok (personal noun phrases)

- a. *Kinmaan si Takcheg.*
 departed [NS.+PRSN Takcheg]_{NOM}
 ‘Takcheg departed.’
- b. *Si Takcheg ket, kinmaan.*
 [NS.+PRSN Takcheg]_{TOP} TPLK departed
 ‘As for Takcheg, he left.’
- c. *Iníla = na = s Takcheg.*
 saw=[GEN.3S]=[NS.+PRSN Takcheg]_{NOM}
 ‘He saw Takcheg.’
- d. *Egwar = mo = n tod-i.*
 give=[GEN.2S]=[P_{DAT} that.person]
 ‘Give (it) to that person (over there).’
- e. *Maseyep = ak an asáwak*
 sleep=[NOM.1S] [P_{DAT} wife.1S]
 ‘I’m sleeping with my wife.’

²⁴ See sec. 4.1.3.2 for further evidence of contact between Guinaang Bontok and Guinaang Kalinga.

- f. *En = tako inkárang as an Cherweg.*
 go=[NOM.1+2P] do.kárang [P_{OBL} [NS.+PRSN Cherweg]]
 ‘Let’s go perform the *kárang* ceremony at Cherweg’s place.’
- g. *Kinmaan cha Takcheg.*
 departed [NS.+PRSN Takcheg]_{NOM}
 ‘Takcheg (and others) departed.’
- h. *Egwar = mo = n cha Takcheg*
 give=[GEN.2S]=[P_{DAT} PLRL Takcheg]
 ‘Give (it) to Takcheg (and others).’
- i. *Inára = n cha Takcheg nan payew = na.*
 got=[P_{GEN} [NS.PLRL Takcheg]] [NS pond.field=[GEN.3S]]_{NOM}
 ‘Takcheg (and others) got his pond field.’

(26) Balangao (Shetler 1976)

- a. *Nanhénga = h Uyyama.*
 sacrifice=[NS.+PRSN Uyyama]_{NOM}
 ‘Uyyama performed a sacrifice.’ (p.237)
- b. *Émméy ah Amlalawiyén = ay mangila.*
 departed [NS.+PRSN Amlalawiyén]_{NOM}=LG see
 ‘Amlalawiyén went to see.’ (p. 236)
- c. *Matéy ah Uménggan = ay ama = n Uyyama.*
 die [NS.+PRSN Uménggan ==LG father=[P_{GEN} [Uyyama]_{NP}]_{NOM}
 ‘Uménggan who was the father of Uyyama died.’ (p.237)
- d. *Inyéy = da ah baléy Uyyama.*
 took=[GEN.3P] [P [house [Uyyama.]_{GEN}]_{OBL}
 ‘They took (it) to the house of Uyyama.’ (p.238)
- e. *E pateko = yu = to an Juan.*
 cause.bend=[GEN.2P]=[this.one]_{NOM} [P_{DAT} [Juan]_{NP}]
 ‘Have Juan bend this.’ (p.143)
- f. *Ah Panapan, publi yay tatagu...*
 [NS Panapan]_{TOP} [poor LG person]_{PRD}
 ‘As for Panapan, he was a poor person ...’
- g. *Ad uwan = ay natéy ah Panapan,*
 P_{LOC} now=LG dead [NS Panapan]_{NOM}
 ‘Now that Panapan is dead, ...’
- h. *Maid anén Panapan.*
 NEG.EXIST food [Panapan]_{GEN}
 ‘Panapan had nothing to eat ...’
- i. *Mangan = da ano hen ongtan.*
 eat=[3P]_{NOM} RPRT [NS spirit]_{NOM}
 ‘The spirits eat, they say.’

- j. *Hen andida=y baknang ad Saliyok, ay da Onsat...*
 [NS those=LG rich.ones [P_{LOC} Saliyok]]_{TOP} LG [NS.PLRL Onsat]
 ‘As for the rich people at Saliyok, that is Onsat and his companions...’
- k. *Hiyadi=n manlaydan hen tatagu=n Panapan.*
 that=[NS like.reason [NS people]_{GEN}]_{NOM}=[P_{DAT} Panapan]]
 ‘That was the reason the people liked Panapan.’

(27) Talubin Bontok (Kikusawa and Reid 2003)

- a. *Inhubli=ja=h ken Lumawig.*
 return=[3P]_{NOM}=[P NS Lumawig]_{OBL}
 ‘They returned to Lumawig’s place.’ (p. 119)
- b. *Kanan=yu ken ja ama=yu.*
 say=[GEN.2P] [P_{DAT} NS.+PLRL father]=[GEN.2P]
 ‘Tell (it) to your father.’ (p. 104)
- c. *Himao=ja han hin-agik.*
 returned.home=[3P]_{NOM} [NS siblings]_{NOM}
 ‘The siblings returned home.’ (p.105)
- d. *Umey ken kavavaiyanna.*
 go [P_{DAT} [sister]_{NP}]
 ‘He went to his sister.’ (p.130)

Table 34 Proto-Nuclear Cordilleran prepositions + personal noun specifiers

	UNM	GEN	DAT
-PLRL	si / =s	= n	kan
+PLRL	da	= n da	kan da

4.1.3 Kalinga-Itneg

The Ethnologue (Gordon 2005) lists nine varieties of Kalinga and four of Itneg, so the information provided here is merely a sample of the variety that probably exists. There are at least two Kalinga languages which have fairly extensive published data available. The first, Limos Kalinga (Ferreirinho 1993), has an insightful description of the relevant forms. The other is Guinaang Kalinga (Gieser 1963).

4.1.3.1 Limos Kalinga (Ferreirinho 1993)

Ferreirinho (referred to as F in the following paragraphs) notes that nominative noun phrases in KLALI are not case-marked. The forms that she lists that mark case are given in Table 35. Three forms that are of interest are 1) the topic-marking preposition *sa*, found also in P-NUCO, and the Oblique and Locative forms *lut* and *lud*. The equivalent forms in NUCO languages have either an *i* or an *a* vowel.

The NS (referred to by F as “determiners”) are given in Table 36. The final nasal on these forms is a frozen enclitic ligature, as is found in the NUCO languages. F refers to these as “determiner ligatures”, and compares them to the ligature which follows the same deictic forms

when they function as “adjectival demonstratives”, shown in Table 37.²⁵ Although F labels the nominal specifiers with the same descriptive terms that she gives to the basic demonstratives, in the process of becoming nominal specifiers, their meanings have changed. F notes that *di* is the unmarked form, presumably the form that occurs most frequently. F labels the two distal forms as ‘visible’ vs. ‘out-of-sight’, but her description suggests that forms with final *-n* are unmarked, and those with final *-t* are commonly found in narrative discourse helping to disambiguate structures which have non-past verbal forms as in fact having occurred in the past, citing Geiser (1972:22) “Case marking particles with final *t* are particularly diagnostic of Kalinga narrative discourse when they mark constructions that otherwise give no indication of past time reference.”

Note also that the nominal specifier *dit* is frequently reduced to the enclitic *=t* creating homophony with the oblique prepositional enclitic *=t*, a reduction of the full form *?ut*.

Table 35 Limos Kalinga case-marking prepositions (adapted from Ferreirinho 1993:9-10)

TOP		GEN	OBL	LOC
sa	V]	=n	=t	=d
	C]	∅	si / ?ut	?ud

Table 36 Limos Kalinga common noun specifiers (adapted from Ferreirinho 1993:9-10)

PROX		tun
MED		nat
DIST (visible)		din
DIST (out-of-sight)	V]	=t
	C]	dit

Table 37 Limos Kalinga “adjectival demonstratives” (adapted from Ferreirinho 1993:9-10)

PROX	tu = a
MED	nat = a
DIST	di = a

Table 38 Limos Kalinga case-marking prepositions + nominal specifiers

TOP	UNM		GEN	OBL		GEN	OBL
sa tu-n	tu-n	V]	=n tu-n	(?u)t tu-n	C] ²⁶	(di) tu-n	si tu-n
sa nat	nat		=n nat	(?u)t nat		(di) nat	si nat
sa di-n	di-n		=n di-n	(?u)t di-n		(di) di-n	si di-n

²⁵ In KLALI the form of the ligature has been generalized in this environment. The variant, *=a*, which only occurs elsewhere following consonant-final words, has replaced the vowel-final variant following demonstratives. In other environments, *=n* typically follows vowel-final words (Ferreirinho 1993:15).

²⁶ When ambiguity may result, the free form *di* optionally occurs before common nouns and *ud* optionally occurs before personal nouns (Ferreirinho 1993:11).

4.1.3.2 Guinaang Kalinga

The forms occurring as prepositions in KLAGU are shown in Table 39, and are exemplified in (28)a-e. The only form that appear to be innovative here is the glottal stop enclitic form of *si*. Examples show either *si*, =*s*, or =*ʔ* following vowel-final words (as in (28)d,e,h). Historically the source of a glottal stop in this position can only be from **k*, but there are no possible prepositions having a velar stop from which this could derive. The locative form *ʔud* is cognate with the identical form in KLALI, and is reconstructible to P-KLA. Although the locative form *ʔad* found Lubuagan Kalinga and in some of the NUCO languages, apparently does not occur as such in KLAGU, the form does appear as an adverb with a sequential sense, typically found in temporal phrases, and at the beginning of sequential clauses, as in (29). The form does not necessarily have past reference, it seems to commonly occur in narrative contexts, and probably is an independent development from a sequence of a ligature and a demonstrative, **a+di*, also found in Isinai (see section 4.1.4.2).

The nominal specifiers of KLAGU are shown in Table 40, with examples in (28)f-l. As in BONGU, there is homophony between the indefinite NS *si* and the preposition of the same form. Since these are the only two languages which show this homophony, it supports local claims, possibly reflected also in the common name of the two communities, that there has been population movement between them in the past. The expected indefinite NS *di* also occurs and supports its reconstruction to P-CCO. Further evidence of contact between the two Guinaang communities is found in the form of the KLAGU basic proximate demonstrative, *na* (see Table 41, with examples of their occurrence in (30)). Only in Bontok and Kankanay is the same form found with this meaning. Elsewhere in the CCO languages, *na* only occurs as a basic demonstrative meaning “near addressee”. This perhaps accounts for the presence of a final *t* on the KLAGU form *nat* “near addressee”. It was disambiguated from *na* “near speaker” by adding an enclitic form of **ta* (occurring also in Ilokano) meaning “near addressee”. This form (**ta*) may also have been the source of the final consonant on NSs with past reference, KLAGU *sit* and *dit*, which are now apparently monomorphemic.

Table 39 Guinaang Kalinga case-marking prepositions (adapted from Gieser 1963:50)

TOP / PRD		GEN	OBL	LOC
si	V]	= n	= s / = ʔ	= d / = ʔ
	C]	= Ø	si	ʔud / ʔad*

* This form occurs in the dialect of Kalinga spoken in Lubuagan.

Table 40 Guinaang Kalinga nominal specifiers (adapted from Gieser 1963:50)

Indefinite		di / si
	default	nan / = n
Definite	-PAST	din / = n
	+PAST	dit / = t

Table 41 Guinaang Kalinga basic demonstratives (Gieser 1963:79)

PROX	na
MED	nat
DIST	di

(28) Guinaang Kalinga (Gieser 1963:18, 24, 28, 59, 76-78, 86)

- a. *si=n mankilawan = mi... nan manugtugan = da si=n ?ugsa.*
 [P [NS prepare.meat=GEN.1P...]_{PRD} [NS chop.in.pieces=[3P]_{GEN} [P [NS deer]_{NP}]_{OBL}]_{NOM}
 ‘The time we prepare *kinilaw* meat ... is when we chop the deer in pieces.’
- b. *si=n ?anak = a lalaki, ?immoy nangayu*
 [P [NS child=LG male]_{TOP} went collected.wood
 ‘As for the boy, he went to get wood.’
- c. *?issa = da pon lumawa si makabulan.*
 NEG=[3P]_{NOM} ADV go.out [P month.period]_{TEM}
 ‘They do not go out for a month.’
- d. *mansa?ul = ta si ?oblit.*
 exchange=[1+2S]_{NOM} [P skin]_{OBL}
 ‘Let’s exchange skins.’
- e. *mangwa = da = ? ?adamal.*
 [make=[3P]_{NOM}]=[P animal.night.sacrifice]_{OBL}
 ‘They kill a sacrificial animal at night.’
- f. *?imbag = n dit luwang si = t baka.*
 told=[P_{GEN} [NS water.buffalo [P=[NS cow]_{OBL}]
 ‘The water buffalo told (something) to the cow.’
- g. *?umiwas = ?ami si ?iwoy si = t gattok = a saklot = na.*
 shave=NOM.1P [P rattan]_{OBL} [P=[NS permanent=[LG tie=GEN.3S]_{NP}]_{OBL}
 ‘We shave rattan for its permanent ties.’
- h. *?idalpong = no = s nan ?andi.*
 set.fire.stones=GEN.2S=[P [NS that.one]_{NP}]_{LOC}
 ‘Set (them) as fire stones at that place’
- i. *?inta?od = da = n gawa = na.*
 tied=[3P]_{GEN}=[NS center=GEN.3S]_{NOM}
 ‘They tied its center.’
- j. *patoyon = da si tagu.*
 kill=[3P]_{GEN} [NS person]_{NOM}
 ‘They kill a person.’
- k. *pongod di wa?il*
 source [NS stream]_{GEN}
 ‘source of a stream’
- l. *na?amin pon niwatwat dit ?issa = da...*
 be.all=[3P]_{NOM} ADV distributed [NS meat=[3P]_{GEN}]_{NOM}
 ‘When the meat was completely distributed...’

(29) Guinaang Kalinga (Gieser 1963:36-37, 39-41)

- a. *magampot ?ad ma?uluban, ?inisong=mi nan ataknang nan boloy, ?ad pinutdan=mi*
 finish SEQ digging measure=EN.1P [NS height [NS house]_{GEN}]_{NOM} SEQ cut=GEN.1P
nan tu?ud=na, ?ad sinagitangan=mi
 [NS posts=GEN.3S]_{NOM} SEQ notch=GEN.1P
 ‘After finishing digging, we measure the height of the house, then we cut the posts, then notch them.’
- b. *magampot ?ad nan langon, ?iniwa=mi.*
 finish SEQ [NS hair.burning]_{NOM} butcher=GEN.1P
 ‘After the hair is completely burned off, we butcher (it).’
- c. *magampot ?ad nan watwat,, ?asi=da mangan dan tagu.*
 finish SEQ [NS distribution]_{NOM} again=[3P]_{NOM} eat [NS.PLRL people]_{NOM}
 ‘After the (meat) is distributed, the people eat again.’
- d. *wadawad ?ad nan ?usalon=mi=n man?alad, ...*
 EXIST SEQ [NS use=GEN.1P=LG fencing]_{NOM}
 ‘When all of the things used for fencing are gathered, ...’
- e. *?issas=da pon ?abos ?ad ?anon dan matipoy...*
 NEG=[3P]_{GEN} ADV also SEQ eat [NS.PLRL vegetables]_{NOM}
 ‘Then they also do not eat vegetables...’
- f. *?awni ?ad mabigat ?ad*
 finish SEQ next.day SEQ
 ‘later’ ‘the next day’

(30) Guinaang Kalinga (Gieser 1963:79)

<i>?an na</i> ‘this, proximal’	<i>si na</i> ‘here, proximal’
<i>?an nat</i> ‘that, medial’	<i>si nat</i> ‘there, medial’
<i>?an di</i> ‘that, distal’	<i>si di</i> ‘there, distal’

The reconstructed Proto-Kalinga prepositions, basic demonstratives and nominal specifiers, based on the data described above are shown in Table 42, Table 43, and Table 44. Limos Kalinga gives evidence that the preposition which marked a topic was the same as that which is reconstructible for P-NUCO, *sa and that Guinaang Kalinga has replaced it with *si*, in effect neutralizing the marking of obliques, topics and nominal predicates. Limos Kalinga also gives evidence of an *ʔu*-initial oblique form, corresponding to its *ʔu*-initial locative form, *ʔud*. The final alveolar consonant on the KLALI oblique preposition *ʔut* probably doesn’t have its source in *ta as proposed above for the final alveolar consonant of the Guinaang Kalinga forms, but is an irregular development of the enclitic form of *si. Each of the basic demonstratives that occurred following *ʔus began with an alveolar stop (as shown in Table 38), so that sequences of *ʔus = tu, *ʔus = na, and *ʔus = di became by assimilation respectively **ʔut = tu, **ʔut = na, and **ʔut = di. Evidence that this was so is that now the enclitic form of the KLALI nominal specifier *si* is also =t. More will be said about these oblique forms in sec. 4.1.5.

Table 42 Proto-Kalinga case-marking prepositions

TOP / PRD		GEN	OBL	LOC
sa	V]	= n	= s	= d
	C]	= Ø	?us / si	?ud / ?ad

Table 43 Proto-Kalinga nominal specifiers

Indefinite		di
	default	nan / = n
Definite	-PAST	din / = n
	+PAST	dit / = t

Table 44 Proto-Kalinga basic demonstratives

PROX	tu
MED	na
DIST	di

4.1.3.3 Itneg

Of the four varieties of Itneg spoken in the province of Abra that are listed in the Ethnologue (Gordon 2005), the only published data available is that from Binongan Itneg (ITGBI) as spoken in Nalbuan, Baay, of the municipality of Baay-Licuan (Walton, J. 1975), although brief statements relating to the “basic CRE [construction reference expressions] articles” of other languages in the group (as well as elsewhere in the northern Philippines) are found in McFarland (1977).

Examining the Itneg data (illustrated in (31)a-i) reveals a difference between this language and Kalinga in the function of the form *si*. While *si* occurs both as an oblique preposition and as an indefinite nominal specifier in Kalinga, and only occurs with definite nouns in topic positions, in Itneg it is a definite nominal specifier and occurs as such in nominative, topic, and presumably predicative noun phrases. It has been replaced as an oblique preposition by *kan, apparently by generalizing the personal dative preposition to also mark phrases that have common noun exponents.

In Reid (1974:545-547), I discussed the Itneg genitive prepositions illustrated in (31)b,e,j,k and (32)a-f. Since this is the only Central Cordilleran language that uses the full form *ni*, rather than the reduced form =*n*, to mark genitive common noun phrases, it is probable that the form was borrowed from Ilokano, a language from which Itneg has borrowed heavily in all areas of its morphosyntax. The inherited reduced form still optionally marks genitive proper noun phrases in Itneg, as in (32)f.

Itneg appears to be neutralizing the distinction between nominal specifiers which distinguish spatial distinction between a reference close to the speaker (*tu*), and one close to the addressee (*ta*). Both deictics occur as an enclitic =*t* attached to either a preceding preposition, or to a preceding nominal specifier. Although the data shows frequent occurrence of the unreduced form *ta*, on forms such as *nita*, *sita*, and *dita*, alongside *nit*, *sit*, and *dit*, with English translations as either ‘this’, ‘that’, or simply ‘the’, forms with an attached *tu*, such as *nit_{tu}*, *sit_{tu}*, and *dit_{tu}* are not found in the published data. The form *to* (from **tu*) does appear as an indefinite NS following a negative, as in (31)j. Itneg case-marking prepositions are given in Table 45. Itneg nominal specifiers are given in Table 46.

The possible development of Itneg specifiers is shown in Table 47. The language as spoken today still maintains earlier structures as variants, alongside the forms which represent later developments. Thus Stage 3 forms in which *ta* is functioning as a demonstrative linked to its following noun with the borrowed ligature *nga* are found, as in (31)l,m, alongside Stage 4 forms in which *ta* has become a nominal specifier, as in (31)k,l.

Table 45 Itneg case-marking prepositions

GEN	OBL	LOC
ni	kan	di

Table 46 Itneg nominal specifiers

Indefinite		to
Default		ta
Definite	-PAST	si = n si = t(a)
	+PAST	di = t(a)

Table 47 Development of Itneg deictic specifiers

Stage 1

Genitive

	P=N_{DMNS}=LG
PROX	ni = tu = a N
MED	ni = ta = a N
DIST	ni = di = a N

Unmarked

	NS=N_{DMNS}=LG
	si = tu = a N
	si = ta = a N
	si = di = a N

Stage 2 (Loss of demonstrative vowel)

	P=N_{DMNS}=LG
PROX	ni = t = a N
MED	ni = t = a N
DIST	ni = di = a N

	NS=N_{DMNS}=LG
	si = t = a N
	si = t = a N
	si = di = a N

>

	NS=N_{DMNS}
	si = ta N
	si = ta N
	si = di N

Stage 3 (Ligature replacement borrowed from **ILK**)

	P=N_{DMNS} LG
PROX	ni = t nga N
DIST	ni = d nga N

	NS=N_{DMNS} LG
	si = t nga N
	si = d nga N

	NS_{DMNS}
	sita N
	sidi N

Stage 4 (Loss of ligature)

	P=NS
PROX	ni = t N
DIST	ni = d N

	NS=N_{DMNS}
	si = t N
	si = d N

	NS_{DMNS}
	ta N
	di N

Stage 5 (Demonstrative clitic fuses with NS)

	P=NS
PROX	ni = t N
DIST	ni = d N

NS_{DMNS}
sit N
sid N

	NS
default	ta N

Table 48 Itneg deictic adverbs (Walton, J. 1975:53, 57)

PROX	tu
MED	kanta
DIST	kantan

(31) Binongan Itneg (Walton, J. 1975)

- a. *Napan = da di Tomeng-ey inggana di Lowaben, inmangoway.*
 went=[3P]_{NOM} [P Tomeng-ey]_{LOC} until [P Lowaben]_{LOC} go.gather.rattan
 ‘They went to Tomeng-ey as far as Lowaben, gathering rattan.’ (p.22)
- b. *Sit olo ni=t baboy, siya kan sit idawis = da kan ta bakes.*
 [NS head [P_{GEN}=[NS pig]]_{TOP} [3S]_{PRD} REPT [NS share=3P]_{NOM} [P_{OBL} [NS woman]_{NP}]
 ‘As for the head of the pig, that is what they gave the old woman as her share.’ (p.5)
- c. *Bagis met sit masengana.*
 intestines also [NS saw.3S]_{NOM}
 ‘Intestines is what she saw.’ (p.5)
- d. *Iyalim kay sit lapis = kon.*
 return.2S also [NS saw=GEN.1s]_{NOM}
 ‘Please return my pencil.’ (p.5)
- e. *Lomtaw kan di pagbekaan ni=d asawa = na, ...*
 arrive [P_{OBL} [NS excavation [P_{GEN}[NS spouse=GEN.3S]]]]
 ‘(When she) arrived where her husband was excavating, ...’ (p.5)
- f. *Sengam no awad payyet ta pagey kan ta alang.*
 see.2S if EXIST yet [NS rice]_{NOM} [P_{OBL} [NS granary]_{NP}]
 ‘See if there is still rice in the granary.’ (p.5)
- g. *Intono og-ogma ta Sabado, omali = kayo.*
 until morning [NS Saturday]_{GEN} come=NOM.2P
 ‘On Saturday morning, you (pl) come.’ (p.5)
- h. *Kan di awi, awad dat tao = wa magbaal.*
 [P_{OBL} [NS old.time]] exist NS.PLRL people=LG wear.loincloth
 ‘In the old times some people wore loincloths. (p.11)

- j. *Naid ta ragsak ni=t pamilya no naid to onlos.*
 NEG.EXIST [NS happiness [P_{GEN}=[NS family]]_{NOM} if NEG.EXIST [NS unity]_{NOM}
 ‘A family has no happiness if there is no unity’ (p.12)
- k. ... *kon=na kano ni=ta babai=ya iMainit.*
 ... say=GEN.3S REPT [P_{GEN}=[NS woman=LG Mainit.person]]
 ‘... said the Mainit woman.’ (p.55)
- l. *Isaldeng=no sit mangbaot kan=ta nga aso.*
 stop=GEN.2S [NS beating [P_{OBL} [that LG dog]]]_{NOM}
 ‘Stop beating that dog.’ (p.11)
- m. *Gapota natliw=da si=ta nga bokal..*
 because caught=[3S]_{GEN} [NS=that LG wild.pig]_{NOM}
 ‘Because they caught that wild pig...’ (p.11)

(32) Binongan Itneg

- a. *bula nit anak* ‘the ball of the child’
 b. *bula nid anak* ‘the ball of that child’
 c. *bula nita nga anak* ‘the ball of this child’, lit. ‘the ball of this one who is a child’
 d. *bula nidi nga anak* ‘the ball of that child’, lit. ‘the ball of that one who is a child’
 e. *bula ni Juan* ‘John’s ball’
 f. *bula=n Juan* ‘John’s ball’

4.1.4 P-Kalinga-Itneg Reconstructions

4.1.4.1 P-KLA-ITG Prepositions and Singular Common Noun Specifiers

Comparing Kalinga and Itneg with forms reconstructed above for Proto-Nuclear Cordilleran, it appears that Itneg has been more innovative than Kalinga, especially in its development of *si* as an unmarked nominal specifier. The reconstructed set of prepositions for the parent language then appears more like what is found in the Kalinga languages, see Table 49, than in the Itneg languages. The same is true of the reconstructed P-KLA-ITG nominal specifiers, given in Table 50, and the reconstructed P-KLA-ITG basic deictics. Itneg has replaced the near-addressee form **na* with the equivalent Ilokano form *ta*, although evidence of its presence in the language at an earlier stage can be seen in the final nasal of the unmarked form *si=n*, which occurs in some nominative noun phrases.

Table 49 Proto-Kalinga-Itneg case-marking prepositions

TOP	GEN	OBL	LOC
sa	Ø / =n	ʔus / si / =s	ʔud / di / =d

Table 50 Proto-Kalinga-Itneg common noun specifiers

Indefinite		di
Definite	default	nan / =n
	-PAST	din / =n
	+PAST	dit / =t

Table 51 Proto-Kalinga-Itneg basic demonstratives

PROX	tu
MED	na
DIST	di

4.1.4.2 P-KLA-ITG Plural Common Noun Phrases

In Itneg, unmarked plural common noun phrases, replace the proximal and distal NS forms, *sit* and *sid* (from earlier *si=ta* and *si=di*), with *dat* and *dad* respectively, as in (33)a,b. Genitive plural common noun phrases become morphologically unmarked in the plural, and use the same plural forms as other unmarked phrases. Oblique plural phrases require plural demonstrative heads, cliticized to a preposition *ka* which appears to be a borrowing from Ilokano.

(33) Binongan Itneg (Walton, J. 1975)

- a. *Kaysan dat tao.*
 went [NS.PLRL people]_{NOM}
 ‘Those people went.’ (p.6)
- b. *Kan di awi, awad dat tao=wa magbaal.*
 [P_{Loc} [NS old.time]] exist NS.PLRL people=LG wear.loincloth
 ‘In the old times some people wore loincloths. (p.11)

Table 52 Itneg plural deictic prepositions + nominal specifiers

	UNM	OBL
+PLRL	da=t	kada=tuwe
		kada=ta
	da=d	kada=di

Kalinga languages, like Itneg replace unmarked singular common noun specifiers with plural forms *dat* and *dan* (from earlier **da=ta* and **da=na*, respectively). But unlike Itneg, Kalinga languages retain the preposition *=n* when the phrase is genitive (and follows a vowel-final word), the NS forms occurring in the expected position, following the preposition.

4.1.4.3 P-KLA-ITG Personal Noun Phrases

A comparison of the forms marking Kalinga and Itneg singular and plural personal nouns phrases with those already reconstructed for P-NUCo, enables us to reconstruct a system of prepositions and nominal specifiers for P-KLA-ITG with very similar forms. In Itneg, unmarked personal noun phrases have NS forms *si* and *da* for singular and plural respectively. Genitive personal nouns but are not marked following a genitive preposition when singular, but are marked with *da* when plural. Dative forms are either unmarked or have a nominal specifier *ni*, following the dative preposition when singular, but are marked with *da* when plural (see Table 53).

Table 53 Itneg personal noun specifiers

	UNM	GEN	DAT
-PLRL	si	Ø	Ø (ni)
+PLRL	da	da	da

Kalinga has a very similar distribution of forms marking personal phrases. The only difference is the use of a singular NS *ʔud*, following a genitive preposition. This is clearly an innovative form, but it's source is opaque. Elsewhere in Kalinga, the form is a locative preposition.

Table 54 Kalinga personal noun specifiers

	UNM	GEN	DAT
-PLRL	si / =t	ʔud	Ø
+PLRL	da	da	da

Table 55 P-KLA-ITG prepositions + personal noun specifiers

	UNM	GEN	DAT
-PLRL	si / =s	= n	kan
+PLRL	da	= n da	kan da

4.1.5 Proto-North Central Cordilleran Reconstructions

4.1.5.1 P-NCCo Case-Marking Prepositions

Comparing the reconstructions of **P-NUCo** and **P-KLA-ITG** case-marking prepositions two interesting problems arise. In the locative forms, three different vowels are found, the forms are **ʔad*, **ʔid* and **ʔud*. These, along with the other reconstructible form, **di*, which was originally probably a distal demonstrative, is the first hint that there may have been a three-way set of locative forms, **ʔa=di*, **ʔi=di* and **ʔu=di* that were distinguished by the quality of the vowel at some early point in the history of these languages, corresponding in some way to the set of genitive forms, **na*, **ni* and **nu* first proposed in Reid (1981), and discussed more recently by Ross (2002) and Blust (2005). There are several problems with this proposal however. The first is that although there is external evidence for a locative form with an *i*-vowel in Ilokano *idi*, to my knowledge there is no evidence for the postulated full locative forms **ʔadi* and **ʔudi* in any Philippine language.

The second problem is that there is no difference in meaning between the reflexes of **ʔad*, **ʔid* and **ʔud* in the Northern Luzon languages that have them. The third problem is that there seems to be no explanation for why even adjacent communities within the same language area sometimes reflect different forms. The fourth problem is that there is evidence that at least **ʔad* had its source, not in an “a-grade” locative form, but in a frozen sequence of post-nominal modifying expression, containing an **a* ‘ligature’ and a **di* ‘distal demonstrative’ which occurs in Isinai today as a definite determiner. This will be further discussed in the following section on Isinai.

Finally, the oblique forms of languages match the VOWEL-GRADE of their locative preposition; those with *ʔad* ‘locative’ have *ʔas* ‘oblique’; those with *ʔid* ‘locative’ have *ʔis* ‘oblique’; and KLALI with *ʔud* ‘locative’ has *ʔut* (< *ʔus) ‘oblique’, suggesting that a vocalic template, or VOWEL-GRADE HARMONY is applied to the forms. This appears to be confirmed by the fact that the NuCo languages which show *ʔad* ‘locative’ and *ʔas* ‘oblique’, also have *nan* and *san* as nominal specifiers, but have lost (or never had) the common noun specifier *din*. This form is found only in those languages which use *ʔid* ‘locative’ and *ʔis* ‘oblique’.

There is no evidence, moreover, that this template is associated with deictic reference. As I have tried to demonstrate, these prepositions have no deictic reference at all, they function only to mark case. Deictic reference is carried by nominal specifiers, or by demonstratives which follow the specifiers. It is probable that only *si and its enclitic form *=s are reconstructible as oblique prepositions, and that the other oblique forms have been innovated on the basis of a common vocalic template between locative and oblique forms. This is not surprising, since both location and time semantic roles are carried by both locative and oblique phrases. While it seems clear that this innovation has taken place in the daughter languages of this group, it is unclear whether or not it was operating in the parent language. Because of the way the forms are distributed, however, it is probable that it was not. For this reason, I place parentheses around the problematic oblique prepositions in Table 56. In the table I also include also a column for nominative. The zero mark is to make explicit that such phrases were not morphologically case-marked.

Table 56 P-NCCo case-marking prepositions

	TOP	NOM	GEN	OBL	DAT	LOC
V]	sa	∅	=n	=s	=n	=d
C]		∅	∅	(ʔis /ʔus) si	kan	ʔid /ʔud / di

4.1.5.2 P-NCCo nominal specifiers

Table 57 presents the reconstructed system of nominal specifiers for P-NCCo, based on the reconstructions provided in the previous sections. The basic semantic distinctions marked by NSs in P-NCCo were personal vs. non-personal. Personal nouns included not only the names of people and names given to pet animals and animal participants in stories, but also kinship terms of address, as well as titles. Singular vs. plural distinctions were maintained throughout the system. The marking of singular personal nouns however differed depending on the case of the phrase. The reconstructed form *si only occurred in unmarked NPs, usually topics, nominal predicates, and nominatives. No personal noun could occur in a phrase marked as oblique, since such phrases had indefinite reference. Oblique phrases expressing a personal location were formally marked with a dative preposition, and were like genitive phrases in not allowing a nominal specifier, unless plural. The explanation for the absence of singular nominal specifiers in these positions is clear. The forms which are reconstructed as genitive and oblique prepositions *=n and *kan, respectively, both have a final nasal which historically had its source as the enclitic variant of a personal nominal specifier *ni.

It is unclear how many semantic distinctions were made by non-personal NS forms. At least in nominative and genitive NPs, a distinction occurred between definite and indefinite forms. Other unmarked NPs did not make this distinction because topics were already marked as definite, by their pre-predicate position, and by the form *sa which introduced them. Nominal predicates which were indefinite had no NS preceding them, neither did indefinite obliques. Datives were restricted to personal nouns (and pronominal forms), and were therefore

always definite. Only Ifugao reflects *=y as an indefinite NS, the enclitic form of *di. However other languages show the form as a frozen ending on some existential verbs with indefinite nominative complements. It is probably that *nan (*na + ligature *=n) was the default definite form, although it has been replaced in a number of languages, and in some, such as IFGKI, it has been reintroduced as a deictic specifier with medial reference. Both proximal *tu and distal *di also formed the basis of NS forms that alternated with the inherited default form *nan, see Table 58 for the set of reconstructed P-NCCo deictic forms.

Table 57 P-NCCo nominal specifiers

			UNM	GEN	DAT	OBL
-PRSN	-DFNT		di / =y	di		-
	+DFNT	DEFAULT	nan			
		PROX	tun			
DIST		din				
+PRSN	-PLRL		si / =s	Ø		-
	+PLRL		da			-

Table 58 P-NCCo basic demonstratives

PROX	tu
MED	na
DIST	di

4.1.6 Isinai

Isinai is primarily spoken in three *barangays*, Aritao, Dupax and Bambang, in the province of Nueva Vizcaya. The data that is given here is from notes taken during fieldwork in Aritao (Reid 1973). Further information on the forms discussed here and their phonological development can be found in Conant (1915), Scheerer (1918), Paz (1965), and Himes (1990, 1996). Isinai case-marking prepositions are shown in Table 59, and Isinai nominal specifiers are given in Table 60. Examples are provided in (34).

Isinai is a first-order branch of Central Cordilleran, and is unique among the other languages of the subgroup in having developed a general, post-nominal clitic definite determiner, =*ad* or =*ar*. The source of the determiner is clear. It is a reduced form of the ligature =*a* and a deictic form *di* (*=a + *di > =*ad*). In Reid (1974:543), I suggested that the use of =*ad* as a marker of Isinai past time nouns (a function it also has in neighboring Bayninan Ifugao) was the source of its general use as a definite determiner in Isinai. In that paper I also reconstructed **qad* (i.e., **ʔad*) as one of the P-CCO locative markers. I am now of the opinion that this was an incorrect reconstruction, the form doesn't occur, for example, with that function as a locative preposition in Isinai, even though the form is widely used in the language. Rather, the P-CCO preposition marking such phrases were **ʔidi* and possibly **ʔu=di* (from earlier prepositions plus a deictic noun **ʔi=di*, and **ʔu=di*,), from which developed P-NCCo **ʔid* and **ʔud*, and the locative *di* prepositions in ITG and ISI. The *a*-initial locative (and oblique) forms found in some of the NUCO languages, as well as in Lubuagan Kalinga, have developed by analogy with such forms, and by using an *a*-vowel template (*nan*, *san*, *ʔas*, *ʔad*, etc.), as noted above in sec. 4.1.5.1. The *ʔad* 'sequential adverb' forms of Guinaang

Kalinga, illustrated in (29), probably also have the same source, that is ligature =*a* plus a deictic form *di*. One other fact that should be mentioned about the distribution of Isinai =*ad* is that it is not simply a post-nominal definite determiner, it occurs at the outermost edge of full NPs, and thus serves to definitize the head of the NP, not necessarily the lexical item to which it is attached, as in (34)i,j, where it attaches to an already definite personal noun which is part of an embedded genitive phrase, but definitizes the nouns ‘dog’ and ‘house’, respectively.

The Isinai oblique enclitic =*t* does not have its source in an assimilative process as described above to account for the equivalent form in Limos Kalinga. In Isinai, **s* > *t* at the end of a word as a regular phonological process (see Himes (1990)). The oblique preposition has spread in Isinai and fused with the inherited locative form, thus partly neutralizing the case-marking function of the form.

The Isinai dative preposition is problematic in that it suggests a PCCO dative preposition **ka* + =*y* singular personal NS, a form reflected as such in Ifugao (see sec. 4.1.2.3), but not found in other Central Cordilleran languages. Isinai has apparently lost its reflex of **ka*, allowing the nominal specifier to become a dative preposition. The genitive preposition, enclitic =*n* following a vowel final form, and the prepositional marking of topics with *sa* are cognate with forms reconstructed above for PNCCO.

Isinai has a very restricted set of nominal specifiers, making do with two common noun forms *si* and *di*, marking a distinction between definite and indefinite. It should be noted that there is homophony between indefinite *si* which functions as a nominal specifier (it commutes with *di*, for example, in genitive noun phrases following the enclitic =*n* preposition), as in (34)a,b, and the preposition *si* which marks oblique case, and can allow either an indefinite noun to follow it (without a following determiner), as in (34)c, or a definite noun (with a following determiner), as in (34)d.

A common noun phrase in Isinai was pluralized as described above in sec. 4.1.2.2, by making it coreferential with a third person plural pronoun, a reflex of P-NLZN *=*da*, and by following it with a plural demonstrative, as in (34)k.

There are also two personal noun specifiers, the expected singular form *si* which occurs in unmarked NPs, and *ʔan* (a regular reflex of **kan*), which optionally occurs before singular personal nouns in genitive NPs, as in (34)i,j. The personal plural NS is a reflex of **da*, and functions as it does in other CCO languages.

Table 59 Isinai case-marking prepositions (adapted from Scheerer (1918) and Reid (1973))

	TOP	GEN	OBL	DAT	LOC
V]	sa	=n	=t	-	=tdi
C]		=Ø	si	ʔi	sidi

Table 60 Isinai nominal specifiers

-PRSN	-DFNT	si
	+DFNT	di
+PRSN	-PLRL	si
	+PLRL	da

(34) Isinai (Reid 1973)

- a. *Dattu si pituana?*
 where [NS living.place.3S]_{NOM}
 ‘Where does he live?’ (0004)

- b. *Dioy si ?isira = mi.*
 EXIST [NS food=GEN.1P]_{NOM}
 ‘We (ex.) have food.’ (00024)
- c. *?in?inumar mangia?bu si bavuy?*
 how catch [P [pig]]_{OBL}
 ‘How does one catch a pig?’ (0007)
- d. *Masaliw di bohat = ar si merkado = ar.*
 can.buy [NS rice=DET]_{NOM} [P [market=DET]]_{OBL}
 ‘Rice can be bought in the market.’ (0032)
- e. *Ampane = t lutuyutan di nuang = ad.*
 wallow=[P mud.hole]_{OBL} [NS water.buffalo=DET]_{NOM}
 ‘The water buffalo is wallowing in a mud hole.’ (0051.2)
- f. *Mari = a? ?amoy si bihat?*
 NEG=[NOM.1S] go [P [tomorrow]]_{OBL}
 ‘I will not go tomorrow.’ (0017)
- g. *Maram?ot si Juan.*
 heavy [NS Juan]_{NOM}
 ‘I will not go tomorrow.’ (0126.1.1)
- h. *?iator = mu di kwarta = r ?i Maria.*
 give=[NOM.1S] [NS money=DET]_{NOM} [P_{DAT} [Maria]]
 ‘Give the money to Maria.’ (0092)
- i. *Mango?ngot di ?asu = n (?an) Juan = ar.*
 black [NS dog=[P_{GEN} [NS Juan]]=DET]_{NOM}
 ‘John’s dog is black.’ (0187.1)
- j. *?amma?i ri beoy (?an) Juan = ar.*
 big [NS house [NS Juan]_{GEN}=DET]_{NOM}
 ‘John’s house is big.’ (0188.2)
- k. *Sin?unu = ra di ?ana? = mu = ar dari?*
 how.many=[3P]_{NOM} [NS child=[GEN.2S]]=DET]_{NOM} [those]_{NOM}
 ‘How many children do you have?’ (0032)

4.2 Proto-Central Cordilleran Reconstructions

Comparison of the Isinai system with that reconstructed for P-NCCO faces the problem that any comparativist faces when dealing with a bifurcating tree. Where differences exist between the branches, a decision must be made as to which form is conservative, maintaining the earlier system, and which is innovative. The prepositional forms are easiest to reconstruct to the parent of the two branches, P-CCO, however two problems are encountered.

The first is with the dative forms. The presence of a reflex of *kay is only found in Ifugao languages, but Isinai also shows evidence of it having once had that form as a dative preposition. Isinai also has a reflex of *kan, but functioning as a personal nominal specifier in genitive phrases, an innovative change from its reconstructed function in P-NCCO as a dative

preposition. I reconstruct both to the parent language, but with no clear idea as to the difference in function between them (if any).

The second problem is with the locative forms. As discussed earlier in this paper, I choose to reconstruct *ʔidi, *ʔudi and *di as locative prepositions. Since *di is also reconstructible as a distal demonstrative, and probably also functioned as a distal nominal specifier, in P-CCO it may not yet have fused with the earlier locative prepositions *ʔi, and *ʔu. That it could probably occur alone as a locative preposition is suggested by the fact that the locative enclitic form in nearly all the daughter languages is =*d*. I also choose to reconstruct P-CCO *=*y* as a nominative preposition, rather than as a nominal specifier, without an equivalent form following consonant-final forms, somewhat paralleling the genitive preposition. An *ʔi preposition needs to be reconstructed for P-SCO, the sister language P-CCO, suggesting that this was also its function in P-CCO.

The P-CCO nominal specifiers are reconstructed with the same general problems discussed in the preceding paragraphs, deciding what is conservative, and what is innovative. Specifically the question needs to be answered with the deictic non-personal specifiers. To what extent had the demonstrative forms become nominal specifiers? Since the process has clear parallels in other NLZN languages, and even in CCO languages the results differ depending on innovations which have taken place in the basic demonstrative set, I assume that this grammaticalization process took place independently in at least some of the daughter languages. I assume moreover that the proto-language also allowed demonstratives to become nominal specifiers, but am conservative in reconstructing them, even though it is fairly clear what the forms of the demonstratives were, see Table 58. I reconstruct only the distal nominal specifier *di as a deictic form, even though it is probable that others existed. A contrast existed between definite and indefinite specifiers, a contrast that is found in all the daughter languages of the group.

Table 61 Proto-CCO case-marking prepositions

	TOP	NOM	GEN	OBL	DAT	LOC
V]	sa	=y	=n	=s	=n / =y	=d
C]		∅	∅	si	kan / kay	ʔidi / ʔudi / di

Table 62 Proto-CCO nominal specifiers

-PRSN	-DFNT	di
	+DFNT	nan
	+DIST	di
+PRSN	-PLRL	si / =s
	+PLRL	da

Table 63 P-CCO basic demonstratives

PROX	tu
MED	na
DIST	di

4.3 Southern Cordilleran

The phonological and some morphological features of Southern Cordilleran languages (SCO) and their historical development have been carefully described in Himes (1998), in his examination of the internal relationships of the family and reconstruction of various forms to

their parent language, Proto-Southern Cordilleran (Proto-SCO). Himes groups three of the languages, Ibaloi (here referred to by its alternate name Inibaloi), Karao, and Kalanguya (frequently referred to in the literature by one of its alternate names, Kallahan) together in a subgroup he calls Nuclear Southern Cordilleran (NuSCO). The other two languages discussed by Himes are Pangasinan, a sister to NuSCO in a subgroup he labels West Southern Cordilleran (WSCO), and Ilongot, a first order branch of SCO. I shall begin by discussing the Nuclear Southern Cordilleran languages.

4.3.1 Pangasinan

Pangasinan case-marking prepositions and nominal specifiers are shown in Table 64 and Table 65, with examples in (35). The information given is taken from Benton (1971). Like other Southern Cordilleran languages, Pangasinan has neutralized oblique and genitive case-marking, using the same preposition for phrases expressing possessive constructions, actors of transitive constructions, and undergoers of dyadic intransitive constructions and triadic transitive constructions, as in (35)a,b. The preposition is *na*, with vocalism matching the locative preposition *ed* (from earlier *ʔad), as in (35)c,d. Following vowel-final words, *na* alternates with the nominal specifier, =y, in effect neutralizing also the morphological distinction between nominative and genitive case forms, as in (35)c,e. Following consonant-final words the nominative is distinctively marked with *so* (from *su), as in (35)f, (Benton 1971:47, 166). The locative preposition has an enclitic form =d which is the reduced form of the earlier locative form *di which functions now only as a base for lexicalized locative adverbs, as in (35)f,h. The loss of *di as a locative preposition, has apparently allowed vowel-grade harmony to match the singular and plural NS forms *si* and *di* (from earlier *da). That these are NS forms (that is not case-marked) is apparent from (35)k, where *si* introduces a personal genitive phrase which is coreferential with the third person singular genitive pronoun =to. When an appositional genitive phrase has a common noun lexical head, the NS form is =y, as in (35)l.

The basic demonstratives in Pangasinan are shown in Table 66. The medial and distal forms have a final alveolar nasal, a frozen, enclitic form of the ligature which linked these forms to the following lexical item. That these are now frozen is apparent from examples, such as (36)a,b, in which they occur as demonstrative pronouns, without any linked forms following them. The proximal form however is different, in that it does not have a final nasal when functioning as a demonstrative pronoun, as in (36)c, but it does when it is followed by a linked phrase, as in (36)d. The reason that the proximal form is different from the others is probably because the proximal form *ya* is an innovated form, replacing an earlier *tu, and the lexicalization of the nasal-final forms must have taken place prior to the innovation. This implies also that the form *may*, is no longer a sequence of a distal demonstrative and an earlier nominative preposition of an appositional phrases (originally *ma=y), but is also a frozen form, functioning as a nominal specifier, semantically indicating definiteness, rather than distal location.

The source of the genitive singular *nen* (from *nan) is innovative. Its source is problematic. The final nasal is probably the enclitic form of earlier *ni, while the form to which it is attached was possibly a third person singular genitive pronoun *=na. The same form, *nen*, occurs in other Southern Cordilleran languages, in which the old third person genitive pronoun has been replaced with *tu*, formerly a proximal demonstrative.

Table 64 Pangasinan case-marking prepositions

	TOP	NOM	GEN	DAT	LOC
V]	say				=d
C]		so	na	ki	ed / di

Table 65 Pangasinan nominal specifiers (adapted from Benton (1971:252))

		UNM	GEN
-PRSN	-DFNT	=y	
	+DFNT	may	
+PRSN	-PLRL	si	nen
	+PLRL	di	

Table 66 Pangasinan basic demonstratives (adapted from Benton (1971:88))

- PLRL	PROX	iyá
	MED	itán
	DIST	imán
+PLRL	PROX	iráya
	MED	irátan
	DIST	iráman

(35) Pangasinan Benton (Benton 1971)

- a. *Mangibatík **si** Pedro **na** manok.*
run.away.with [NS Pedro]_{NOM} [P_{GEN} chicken]
'Pedro will run away with a chicken' (p. 168)
- b. *Initdán = da = kamí **na** líbro.*
gave.to=[3P]_{GEN}=[NOM.1P] [P_{GEN} book]
'They gave us a book.' (p. 196)
- c. *Manalíw = ka = y kárne **ed** tindáan.*
buy=[NOM.2S]=[NS meat]_{OBL} [P_{LOC} [market]]
'You will buy meat in the market' (p. 54)
- d. *Linmá = d Ibále.*
went=[P_{LOC} [Manila]]
'He went to Manila.' (p. 57)
- e. *Antó = y agáwa = to?*
what=[NS do=GEN.3S]_{NOM}
'What did he do?' Lit. 'What was his doing' (p. 47)
- f. *Dapít diyá so abóng = to.*
near here [P_{NOM} house=GEN.3S]
'His house is around here.' (p. 60)
- g. *Komósta ira = y bálo = n kásal ey?*
how [3P]_{NOM}=[NS new=LG marry]_{NOM} eh
'How are the newly-weds, eh?' (p. 166)

- h. *Nananáp si Linda na manók díma=d hardín.*
 caught [NS Linda]_{NOM} [P_{GEN} [chicken]] there=[P_{LOC} [garden]]
 ‘Linda caught a chicken there in the garden.’ (p. 58)
- i. *Isínger=mo may asóm.*
 tie.up=GEN.2S [NS dog GEN.2S]_{NOM}
 ‘Tie up your dog.’ (p. 204)
- j. *Ibatík nen Pedro may manók.*
 run.away.with [NS Pedro]_{GEN} [NS chicken]_{NOM}
 ‘Pedro will run away with the chicken.’ (p. 168)
- k. *Anengneng=to=ak si Pedro.*
 seen=GEN.3S=[NOM.1S] [NS Pedro]_{GEN}
 ‘Pedro saw me.’ (p. 165)
- l. *kaabongán=da=y amimíga.*
 houses=GEN.3P=[NS friends]_{GEN}
 ‘houses of friends.’ (p. 165)

(36) Pangasinan Benton (Benton 1971)

- a. *Libró tan.*
 book [that.one]_{NOM}
 ‘That’s a book.’ (p. 89)
- b. *Sikató so analíw imán.*
 [3S]_{PRD} [P_{NOM} [bought [that.one]_{OBL}]]
 ‘He is the one who bought that.’ (p. 89)
- c. *Akán=mo ya.*
 eaten=GEN.2S [this.one]_{NOM}
 ‘This was eaten by you.’ (p. 89)
- d. *ya=n abóng=mi*
 [this.one =LG house=GEN.1P]
 ‘this house of ours’ (p. 89)

4.3.2 Nuclear Southern Cordilleran

4.3.2.1 Inibaloi

Roberta Ruffolo’s description of the language as spoken in Kabayan municipality of Benguet Province (Ruffolo 2005), is the best source of data currently available on the language. Her analysis of the forms that introduce noun phrases is similar to that presented in this paper, except that her terminology differs from mine. Ruffolo retains the term “determiner” to label what I am referring to in this paper as “preposition”. The forms shown in Table 67 are given in their phonemic representation. Like CCo languages, prepositions have enclitic forms following vowel-final words. Ruffolo states, “Two separate forms performing similar semantic functions are found in Ibaloy. One is the Locative form *chi* [/di/] ‘loc’ which is used for inanimate locations, the other is the Oblique determiner *so* (followed by its Genitive-marked complement) which is used to refer to animate locations, usually human goals and sources” (Ruffolo 2005:159). To be consistent with the terminology used in the previous sections on CCo languages, I rename Ruffalo’s ‘oblique’ form *so* as ‘dative’, since its

grammatical functions are identical, although the range of nominals that it specifies is broader than in the CCO languages, including as it does animate nouns that are not necessarily human or personal. Ruffolo states that the forms that mark inanimate undergoers of intransitive constructions are marked by genitive “determiners”, while those which mark animate undergoers of such constructions are marked by the oblique “determiner” *so*, and that this form takes an obligatory genitive complement. In this position it is probably innovative, replacing an earlier *ka, reflexes of which are found in other Southern Cordilleran languages, such as Pangasinan.

The distribution of *so* suggests that there are three homophonous forms involved. As described in the previous paragraph it functions as a dative preposition, as in (37)d. It also occurs as part of one of the two recognitional forms, *sota* and *nonta*, to both of which is attached the deictic nominal specifier *ta*, also functioning as a medial demonstrative in Inibaloi. The form *sota* is not marked for case, although I include it in with the case-marking prepositions in Table 67, in that it can appear as a recognitional deictic in topics, nominal predicates, as well as nominatives, as in (37)e,f, while the form *nonta* is case-marked as genitive (37)g, and is therefore a complex form, containing both a genitive preposition and a nominal specifier. Finally, *so* also occurs as a pronoun substituting for any specific oblique noun phrase, as in (37)h. While *no* does not appear independently as a genitive preposition, its presence as part of the form *nonta* is evidence that it was present as such at some earlier stage of the language. The other demonstrative forms, *ma* and *ya* also function as nominal specifiers, as in (37)b,c.

Inibaloi personal noun specifiers have two basic forms, depending on whether they occur in unmarked NPs, such as topics, predicates, and nominatives, or whether they occur in genitive phrases. The genitive singular *nen* (from *nan) is innovative. Its source is problematic. The final nasal is probably the enclitic form of earlier *ni, while the form to which it is attached was possibly a third person singular genitive pronoun *=na. The same form, *nen*, occurs in other Southern Cordilleran languages, in which the old third person genitive pronoun has been replaced with *tu*, formerly a proximal demonstrative. If this hypothesis is correct, it implies that the parent language required agreement between genitive pronouns both singular and plural and following noun phrases, and could have developed by contact with a language such as Kapampangan in which such agreement is still found. Genitive phrases in Inibaloi immediately follow the verb, giving support to this hypothesis.

Inibaloi does not have a distinct set of plural nominal specifiers, either for common or for personal nouns. Nouns are typically pluralized by adding the form *ira* following the noun, as in (37)i. In this position it is functioning as a determiner. The plural form can also occur between a NS and a following lexical noun, as in (37)j,k. In this position it functions as an unmarked third person plural pronoun, coreferential with the lexical noun.

Table 67 Inibaloi case-marking prepositions (adapted from (Ruffolo 2005:156))

TOP		NOM	GEN/OBL	DAT	LOC
say	V]	=y	=n		=d
	C]	ʔi /su	ni /nu	su	di

Table 68 Inibaloi deictic nominal specifiers (Ruffolo 2005:163)

		UNM	GEN
-PRSN	PROX	ya	
	MED	ta	
	DIST	ma	
	V]	=s	=n
+PRSN	C]	si	nen

(37) Inibaloi (Ruffolo 2005)

- a. *Nanmola i bii ni pagey.*
planted [P_{NOM} [woman]] [P_{GEN} [raw.rice]]
'The woman planted some rice.' (p. 140)
- b. *yet iasal=cha i=ma too.*
then put,in.death.chair = [3P]_{GEN} [P_{NOM} = [NS.DIST person]]
'then they will put that person on the death chair.' (p. 163)
- c. *Sipa=y inongkal ni=ya apag?*
who=[P_{NOM} [bought]] [P_{GEN} = [NS.PROX meat]]
'Who bought this meat?' Lit. 'Who was the buyer of this meat?' (p. 163)
- d. *cha=ka=idoado so=n Matono.*
[3P]_{GEN} = CNTV = pray [P_{DAT} = GEN [Matono]]
'They habitually pray to Matono' (p. 157)
- e. *jet dimaw so=ta naama chi baley=cha.*
and.then went [P.REC = [NS old.man]]_{NOM} [P_{LOC} [house = [3P]_{GEN}]]
'and then the old man went to their house' (p. 159)
- f. *So=ta bedat=cha ket etattooan.*
[P.REC = NS [skin = [3P]_{GEN}]]_{TOP} TPLK tattooed
'As for their skin, it was tattooed' (p. 168)
- g. *Inaschaw ja pasiya so=ta aki ja engoney non=ta otot ja imoli.*
surprised LG very [P.REC = [NS monkey]]_{NOM} LG see [P.REC.GEN = [NS mouse LG return]]
'The monkey was very surprised to see the mouse that came back' (p. 160)
- h. *Ekay'ala=k so.*
just.got = [GEN.1S] OBL.3S
'I just got it.' (p. 168)
- i. *Idi in'an=cha so=ta dokto ira,...*
when saw = [3P]_{GEN} [P.REC = [NS sweet.potato DET.PLRL]]_{NOM}
'When they saw the sweet-potatoes, ...' (p. 341)
- j. *Aspolen=to=d simbaan si ira Sarchila.*
meet = [GEN.3S] = [P_{LOC} [church]] [NS [3P] Sarchila]_{NOM}
'He will meet Sarchila and her family at church.' (p. 342)
- k. *Nem so=ta ira talaw, makedsang ira.*
but [P.REC = [NS [3P] star]]_{TOP} strong [3P]_{NOM}
'But as for the stars, they are strong.' (p. 342)

1. *Say daki, ingda=to=y tapey.*
 [P man]_{TOP} got=GEN.3S=[P [rice.wine]]_{NOM}
 ‘The man, he got the rice wine.’ (p. 158)

4.3.2.2 Karao

Karao case-marking prepositions and nominal specifiers are shown in Table 69 and Table 70, with examples in (38). Although most of the nominative NPs in the published texts in Brainard (2003) are marked with a preposition, as in (38)a, some of them are unmarked and have only a nominal specifier or demonstrative pronoun preceding the noun, as in (38)b,h. Vowel-grade harmony has also brought about an innovation in the Karao locative forms. Where pre-Karao genitive and locative prepositions had an *i*-vowel, matching the nominative preposition and corresponding to the forms found in Inibaloi, present-day Karao has an *a*-vowel. When the genitive preposition is immediately followed by one of the nominal specifiers, or by one of the demonstrative pronouns, the earlier form *ni* is retained, otherwise the form is *na*. Similarly, when the locative preposition is immediately followed by one of the nominal specifiers, or by one of the demonstrative pronouns, the earlier form *chi* (from **di*) is retained, as in (38)c-e, otherwise the form is *cha*, as in (38)a. The preposition marking topics and predicates is *say* only when no specifier or demonstrative follows it, otherwise the form is a reflex of **sa* (KRW *se*), as in (38)f,g.

Demonstrative pronouns in Karao are case marked and retain a frozen final ligature. They also require a ligature when followed by another noun, see Table 71 and (38)h,i. The nominal specifiers however do not have either a frozen ligature or other explicit ligature before the following noun.

Karao people claim that they originally came from the Bontoc area, and offer cultural similarities with Bontoc to support their claims. There is little evidence from the language to support it, although the marking of genitive personal noun phrases is similar to what is found in Central Cordilleran languages. Following a consonant-final word, genitive personal nouns are unmarked, as in (38)j; following vowel-final words only the enclitic genitive preposition, =*n*, occurs, but no nominal specifier.

Plural phrases are preceded by an independent third person pronoun which is coreferential with the following case-marked phrase. The form of this pronoun is typically a regular reflex of **?ida*, however when it precedes a nominative phrase with enclitic =*y*, the form is *iri* (/?*idi*/). This vowel change is not regular, since an /*ay*/ sequence is common in the language, and can only be accounted for by vowel-grade harmony, as in (38)k,l.

Although there are instances of the use of *so* in the Karao texts, Brainard (2003:8) states “The morpheme *so* appears to have been borrowed from Ibaloi... When *so* is present [in a dependent clause] it is coreferential with the object of the independent counterpart of the dependent clause.” In this environment it functions either as an oblique deictic pronoun or, when followed by a noun, is an oblique nominal specifier.

Table 69 Karao case-marking prepositions (adapted from Brainard (2003:131))

TOP / PRD		NOM	GEN/OBL	LOC
say / se	V]	=y	=n	=d
	C]	?i	na / ni	cha / chi

Table 70 Karao nominal specifiers

-PRSN	PROX	ya
	MED	ta
	DIST	ma
+PRSN		si / =s

Table 71 Karao demonstrative pronouns (adapted from Brainard (2003:137))

	TOP / PRD	NOM	GEN/OBL	LOC
PROX	se=yay	?i=yay	ni=yay	chi=yay
MED	se=tan	?i=than	ni=than	chi=than
DIST	se=man	?i=man	ni=man	chi=man

(38) Karao (Brainard 2003)

- a. *Ig=wa no=y abo-nan cha Bontok.*
 EXIST=DEM also=[P_{NOM} [men's.house]] [P_{LOC} [Bontoc]]
 'There is also a men's house in Bontoc.' (p. 10)
- b. *Idi metaen=cha kono ma balat...*
 When see/look=[3P]_{GEN} REPT [NS.DIST banana]_{NOM}
 'When they looked at the banana trees...' (p. 45)
- c. *Simagwi la ire=d Vizcaya chi=ya Kirang.*
 came DIR [3P]_{NOM}=[P_{LOC} [Vizcaya]] [P_{LOC}=[NS.PROX Kirang]]
 'They came here to Vizcaya, to this place Kirang.' (p. 10)
- d. *Simagwi=che=d ta Diyang kono.*
 came=[3P]_{NOM}=[P_{LOC} [NS.MED Diyang]] REPT
 'They came to Diyang.' (p. 10)
- e. *Isonga di=wa Vizcaya...*
 that.is.why [P_{LOC}=[NS.DIST Vizcaya]]
 'That's why there in Vizcaya...' (p. 10)
- f. *Se=ma balat i kidat=to.*
 [P_{PRD}=NS.DIST banana [P_{NOM} [bit=GEN.3S]]]
 'The banana tree is what it bit.' (p. 45)
- g. *Se=ma timpo=n onkawas, nat mebedin=a maodi.*
 [P_{TOP}=NS.DIST time=LG wasted NEG possible=LG get.back]
 'Wasted time, it is not possible to get back.' (p. 130)
- h. *Bintihan=cha man=a dogad.*
 ran=[3P]_{GEN} [DEM=LG place]_{NOM}
 'They ran away from that place.' (p. 10)
- i. *Gwara kono=y samat ire=n tan=a iyan-iyay-iyay chi=wan.*
 EXIST REPT=[P_{NOM} [remains [3P]=[P_{GEN} [DEM=LG used.to.reside P_{LOC}=DEM]]]]
 'There are remnants of those who used to live there' (p. 11)

- j. *Insalaknib=ko=y biyag Pagit.*
protected=[GEN.1S]=[P_{NOM} [life [Pagit]_{GEN}]]
'I protected Biyag's live.' (p. 60)
- k. *Aofa iri=y too.*
hungry [3P]=[P_{NOM} [person]]
'The people are hungry.' (p. 132)
- l. *A-daen ira na too=y bekas.*
get [3P] [P_{GEN} [person]]=[P_{NOM} [rice]]
'The people got the rice.' (p. 133)

4.3.2.3 Kalanguya

Keley-i Kalanguya (KLNKL) case-marking prepositions and nominal specifiers are shown in Table 72 and Table 73, with examples in (39). Like other Southern Cordilleran languages, Keley-i has neutralized oblique and genitive case-marking, using *ni* for both, as in (39)c,d, and has replaced even the full form of the ligature **na* with *ni*, as in (39)e. While Karao shows vowel grade harmony between *a* and *i* forms, with the latter being the base to which demonstrative forms have become encliticized, KLNKL shows vowel-grade harmony between *a* and *u* forms, with the latter being the base to which demonstrative forms have become encliticized. The proposed development of the demonstratives is given in Table 74. (An extensive discussion of the various functions of KLNKL demonstratives is provided in D. Hohulin and Hale (1977), with examples which illustrate not only the demonstratives given in Table 74, but other sets with both *a* and *i* initial vowels). The function of the NS *hu* (from **su*) is different from that in Inibaloi, in that it occurs only in unmarked NPs; and the demonstrative forms which are based on it likewise only occur in unmarked NPs, as in (39)e,f.

Singular personal specifiers, genitive *nan* (optionally zero) and unmarked *hi*, occur with their inherited vocalism, as in (39)g,h, but the plural NS is *di*, with innovated vowel (originally **ʔida*), as in (39)i.

(39) Keley-i Kalanguya (Hohulin, L. and A. Hale 1977)

- a. *Inha-ad=ku libluh di det-al.*
placed=[GEN.1S] [book]_{NOM} [P_{LOC} floor]
'I placed the book on the floor.' (p. 238)
- b. *Inang-ang=tu annel=tu=d diggal.*
saw=[GEN.3S] [body]_{NOM}=[GEN.3S]=[P_{LOC} mirror]
'He saw himself in a mirror.' (p. 239)
- c. *Ya kalneru, ag=da amta anmenang-ang ni kennen=da.*
[P_{TOP} [sheep]] not=[3P]_{GEN} know look [P [food]=[3P]_{GEN}]_{OBL}
'Sheep, they don't know how to look for their food.' (p. 244)
- d. *Binulluan=ku ngamay ni mahhiken.*
washed=[GEN.1S] [hand [P [boy]]]_{GEN}_{NOM}
'I washed the hands of the boy.' (p. 238)
- e. *Huyya hu agi=k ni nenagun ni hi-gak di Antipolo.*
this.one [NS brother=GEN.3S]_{NOM} [LG advised [P [3S]_{OBL} [P_{LOC} Antipolo]]
'This is my brother, who advised me in Antipolo.' (p. 250)
- f. *Hi apu hi Pungad, hiningbu=tu hu alma.*
[NS grandfather [NS Pungad]]_{TOP} feasted=[GEN.3S] [NS [crab]]_{NOM}
'Grandfather Pungad, he feasted on the crab.' (p. 246)

- g. *Binaddangan nan Juan hi Bil.*
 helped [P_{GEN} John] [NS Bill]_{NOM}
 ‘John helped Bill.’ (p. 241)
- h. *Imbunget ama hi Buyyakew.*
 helped [father]_{GEN} [NS Buyyakew]_{NOM}
 ‘John helped Bill.’ (p. 254)
- i. *Nan-imbabaddang di Juan hi Bil et hi Mely.*
 helped.each.other [P [John]]_{GEN} [[NS Bill] and [NS Mary]]_{NOM}
 ‘John, Bill and Mary helped one another.’ (p. 241)

Table 72 Keley-i Kalanguya case-marking prepositions (adapted from Hohulin and Hale (1977))

TOP		NOM	GEN	LOC
	V]	Ø	=n	=d
ya	C]	Ø	ni / Ø	di

Table 73 Keley-i Kalanguya nominal specifiers (adapted from Hohulin and Hale (1977))

			UNM	GEN
-PRSN	DEFAULT		hu	
	PROX		eya	
	MED		etan	
	DIST		eman	
+PRSN	-PLRL	V]	=h	
		C]	hi	nan
	+PLRL		di	

Table 74 The development of Keley-i Kalanguya demonstratives

Stage 1 Nominal specifier + enclitic demonstrative pronouns

	UNMARKED	MARKED
PROX	*su=?iya N	*nu=niya N
MED	*su=?itan N	*nu=nitan N
DIST	*su=?iman N	*nu=niman N

Stage 2 Loss of medial, unstressed vowel

	UNMARKED	MARKED
PROX	*su=?ya N	*nu=nya N
MED	*su=?tan N	*nu=ntan N
DIST	*su=?man N	*nu=nman N

Stage 3 Assimilation of glottal stop to following consonant; *s > h

	UNMARKED	MARKED
PROX	huyya N	nunya N
MED	huttan N	nuntan N
DIST	humman N	nunman N

4.3.3 Proto-Nuclear Southern Cordilleran

The form of Keley-i Kalanguya demonstratives suggests that demonstrative pronouns in its immediate parent language had two forms, one set was unmarked for case and was enclitic to *ʔi, while the other set was marked for genitive/oblique case and was enclitic to *ni. After these forms had become lexicalized, the unmarked forms were encliticized to *su, while the genitive/oblique forms were encliticized to *nu.

Table 75 P-NuSCo basic demonstratives

PROX	ya
MED	tan
DIST	man

4.3.4 Ilongot

Unfortunately, I have relatively little data on the syntax of Ilongot. The glossary in the Appendix of Rosaldo (1980), provides a considerable number of unanalyzed sentence examples for which I have provided tentative analyses in 0. Similarly I have given tentative analyses of sentence examples found in Vanoverbergh (1937) and listed in 0. The forms I have analyzed as prepositions and nominal specifiers taken from these examples appear in Table 76 and Table 77.

There are several forms that are of interest, in the light of what is found in the other Southern Cordilleran languages. The nominative preposition *ʔi* / =y is optional, present in 0a and 0a,b, but absent in 0b and 0c,d,e. There are several enclitic =n forms in the data. The source of =n attached to the prepositions in 0b,e is unclear, but is possibly an enclitic form of *na*, a shortening also found in some Central Cordilleran languages. In 0d, however the form attached to *tóo* ‘person’ precedes a demonstrative, and is probably the enclitic form of a set of *ni*-based demonstrative adverbs, which includes *nima* ‘there’. This does not account however for the form attached to the negative existential *naawá*, since the semantics do not justify such an analysis. One possible consideration here is that the full form is a borrowing of ILK *awán*.

It is worth noting also that although Ilongot, as a first-order branch of Southern Cordilleran reflects the Proto-Southern Cordilleran innovation by which the third person genitive pronoun *na was replaced with *tu, there are forms which appear to be a reflex of *tu found in the data which are not genitive pronouns. These are problematic in that they may be reflexes of the proximal deictic *tu, or they may be reflexes of *su, since in Ilongot *s > t and *t > s before a high front vowel. Since other Southern Cordilleran languages show *so* (from *su) as either a nominal specifier occurring in unmarked positions or as a nominative preposition, and some of the sentences give no semantic evidence that a proximate demonstrative is involved, e.g., 0h,i, I assume that these are homophonous forms, one is a demonstrative, as in 0g, and the other is a nominative preposition as in 0h and 0c.

The forms *say* and *su* appearing in 0e and 0f are clearly borrowings from a language in which *s > t has not taken place. The form *su* is also listed by Rosaldo (1980:236) as a third person singular oblique free form (as in 0f), corresponding to its functions also in Inibaloi (37)f,h.

Both sets of data show the neutralization of genitive and oblique forms, as in other Southern Cordilleran languages, with both being marked with *ni* when functioning as the base

to which deictic forms are encliticized, as in 0c. Rosaldo's data also includes sentences in which the genitive form is *nu*, or *nun*, as in 0d.

Table 76 Ilongot prepositions

TOP		NOM	GEN	LOC
say	V]	=y / =t		=d
	C]	?i / tu	ni / nu	di

Table 77 Ilongot nominal specifiers (adapted from Vanoverbergh (1937))

-PRSN		PROX	tu
		MED	ta
		DEFAULT	ma
+PRSN		-PLRL	si
		+PLRL	di

(40) Ilongot (Rosaldo 1980)

- a. *?adugim ?i=ma lakay.*
 bear.2S [P_{NOM}=[NS old.man]]
 'Have patience with the old man.' (p. 238)
- b. *?adugim ta ?anak.*
 bear.2S [NS child]_{NOM}
 'Be patient with your child.' (p. 238)
- c. *na?akinan=ak ni=ma ngired.*
 caught=NOM.1S [P_{GEN}=[NS illness]]
 'I caught the illness.' (p. 238)
- d. *...?eg=kami ?amumur ?engangaa nu side.*
 ...NEG=NOM.1P equally get [P_{GEN} [game]]
 '...we don't equally get game.' (p. 238)
- e. *na?alimet=ak ten say dita ?emul.*
 itchy=NOM.1S because [P_{PRD} [NS.PLRL flies]]
 'I feel itchy because of the flies.' (p. 239)
- f. *?awa=y ?ita?rat=ku=su*
 NEG.EXIST exchange=GEN.1S=[OBL.3S]
 'I don't have anything to exchange for it.' (p. 241)
- g. *nabētangan=tu=y ma ?anak.*
 ashamed=[this.one]_{NOM}=[P_{NOM} [NS child]]
 'The child is ashamed.' (p. 242)
- h. *?embiray tu rinotom.*
 alive [P_{NOM} cooked.2S]
 'The food you cooked is still raw.' (p. 243)

- i. *ngade = t berita = m*
 what=[P_{NOM} news.2S]
 ‘What’s the news?’ (p. 241)

(41) Ilongot (Vanoverbergh 1937)

- a. *naawá = y tóo*
 NEG.EXIST=[P_{NOM} [person]]
 ‘There are no more men.’ (p.169)
- b. *pigey i = n kapasí = to*
 when [P_{NOM}=[NS die=GEN.3S]]
 ‘When did he die?’ (p.163)
- c. *sidiáy to abúŋ = si*
 this [P_{NOM} house=[1+2P]_{GEN}]
 ‘This is our (incl.) house.’ (p.139)
- d. *naawán di tóo = nma = d abúŋ*
 NEG.EXIST [NS.PLRL person]_{NOM} = [there]=[P [house]]_{LOC}
 ‘There are no people in the house.’ (p.169)
- e. *měn-angěangět = ka ne = n lěgěm*
 bury=NOM.2S [P_{GEN}=[NS body]]
 ‘You bury the body.’ (p.169)

4.4 Proto-Southern Cordilleran Reconstructions

Table 78 Proto-Southern Cordilleran case-marking prepositions

	NOM	GEN/OBL	LOC
V]	=y	=n	=d
C]	?i	na / ni	di

Table 79 Proto-Southern Cordilleran deictic nominal specifiers

proximal	tu
medial	ta
distal	ma

4.5 The Altan Languages

4.5.1 Northern Alta

(42) Northern Alta (Reid 1987)

- a. *pinómayúŋ aná? = i.*
 stood.up [child=DET]_{NOM}
 ‘The child stood up.’ (001)
- b. *minəŋŋan in aná? (* = ?i) ti maŋga = ?i.*
 stood.up [NS child]_{NOM} [P_{OBL} [mango=DET]]
 ‘The child ate some of the mangos.’ (017)
- c. *in aná? (* = i), pinómayúŋ.*
 [NS child]_{TOP} stood.up
 ‘As for the child, it stood up.’ (002)
- d. *innan ni aná? = i in maŋga.*
 ate [P_{GEN} [child=DET]] [NS mango]_{NOM}
 ‘The child ate the mango.’ (020)
- e. *isinúlat ni ulétaw in ɲaddən nən madí?it.*
 wrote [P_{GEN} [bachelor] [NS name [P_{GEN} maiden]]]_{NOM}
 ‘The young man wrote the name of the young woman.’
- f. *awən tə bulaklak siddə = n madí?it.*
 NEG.EXIST [P_{OBL} [flower] [3P=LG maiden]]_{NOM}
 ‘The ladies have no flowers.’ (073)
- g. *napakasədəm ti?say bəli.*
 very.dark [P_{LOC} [house]]
 ‘It’s very dark in the house’ (091)
- h. *i?iyay aná? in pinómayúŋ, bisa i?ina ulétaw = ?i.*
 [DEM.DIST child]_{PRD} [NS [stood.up]]_{NOM} not [DEM.MED bachelor=DET]_{PRD}
 ‘That child is the one who stood up, not that young man.’ (091)

Table 80 Proto-Altan case-marking prepositions

TOP	GEN	OBL	LOC
i	ni	tə	ti

Table 81 Proto-Altan basic demonstratives

proximal	
medial	na
distal	ya

Table 82 Proto-Altan locative demonstratives

proximal	tiʔsin
medial	
distal	tiʔsay

Table 83 Proto-Altan nominal specifiers

proximal	
medial	iʔina (N)
distal	iʔiyay (N)

4.6 Proto-Alta Reconstructions

4.7 Proto-Meso-Cordilleran Reconstructions

4.8 Northern Cordilleran

Table 84 Proto-Northern-Cordilleran Phonological System

p	t	k	i	u
b	d	g	ə	
m	n	ŋ	a	
	s			
	l		'CV	
	r			
w	y			

4.9 Cagayan Valley Languages

4.9.1 Itawis

4.9.2 Isneg

Table 85 Isneg nominal specifiers (Barlaan 1977:121)

	Unmarked		Genitive			Locative		
	Sg.	Pl.	Sg.	Pl.	Sg.	Pl.		
common -REMT (“non-past, near”)	ya	daya	na	naya	daya	ki	kiya	daya
common +REMT (“past, far”)	tu	datu		natu	datu	ka	kitu	datu
personal	Ce / nge	de	ne		de	ke		kade / kitu

4.9.3 Malaweg

4.9.4 Gaddang

In Gaddang, *ʔi is reflected as a Nominative marker only on demonstratives (Walrod 1976:29).

(43) Gaddang (Walrod 1976)

Bəkkən = nu i = no gafa.
 break=GEN.3s [P=NS jar]_{NOM}
 ‘Break the jar.’ (p. 29)

Table 86 Ga’dang case-marking prepositions

NOM	GEN	OBL	LOC		TEM	
			-REMT	-PAST	+REMT	+PAST
ino	na	si			so / sey / se	

Table 87 Ga’dang basic demonstratives

proximal	to
medial	no
distal	

4.9.5 Ibanag

In Ibanag spoken in Tuguegarao (Brandes and Scheerer 1927-28:31), *i* appears only before vowels. Before a consonant it is a proclitic causing gemination of the consonant. If the segment preceding *i* is a consonant, it also geminates.

(44) Ibanag (Brandes and Scheerer 1927-28)

- a. *Natay i atawa na iloko ta ili = mi.*
 dead [P wife LG Iloko [P_{LOC} town=GEN.1+2S]]_{NOM}
 ‘The wife of the Ilokano in our town is dead.’ (p. 31)
- b. *Kwam = mu lagúz = zik = kinagi = k nikáw.*
 do=GEN.2S then=[NS=said=GEN.1S]_{NOM} [LOC.2S]
 ‘Do then what I said to you.’

4.10 North-Eastern Luzon languages

Table 88 Proto North-Eastern Luzon nominal specifiers

			Unmarked	Genitive	Locative
-plrl	-prsn	-remt	=i	ni	ti/di
		+remt	=u/=a	nu/na	tu/ta
	+prsn		ti	ni	
+plrl	-prsn	-remt	di		
		+remt	du		
	+prsn		da		

4.10.1 Paranan

In Paranan (Finkbeiner 1983:9) *i* marks nominative common noun phrases whose referents are "present, seen, specific, or actual". These features define what I referred to above as PROXIMATE. On the other hand, nominative common noun phrases that are "absent, not seen, unspecific, or non- actual", features which define REMOTE, are marked by *en*.

Table 89 Paranan markers (Finkbeiner 1983:9)

			Unmarked	Genitive	Locative
-plrl	-prsn	-remt	i	ni	ti/di
		+remt	en	nen	ten
	+prsn		ti	ni	kən
+plrl	-prsn	-remt	i N hidi	ni N hidi	ti N hidi
		+remt	en N hidi	nen N hidi	ten N hidi
	+prsn		de		kən de

4.10.2 Palanan Agta

4.10.3 Casiguran Dumagat

Table 90 Casiguran Dumagat markers

			Nom	Gen	Loc
-plrl	-prsn	-remt	i	na	ta
		+remt	tu	no	to
	+prsn		ti	ni	
+plrl	-prsn	-remt	di		
		+remt	du		
	+prsn		da		

Headland and Headland (1974) has two distinct sets of common noun markers. The singular Nominative forms are *i* and *tu*. The distinction between these forms is somewhat complex. The first marks nouns that are “alive, known, actual, in sight, present in time...” (ex. ??). The second set marks nouns that are “dead, unknown, out of sight, past in time...” (ex. ??) (*ibid* p. xxxii). In addition Headland (p.c.) notes that “these definitions are grossly inadequate and in some contexts these labels are not only incorrect, but the opposite of what they imply.” Thus although *i* is said to mark nouns that are general, and *tu* marks those that are specific, it is *tu* that marks indefinite nouns after existential verbs (ex. ??), but *i* which marks indefinite nouns when they are first introduced into a discourse. Furthermore although *i* is said to mark nouns that are general, the enclitic determiners =*eh* and =*a* occur only on nouns that are marked with *i*. The clitic “adds the meaning of definiteness or exactness to the thing or place referred to.”

(45) Casiguran Dumagat Agta (Headland and Headland 1974:xxxii)

- a. *Negkagi i anak.*
spoke [NS.+prxm child]_{NOM}
‘The child spoke (you know the one).’
- b. *Negkagi tu anak.*
spoke [NS.-prxm child]_{NOM}
‘The child spoke.’
- c. *Éwan kame tu begas.*
none NOM.1+2P [NS.-prxm rice]_{OBL}
‘We have no rice.’
- d. *i niyog a ina*
NS.+prxm coconut LG there (near you)
‘that coconut there (near you)

Casiguran Dumagat genitive *no* and locative *to* appear to have developed from sequences of **na+u* and **ta+u* respectively, rather than from **nu* and **tu* with vowel lowering, since high vowel lowering only occurred when the vowel was stressed.

References

- Allen, Janet. 1978. Kankanaey adjuncts. *Studies in Philippine Linguistics* 2(1):82-102.
- Allen, Lawrence P. 1975. Distinctive features in Kankanay. *Philippine Journal of Linguistics* 6(2):23-30.
- _____. 1977. Reduplication and cyclical rule ordering in Kankanaey morphophonemics. *Studies in Philippine Linguistics* 1(2):280-295.
- Barlaan, Rodolfo R. 1977. Fact and fiction in Isneg narrative discourse. *Studies in Philippine Linguistics* 1(2):110-142.
- Bellwood, Peter and Eusebio Dizon. 2005. The Batanes archaeological project and the "out-of-Taiwan" hypothesis for Austronesian dispersal. *Journal of Austronesian Studies* 1(1):1-36.
- Bellwood, Peter et al. 2003. Archaeological and palaeoenvironmental research in Batanes and Ilocos Norte Provinces, Northern Philippines. *Indo-Pacific Prehistory Association Bulletin* 11:141-161.
- Benton, Richard A. 1971. *Pangasinan reference grammar*, PALI Language Texts: Philippines. Honolulu: University of Hawai'i Press.
- Blust, Robert A. 1991. The Greater Central Philippine hypothesis. *Oceanic Linguistics* 30(2):73-129.
- _____. 2004. Austronesian nasal substitution: a survey. *Oceanic Linguistics* 43:73-148.
- _____. 2005. A note on the history of genitive marking in Austronesian languages. *Oceanic Linguistics* 44:215-222.
- Brainard, Sherri (Compiler). 2003. *Karao Texts*, Studies in Philippine Languages and Cultures, vol. 13. Manila: Linguistic Society of the Philippines and the Summer Institute of Linguistics.
- Brandes, Carlos O. and Otto Scheerer. 1927-28. On sandhi in the Ibanág language. In *The Archives*, vol. 6, Otto Scheerer, 5-42. Manila: University of the Philippines.
- Charles, Mathew. 1974. Problems in the reconstruction of Proto-Philippine phonology and the subgrouping of the Philippine languages. *Oceanic Linguistics* 13:457-510.
- Conant, Carlos E. 1911. The RGH law in Philippine languages. *Journal of the American Oriental Society* 31:70-85.
- _____. 1912. The pepet law in Philippine languages. *Journal of the American Oriental Society* 32:246-279.
- _____. 1915. Grammatical notes on the Isinai language (Philippines). *Journal of the American Oriental Society* 35:289-292.
- Diessel, Holger. 1999. *Demonstratives: Form, Function and Grammaticalization*. Amsterdam/Philadelphia: John Benjamins.
- Dyen, Isidore. 1965. *A lexicostatistical classification of the Austronesian languages*, Supplement to International Journal of American Linguistics Vol. 31, No. 1, 1965. Indiana University Publications in Anthropology and Linguistics, Memoir 19 of the International Journal of American Linguistics. Baltimore: Waverly Press.
- _____. 1972. Non-gradual regular phonetic change involving sibilants. In *Homage à André G. Haudricourt; Langues et Techniques. Nature et Société, 1. Approche Linguistique*, Jacqueline M.C. Thomas and Lucien Bernot, 95-99.
- Ferreirinho, Naomi. 1993. *Selected topics in the grammar of Limos Kalinga, the Philippines*, Pacific Linguistics, vol. B-109. Canberra: Department of Linguistics, Research School of Pacific Studies, the Australian National University.
- Finkbeiner. 1983. Paranan noun markers. **MS**. Library of the Summer Institute of Linguistics, Manila.
- Fukuda, Takashi. 1980. Discourse features in Kadaklan. *Studies in Philippine Linguistics* 4(1):71-100.
- Gieser, C. Richard. 1963. *A grammatical sketch of Kalinga*. Nasuli, Malaybalay, Bukidnon: Summer Institute of Linguistics.
- _____. 1972. Kalinga sequential discourse. *Philippine Journal of Linguistics* 3(1):15-34.
- Gordon, Raymond G., Jr. (Ed.). 2005. *Ethnologue: Languages of the World*, Fifteenth edition. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com/>
- Headland, Thomas N. and Janet D. Headland. 1974. *A Dumagat (Casiguran) - English dictionary*, Pacific Linguistics C-28. Canberra: Research School of Pacific Studies, The Australian National University.
- Hettick, Donna and Carolyn Kent. 1967. Uses of the particle *di* [in Northern Kankanay]. **MS**. Library of the Summer Institute of Linguistics, Manila.
- Hettick, Donna and Judy Wallace. 1978. Northern Kankanay texts. *Studies in Philippine Linguistics* 2(2):1-28.
- Himes, Ronald S. 1990. An algorithm for the derivation of Isinai from Proto-Central Cordilleran. *Philippine Journal of Linguistics* 21(2):1-13.
- _____. 1996. Isinai: reconstructions and relations. *Philippine Journal of Linguistics* 27(1,2):83-109.

- _____. 1998. The Southern Cordilleran group of Philippine languages. *Oceanic Linguistics* 37(1):120-177.
- _____. 2004. The relationship of Umiray Dumaget to other Philippine languages. *Oceanic Linguistics* 41(1):1-20.
- Himmelmann, Nicholas. 1996. Demonstratives in narrative discourse: A taxonomy of universal uses. In *Studies in Anaphora*, A. B. Fox, 205–254. Amsterdam: John Benjamins.
- Hohulin, Dick and Austin Hale. 1977. Physical, temporal and cognitive location in Keley-i demonstratives. *Studies in Philippine Linguistics* 1(2):209-230.
- Hohulin, Lou and Austin Hale. 1977. Notes on Keley-i relational grammar. *Studies in Philippine Linguistics* 1 (2):231-263.
- Kikusawa, Ritsuko and Lawrence A. Reid. 2003. A Talubin text with wordlist and grammatical notes. *Journal of Asian and African Studies* 65:89-148.
- Lambrecht, Frans Hubert. 1978. *Ifugaw-English dictionary*. Baguio City, Philippines: The Catholic Bishop Apostolic of the Mountain Province.
- Liao, Hsiu-Chuan. 2004. Transitivity and ergativity in Formosan and Philippine languages. Ph.D. dissertation, University of Hawai'i.
- Llamzon, Teodoro A. and Ma. Teresita Martin. 1976. A subgrouping of 100 Philippine languages. In *South-East Asian Linguistic Studies Vol. 2*, Dang Liem Nguyen, 141-172. Canberra: Australian National University.
- Mcfarland, Curtis D. 1977. *Northern Philippine linguistic geography*, Study of Languages and Cultures of Asia and Africa Monograph Series. Tokyo: Tokyo University of Foreign Studies.
- _____. 1980. *A linguistic atlas of the Philippines*, Study of Languages and Cultures of Asia and Africa Monograph Series No. 15. Tokyo: Tokyo University of Foreign Studies.
- Newell, Leonard E. 1993. *Batad Ifugao dictionary with ethnographic notes*, Linguistic Society of the Philippines Special Monograph Issue, Number 33. Manila: Linguistic Society of the Philippines.
- Paz, Consuelo J. 1965. -AD in Isinai. *Asian Studies* 3(1):116-125.
- Racho, Alberto L. 1979. Some phrase-structure rules for Kiangan Ifugao noun and verb phrases. *Philippine Journal of Linguistics* 1(2):85-97.
- Reid, Lawrence A. 1973. Isinai field notes. Unpublished database file.
- _____. 1974. The Central Cordilleran subgroup of Philippine languages. *Oceanic Linguistics* 13:511-560.
- _____. 1976. *Bontok-English Dictionary, with English Bontok Finder List*. Canberra: Pacific Linguistics C-36.
- _____. 1979. Towards a reconstruction of the pronominal systems of Proto-Cordilleran, Philippines. In *South-East Asian Linguistic Studies*, vol. 3, Dang Liem Nguyen, 259-275. Canberra: Department of Linguistics, Research School of Pacific Studies, The Australian National University.
- _____. 1981. Proto-Austronesian genitive determiners. In *Linguistics across continents: Studies in honor of Richard S. Pittman*, Andrew B. Gonzalez, FSC and David Thomas, 97-105. Manila: Summer Institute of Linguistics (Philippines) and Linguistic Society of the Philippines.
- _____. 1987. Alta field notes. Unpublished database file.
- _____. 1991. The Alta languages of the Philippines. In *VICAL 2: Western Austronesian and contact languages: Papers from the Fifth International Conference on Austronesian Linguistics*, Ray Harlow, 265-297. Auckland: Linguistics Society of New Zealand.
- _____. 1992. *Guinaang Bontok texts*, Study of Languages and Cultures of Asia and Africa Monograph Series. Tokyo: Tokyo University of Foreign Studies.
- _____. 2000. Sources of Proto-Oceanic initial prenasalization: The view from outside Oceanic. In *Grammatical Analysis: Morphology, syntax, and semantics*, vol. 29, Videia P. De Guzman and Byron Bender, 30-45. Honolulu: University of Hawai'i Press.
- _____. 2002. Determiners, nouns or what? Problems in the analysis of some commonly occurring forms in Philippine languages. *Oceanic Linguistics* 41(2):295-309.
- Reid, Lawrence A. and Saranya Savetamalya. 1997. An explanation for inconsistent word order typologies in some Southeast Asian languages. In *Southeast Asian linguistic studies in honour of Vichin Panupong*, Arthur S. Abramson, 221-236. Bangkok: Chulalongkorn University Press.
- Reid, Lawrence A. and Hsiu-Chuan Liao. 2004. A brief syntactic typology of Philippine languages. *Language and Linguistics* 5(2):433-490.
- Rosaldo, Michelle R. 1980. *Knowledge and passion: Ilongot notions of self and social life*. Cambridge: Cambridge University Press.
- Ross, Malcolm D. 2002. The history and transitivity of western Austronesian voice and voice-marking. In *The history and typology of western Austronesian voice systems*, Fay Wouk and Malcolm Ross, 17-62. Canberra: Pacific Linguistics.

- Ruffolo, Roberta. 2005. Topics in the morpho-syntax of Ibaloy, Northern Philippines. Ph.D. Dissertation, Australian National University.
- Scheerer, Otto. 1918. *The particles of relation of the Isinai language*. 's-Gravenhage: Martinus Nijhoff.
- Shetler, Joanne. 1976. *Notes on Balangao grammar*, Language Data: Asian-Pacific Series, No. 9. Hunting Beach: Summer Institute of Linguistics.
- Tharp, James A. 1974. The Northern Cordilleran subgroup of Philippine languages. *Working Papers in Linguistics, Department of Linguistics, University of Hawaii* 6(6):53-114.
- Thomas, David D. and Alan Healey. 1962. Some Philippine language subgroupings: A lexicostatistical study. *Anthropological Linguistics* 4(9):21-33.
- Vanoverbergh, Morice. 1937. *Some undescribed languages of Luzon*. Nijmegen: Dekker and van de Vegt N.V.
- _____. 1955. *Iloko grammar*. Baguio City: Catholic School Press.
- Walrod, Michael R. 1976. Case in Ga'dang verbal clauses. In *Papers in Philippine Linguistics No. 8*, vol. Series A - No. 46. Canberra: Australian National University.
- Walton, Charles. 1979. A Philippine language tree. *Anthropological Linguistics* 21(2):70-98.
- Walton, Janice. 1975. *Binongan Itneg Sentences*, Pacific Linguistics B32. Canberra: Australian National University.
- Zorc, R. David. 1986. The genetic relationships of Philippine languages. In *FOCAL II: Papers from the Fourth International Conference on Austronesian Linguistics*, Paul Geraghty, Lois Carrington and S. A. Wurm, 147-173. Canberra: Department of Linguistics, Research School of Pacific Studies, The Australian National University.

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