

ON RECONSTRUCTING THE MORPHOSYNTAX OF PROTO-NORTHERN LUZON

LAWRENCE A. REID

University of Hawai'i

reid@hawaii.edu

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 move toward a reconstruction of various features of the morphosyntax of the parent of the group, Proto-Northern Luzon. An overview of the syntax of Proto-Northern Luzon is provided as a context for discussing the reconstruction of the 'phrase markers' of noun phrases. The paper deals specifically with the need to distinguish prepositional forms whose primary function is to mark the case of noun phrases, from nominal specifiers which specify features of their lexical head, and demonstratives which are often homophonous with and the source of nominal specifiers and case-marking prepositions. The paper restricts itself to reconstruction within one of the major subgroups of Northern Luzon – Central Cordilleran – beginning with the languages of the Nuclear Cordilleran set of languages, i.e. Bontok, Kankanaey, Balangao, and Ifugao, and then with the Kalinga-Itneg set of languages, and finally Isinai, to arrive at a set of reconstructions for the noun phrase markers of Proto-Central Cordilleran. It is argued that 'bottom-up' reconstruction of this type is essential in order to understand the historical processes that have brought about the plethora of forms that are found and to enable us to distinguish between forms that are retentions of reconstructed forms from those that are shared innovations.

1. Introduction

Reconstructing the morphosyntax of Proto-Northern Luzon has been a major interest of mine for many years. Numerous attempts have been made by various researchers to throw light on the internal relationships of the group and the nature of the proto-language from which the more than 50 languages spoken today descended. However the enterprise is far from complete and many problems remain. The purpose of this paper is to provide a summary of what has been done, and to outline some of the problems that interfere with achieving the goal of reconstructing the morphosyntax of Proto-Northern Luzon (P-NLZN). I intend first to provide some background on Northern Luzon itself, and then set the stage for the major focus of the paper by giving a summary of what must have been the clause structure of Proto-Northern Luzon. The discussion will then focus on two major topics. The first is the structure of the noun phrase, and deals in particular with what I consider to be the syntactic categories of the ubiquitous so-called ‘phrase markers’ of noun phrases. The second deals with the reconstruction of the forms of ‘phrase markers’. Because of space constraints, this paper will only deal with the reconstruction of ‘phrase markers’ in one of the major subgroups of Northern Luzon, Central Cordilleran. Passing reference will be made to some of the factors that hinder reconstruction of ‘phrase markers’ in early proto-languages of the Philippines. These factors include problems resulting from enclitic homophony, those resulting from what I am calling vowel grade harmony, and problems resulting from homophonous forms caused by sound change.¹

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 & Dizon, 2005) confirms that Northern Luzon was probably the site of the first Austronesian settlements in the Philippines following their movement

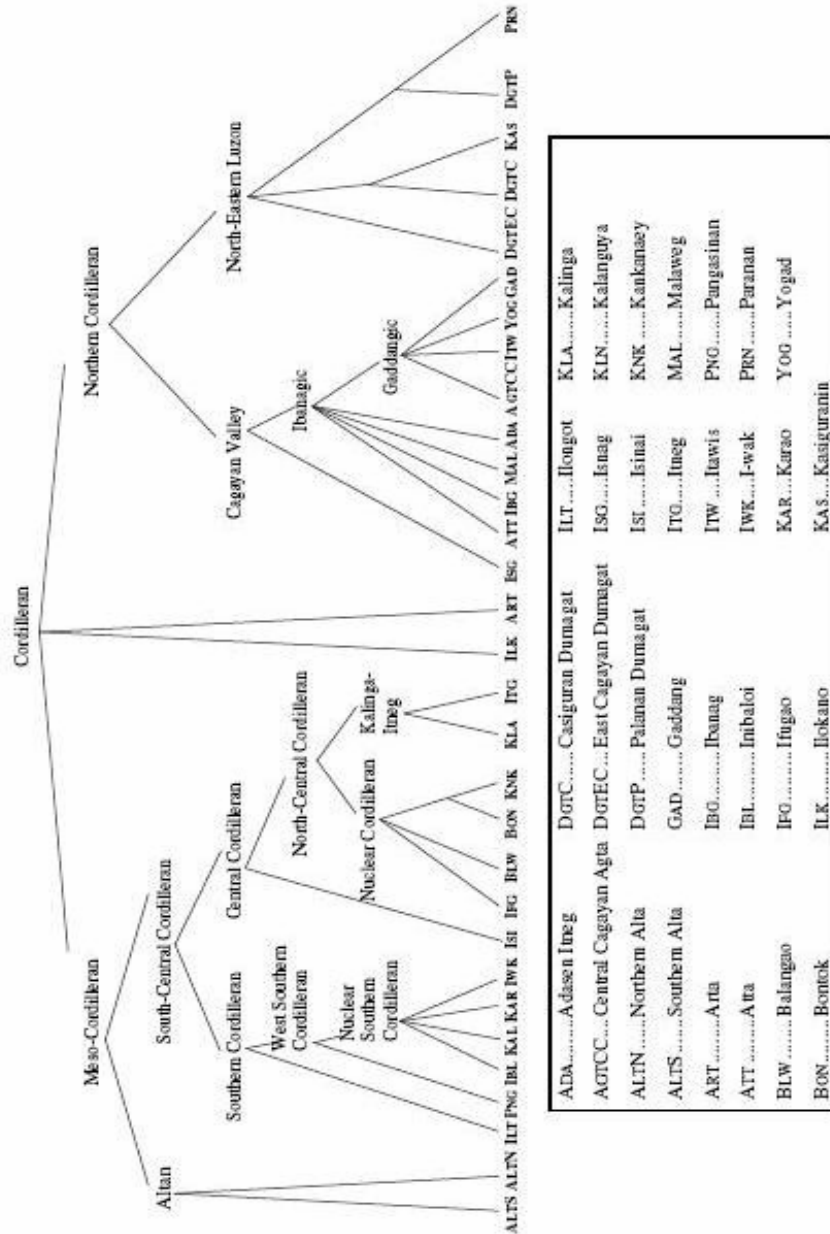
¹ These problems were discussed at more length during the plenary presentation at the 10th International Conference on Austronesian Linguistics in Puerto Princesa, Palawan, Philippines, where this paper was first presented. Each of these problems is being discussed more fully in other venues, see Reid (2006). I wish to thank the participants at 10-ICAL, especially Hsiu-chuan Liao, Nikolaus Himmelmann, and Andrew Pawley, for their comments.

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) also commonly referred to in the literature as Proto-Malayo-Polynesian, the language of the original migrants into the Philippines, and the immediate ancestral language of Proto-Northern Luzon.

The *Ethnologue* (Gordon, 2005) includes 56 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, p. 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 (1974) 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

² The only language of the group that I label as Northeastern Luzon which is included by Tharp (1974) in his subgrouping is Casiguran Dumagat (DGTC).

Figure 1. Revised subgrouping of Cordilleran languages



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; Blust, 1991, etc.). Blust (1991, pp. 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 all of the publications he refers to are primarily lexicostatistical classifications,³ and as Blust notes, 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, p. 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.

In terms of phonology, Charles (1974, p. 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,⁴ 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,

³ See Thomas and Healey (1962), Dyen (1965), and Walton (1979).

⁴ 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, pp. 84-85).

REID

at least the latter of which appears to have its ancestry in some early form of Tagalog (in which *j > /d/, and subsequently /l/ intervocalically). Both of these languages 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, p. 11; Tharp, 1974, p. 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. Table 1 lists some of the forms which show the reflexes of P-NLZN *j as /d/, both in intervocalic and word final positions.

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

English Gloss	ALTS	ALTN	ART	PRN	KSG	DGTC	P-NLZN
betel leaf			god		gawəd	ga'wid	*Rawəj
charcoal		ʔu'diŋ	u'diŋ				*ʔujiŋ
dry		maddi		mamadi		mema'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
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 *'panaʔ > P-NLZN *'pana 'shoot an arrow'. Northern Cordilleran languages (and Ilokano) also lost syllable-final glottal stop, e.g., P-NLZN *tuʔlaŋ > ILK, /tu'laŋ/, DGTC /'tulaŋ/ 'bone', while Central Cordilleran languages metathesized medial *-

ʔC- sequences to become *-Cʔ-, e.g., ITGBI /tuʔaŋ/ ‘bone’. Southern Cordilleran languages retained the P-NLZN *-ʔC- sequence, e.g., ILT /tuʔaŋ/ ‘bone’.

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 *təŋis > P-NLZN *səŋit ‘cry’; and PEF *Ra'tus > P-NLZN *Ra'sut ‘hundred’.⁵ Apart from the phonological (and lexicostatistical evidence) for NLZN, there is a 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.

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). The reconstructed phonological system of P- NLZN is given in Table 2. Notice that I include *j as one of the proto-phonemes, because of the /d/ reflexes in some of the languages of the group.

Table 2. Proto-Northern Luzon phonological system*

p	t		k	ʔ			i	ə	u
b	d	j	g					a	
m	n		ŋ						
	s								
	l							‘CV	(contrastive stress)
	r		R						
w	y								

*The actual phonological value of the central vowel shown as * ə in this table is unknown. In languages where it is still retained as a central vowel, the quality may range from /ʌ/ to /i/.

3. Clause Structure in Proto-Northern Luzon

The purpose of this section on clause structure in Proto-Northern Luzon is merely 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, found throughout Northern Luzon, are considered to be reconstructible to the parent language. These features are typical also of the structures found in many non-

⁵ This metathesis was first described in Conant (1912), and further discussed in Dyen (1972).

REID

Northern Luzon languages. These features have been discussed and exemplified in Reid and Liao (2004) generally for the Philippines.

P-NLZN was a predicate-initial, ergative language,⁶ 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;⁷ or dyadic, expecting two core arguments, a nominative and an OBLIQUE.⁸

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 typically indefinite.

Atransitive verbs were marked by the infix reconstructed as PEF *<um>. When the nominative phrase of either a monadic or a dyadic intransitive clause expressed an actor, the verbal morphology reflected one of the prefixes reconstructed as PEF *maR-, and *maN-,⁹ 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, p. 147; Liao, 2004, Ch. 2, pp. 31-33).

⁶ For a full discussion of transitivity and ergativity in Philippine languages, see Liao (2004).

⁷ 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 labeled absolutive in ergative languages. Maintaining the term nominative moreover enables the syntactic change from ergative to accusative languages to be more clearly described.

⁸ Not all oblique NPs were core. Only those that encoded undergoer participants are considered to be core. They could not be topicalized by fronting. Oblique NPs could also encode location and time settings. These were peripheral arguments and could be topicalized.

⁹ The final nasal of this form represents an assimilating nasal the characteristics of which are discussed in Blust (2004).

Transitive predicates were either dyadic or triadic. Dyadic transitive predicates expected two core arguments, a nominative phrase and a GENITIVE phrase.¹⁰ 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 a common noun; a DATIVE¹¹ 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 *-ən 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 *-ən 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.

With this background, we can now begin discussing the structure of the Proto-Northern Luzon noun phrase, specifically about the nature of the forms that introduced them. 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

¹⁰ 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.

¹¹ 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’.

REID

languages such as those found in the Philippines and in other language families throughout Southeast Asia, they occur at the outer (right-hand) edge of their noun phrase (Reid & Savetamalya, 1997).¹²

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,¹³ but they also function to identify, or specify, or agree with, various features of their nominal complements. Nominal specifiers are considered to be the heads of the NPs which they introduce.¹⁴ 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 themselves 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. Full forms were typically proclitics (although in example sentences I usually represent them as separate words), while shortened forms were enclitics, 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,¹⁵ that is, within

¹² 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 the Isinai examples appearing in (34)).

¹³ Extension nouns require a (following) nominal complement predicate.

¹⁴ Ruffolo (2005, p. 316) retains the label ‘Determiner’ for these forms, while noting that they are the heads of their phrases, and require a following complement.

¹⁵ The term ‘recognitional’ is taken from Ruffolo (2005, p. 167), who acknowledges her sources for the term as Himmelmann (1996) and Diessel (1999).

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 Prepositions and Nominal Specifiers of Proto-Northern Luzon**

Deciding on the syntactic categories of the forms of phrase markers is one thing, but reconstructing them is another. Before providing the reasons why I distinguish case-marking prepositions from nominal determiners I would like to briefly discuss the basic methodological principles involved in their reconstruction. Blust (2005, p. 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 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

In order to demonstrate the kind of data that requires that a distinction be made between case-marking prepositions and nominal specifiers, let us take a look at the marking of definite common noun phrases in some of the Central Cordilleran languages. We begin with 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	ə	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 three groups, Bontok-Kankanaey, Balangao, and Ifugao. No two of these languages have 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 sec. 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 Bontok¹⁶

- a. *Kinmaan nan laráki.*¹⁷
 departed [PM.-PRSN man]_{NOM}
 ‘The man departed.’
- b. *Kinmaan si Takcheg.*
 departed [PM.+PRSN Takcheg]_{NOM}
 ‘Takcheg departed.’
- c. *Chaan omey si esa=y minotos, ...*
 NEG.-PAST go [PM.-SPFC one=LG minute]_{NOM}
 ‘A minute had not yet gone by, ...’
- d. *Omána=ak si pákbey si árang si 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.’

¹⁶ Guinaang Bontok examples are taken from, or based on, sentences found in Reid (1976 and 1992).

¹⁷ 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.

REID

- 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 Lomawikb=en "Sána=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 *si* 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', *si* appears to carry the feature [-SPFC]. In such an oblique NP, the exponent of the NP which follows *si* can only be interpreted in a general (partitive) sense, somewhat equivalent to English *of*. In an oblique NP expressing a location, *si* 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 *si* which introduces the phrase, as in (1)h, also carries the feature [-SPFC], but it doesn't have a partitive sense; finally the *si* 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, *si* carries the feature [+PRSN] 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, *si* carries the feature [-PRSN]. When *si* 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 (Guinaang), although some place names within the village are marked as [-REMT]. All common, location nouns, such as *áfong* 'house', *arang* 'granary', *ab-afongan* 'men's ward house', and *pangis* 'young women's dormitory', etc., when preceded by the [-REMT] PM *si*, and not followed by genitive pronoun, 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.¹⁸ 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 may be definite or indefinite although they are usually definite when they are preceded by a lexical 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* (/ʔi/).

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.

¹⁸ All dialects of Central Bontok use *as*, except Bontok Poblacion and Samoki which use *is*.

(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.’

Distributed in the same positions as the definite *nan* is the recognitional PM *san*, shown in Table 6.

Table 6. Bontok recognitional phrase markers

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

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.

(3) Guinaang Bontok

- a. *Ay inílam 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).¹⁹ In a core oblique NP, where no

¹⁹ This analysis was first suggested in Kikusawa and Reid (2003), in their description of Talubin Bontok.

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 case. Throughout the rest of the paper, I will now forego the use of the term ‘phrase marker’ in favor of what I believe to be their true class membership, either preposition (P) or nominal specifier (NS).

(4) Guinaang Bontok

- a. *Inmára=ak si fótog.*
got=NOM.1S [P [pig]_{NP}]_{OBL}
‘I got a pig.’ Lit. ‘I got 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 marked 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 Tables 7 and 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. *Somkɛp=ka=s áfong!*
enter=[NOM.2S]=[P [inside.of.a.house]_{NP}]_{OBL}
'Come inside!'
- b. *Omey=ka=s cɛra!*
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!'
- g. *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. *Omali=ka=s niit si wákas!*
come=NOM.2S=[P [early.morning]_{NP}]_{OBL} [P [morrow]_{NP}]_{OBL}
'Come early tomorrow morning!'
- b. *Inilak as san niit?*
saw.1S [P [NS.+REC early.morning]_{OBL}]
'I saw (it) this morning.'
- c. *Inára=cha=s san inmalíyan=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 inilak....*
even [P [youth.1S]_{NP}]_{OBL} NEG.EXIST saw.1S
'Even in my youth, I didn't see anything ...'

- e. *As kaapowan=mi, ináfat=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.Al-al CONJ person.Gamoyo
 ‘Al-al and Gamoyo people’
- b. *fafarro=s mamagkhit*
 young.men=CONJ young.women
 ‘young men and women’
- c. *inin-a=s amam-a*
 married.women=CONJ married.men
 ‘married women and married men’

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 introducing 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 si omar-am.*
 [NS that water.buffalo]_{PRD} [NS.FUTR get.NMNZ.2S]_{NOM}
 ‘That water buffalo is what you will get.’
- b. *Ay as omej=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 i 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 that of the Central Bontok dialects, including Guinaang. However, in Talubin, the distinction between *nan* and *han* is being lost,²⁰ 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 & 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.*
 possible 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.²¹ Kadaklan, like the Central Bontok dialect

²⁰ Among other sound changes that distinguish Southern Bontok from Central Bontok are *s > /h/ and *k > /ŋ/.

²¹ Among other sound changes that distinguish Eastern Bontok from Central Bontok is *s > /h/.

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 *ben* (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 *ben* also occurs as an enclitic =*n* on preceding vowel-final words, as in (11)b.

In oblique phrases, the specific form *ben* (reduced to =*en*) has replaced *nan* and follows the preposition *ab*, as in (11)c, and the preposition itself is sometimes completely lost following vowel-final words (=b > Ø), leaving such phrases as bare lexical items.²² Following consonant-final words, the alternate preposition *be* (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 Tables 9 and 10.

Table 9. Kadaklan case-marking prepositions

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

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

-DFNT		chi
+DFNT	V]	=n
	C]	nan ~ na = [?V hen

(11) Eastern Bontok (Kadaklan) (Fukuda, 1980, pp. 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-iva omar-ali=n tolin.*
 CNTV=[3P]_{NOM} true coming=[NS sparrow]_{NOM}
 ‘The sparrows are truly coming.’

²² Shetler (pers. comm.) notes that in Hâgi, 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.

- c. *Inyoy=na=Ø 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 nomnonomom 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 Kankanaey). The data (drawn primarily from Hettick and Kent (1967), and Hettick and Wallace (1978), and summarized in Tables 11 and 12) show a formal distinction between the prepositional form which introduces oblique phrases, namely *si* and its alternate *?is* (as in Bontok), as in (12)a,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 included 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 Proto-Central Cordilleran (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

-DFNT		di
+DFNT	default	nan
	REC	san
	ANTE	din

(12) Northern Kankanaey (Hettick & Kent, 1967)

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

(13) Northern Kankanaey (Hettick & Kent, 1967)

- 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 gavis ta mensovako*
NEG=[1+2P]_{GEN} monopolize [NS.-DFNT goodness]_{NOM} so remove
di dakes.
[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.²³ 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

²³ Published material contains a few examples with *san*, as in (14)h,i (Allen, L.P., 1975, p. 29), although apparently without the recognitional feature associated with this form in Bontok.

REID

frozen enclitic ligature (see discussion in sec. 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** kaim.*
 put.down=GEN.2S [NS.+DFNT wood]_{NOM}
 'Put down the stick!'
- b. *Kiniting=na **din** takekay=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 gayangen kiling **is=san***
 met QUOT [NS.+PL crow with *kiling*,bird]_{NOM} [P=[NS.+DFNT
*sebang **di** kaong.*
 trail [NS.-DFNT sow]_{GEN}_{NP}]_{OBL}
 'The crow and the *kiling* bird met on the trail of a sow.'
- 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

Tables 13 and 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

-DFNT		*di
+DFNT	default	*nan
	REC	*san
	ANTE	*din

4.1.1.2.1. Sources of Proto-Bontok-Kankanaey nominal specifiers

In various papers (Reid, 1974, pp. 526-546; 2000, pp. 38-40; 2002, pp. 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 (15),a-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, p. 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 Kiangnan Ifugao, as in (17), and is still found in various languages throughout the Northern Luzon family.

Table 15. Proto-Bontok-Kankanaey deictic forms

PROX	*na
MED	*sa
DIST	*di

(15) Guinaang Bontok

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

(16) Guinaang Bontok

<i>chow</i> n poro	20'	<i>enem</i> poro	60'
<i>toro</i> n poro	30'	<i>pi</i> to n poro	70'
<i>epat</i> poro	40'	<i>waro</i> n poro	80'
<i>lima</i> n poro	50'	<i>siyam</i> poro	90'

(17) Kiangan Ifugao (Lambrecht, 1978, p. 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 Tables 16 and 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 *ben*, which appears to have had its source in a sequence of preposition and definite NS, was probably as follows: *si + *nan > **si=n > *ben*. 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 *ʔah* has been lost, so these phrases are no longer case-marked when *ben* occurs, as in (18)d.

Table 16. Balangao case-marking prepositions

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

Table 17. Balangao common noun specifiers

-DFNT		di
+DFNT	V]	=n
	C]	hen

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

- a. *Ayagan=yu di éba=y onga, ...*
call=[GEN.2P] [NS one=LG child]_{NOM}
'You (pl.) call a child, ...'
- b. *Enayagan=da hen éba=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, pp. 233-238)

- a. *hen okom=ay mandawéb 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 na-al, nalpo=n lota yag émméy ad udu.*
 [NS vine]_{TOP} came=[_{OBL} earth] CONJ went [_{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 [_{LOC} Saliyok]]_{TOP}
 ‘As for the rich people at Saliyok ...’
- f. *Ad namenghan ano, i nanganop ah Amlalawiyén ah pagpag.*
 [_{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. Tables 18 and 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, encliticized to *ya*, a reduced form of the unmarked third person singular form *biya* (< *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 (20)f, the demonstratives occur as deictic nominal specifiers, with the ligature now fused as part of the nominal specifier.

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

- a. *Onga=to.*
 child=[NOM.this]
 ‘This is a child.’
- b. *Awa=n Ina=ha.*
 possession=[_{GEN} [mother]]=[NOM.that]
 ‘That is mother’s.’
- c. *Ya=to ben onga.*
 [3S=this]_{PRD} [NS child]_{NOM}
 ‘The child is this one.’
- d. *Ya=ha, awa=n Ina.*
 [3S=that]_{TOP} [possession=[_{GEN} [mother]]]_{PRD}
 ‘As for that one, it belongs to mother.’
- e. *Ammag ya=di ben 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 ben andida=y tape=na, ...*
 [NS those=LG rich.ones [_{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 abo, ...*
 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 ben tatagu=waynetnod andi.*
 die all [NS people=LG [went.with that.one]_{RELTV}]_{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 demonstratives in Balangao is given in Table 20. Unmarked demonstratives are shown in Table 21, and deictic nominal specifiers are given in Table 22.

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	?andiyen	=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 the enclitic ligature =y.

Table 22. Balangao deictic nominal specifiers

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

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.

4.1.1.3.3. Historical development of Balangao deictic specifiers

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

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.

N=LG	+	DMNS	>	N=LG=DMNS	>	
		N=DMNS				
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'

2. *Spread of post-nominal forms to pre-nominal position; ligature reduction*²⁴

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.

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

3. *Derivation of locational predicate forms*

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).

NS	+	-an	>	PRD.LOC
?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)'

²⁴ Shetler (1976, p. 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'.

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.

P _{OBL}	+	=DMNS	>	ADV.LOC	
ʔas	+	=tu	>	ʔahto	‘here’ ‘PROX’
ʔas	+	=na	>	ʔahna	‘there, near addressee’ ‘MED’
ʔas	+	=di	>	ʔahdi	‘there, away from speaker and addressee’ ‘DIST’

5. Formation of deictic specifiers

The forms that occur today as deictic specifiers carry no case marking when in genitive noun phrase positions in a sentence. The same forms however are preceded by a case-marking preposition, when introducing singular common noun phrases in nominative and oblique positions in a sentence. When introducing plural common noun phrases in topic and nominative positions, the forms are homophonous with those found in genitive noun phrases, there are no case-marking prepositions preceding them. At an earlier stage of the language it is probable that the deictic specifiers for both singular and plural entities in genitive noun phrases occurred also in nominative noun phrases, both were (morphologically) unmarked. 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'bæg > **ʔiʔ'bæg > *ibbeg* ‘to put to bed’.²⁵ In the following examples, the parenthetical *da* pluralizes the demonstrative.

²⁵ Shetler (1976, p. 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: BONGU *ʔi- + *ʔə'bæg > **ʔiʔ'bæg > /ʔibʔæg/ ‘to put to bed’. Most Balangao forms having an initial weak syllable with a glottal stop onset undergo metathesis of the medial consonant cluster, following weak vowel deletion, like Bontok.

(PLRL)NS + DMNS	>	(PLRL)DMNS	>
(PLRL)DMNS			

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

6. Derivation of nominative and oblique deictic specifiers

The nominative forms were derived by cliticizing the basic singular demonstrative set to the preposition *ab* (from *as) for nominative singular. The plural forms carry the plural marker *da* found on the basic forms. These forms were apparently originally personal demonstratives ('this person', etc.), but now carry general reference. For the oblique forms, both the singular and plural forms of the basic set were cliticized to the oblique preposition *an* (from *kan).

P _{NOM} + NS _{DMNS}	>	P _{NOM} = NS _{DMNS}		P _{OBL} + NS _{DMNS}	>
P _{OBL} = NS _{DMNS}					

ʔah + natto > ʔahnatto ʔan + natto > ʔannatto
 ʔah + nahha > ʔahnahha ʔan + nahha > ʔannahha
 ʔah + naddi > ʔahnaddi ʔan + naddi > ʔannaddi

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 Kiangan (referred to as Tawali Ifugao in Gordon, 2005; Lambrecht, 1978; 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 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, pp. 12-14, 81).

The IFGBT prepositions presented in Table 23 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 *ba*, as in (21)a,b. Newell (1993, p. 274) notes that the form *hay* (from earlier *say) is bimorphemic, being a sequence of *ba* + [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*.

Table 24 presents a summary of IFGBT common noun non-deictic specifiers, while Table 25 shows the IFGBT basic demonstratives.²⁶ Examples are provided in(21)e-i.

Table 23. Batad Ifugao case-marking prepositions

TOP/PRD		NOM	GEN	OBL	LOC
hay	V]	=y / $\text{=}\emptyset^*$	=n	=h	=d
	C]	\emptyset	$\text{=}\emptyset$	hi	?ad

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

Table 24. Batad Ifugao common noun specifiers

-DFNT	C]	di han*
+DFNT	default	nan**
	REMT	din***

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

**Newell reports stylistic variants *banan* and *han din* for *nan* and *din*, respectively. Note that these forms correspond to the Kiangang 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, p. 216)

Table 25. Batad Ifugao basic demonstratives

- PLRL	PROX	(he)te
	MED	(he)ne
	DIST	(he)de
+ PLRL	PROX	date / hātu
	MED	dane / hāna
	DIST	dade / hādi

²⁶ 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.

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

- a. *Hay aton di linala'i ya umuy=da=h wangwang an manalop.*
 [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 panayawan=da=h ma'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}OBL=[P_{OBL} [nice]_{NP}]
 'I will buy a nice shirt for myself.'
- d. *Munggabut nan binaba'i hi ma'et hi=nan uma=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. *Inab'upana han miyapat an mamungwit.*
 came.upon.3S [NS fourth]_{NOM} LG fishing
 'He came upon a fourth one fishing.'
- f. *Adi=yu ibaag 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 ulba=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. Kiangán Ifugao

As shown in Table 26, IFGKI marks topics with a distinct preposition, as does IFGBT, as in (22)a. Lambrecht (1978, p. 10) notes that the oblique form *ab* is 'exceptionally used after *maid* [i.e., as an indefinite marker following a negative existential verb] in *budhúd* [epic poetry] chant' and occurs frequently in the Banaue area, see (22)h. For similar types of construction in Bontok with the oblique preposition *as* / =s, see the examples in (9). Although Lambrecht considers *ab* to be a metathesized form of *ba*, 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 28, and illustrated in (23). Lambrecht (1978, p. 172) states 'In *budhúd* [epic poetry], and in the Kiangán and Hapaw areas, *ba* is the case marker *di*... or affixed -y if the previous word ends in a vowel. In other areas, *ba* is more often replaced by *nan* [see the description of Batad Ifugao

- 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.’

(23) Kiangán Ifugao (Lambrecht, 1978, p. viii)

- Páyo=n ban=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 *ab* 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 $\exists y$ 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 / *ʔah	*ʔad

Table 30. Proto-Ifugao common noun specifiers

-DFNT		V]	*=y
+DFNT	default	C]	*di / *nan / *han
	DIST		*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 case-marking prepositions, and nominal specifiers which introduce singular common nouns as shown in Tables 32 and 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

-DFNT		*di / *=y
+DFNT	default	*nan
	REC	*san
	ANTE	*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* takfa!*
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 =*b*) as in (26)a, but which has replaced *si with *ab*, as in (26)b,c. Since, in Balangao, =*b* is homophonous with the enclitic form of the common noun oblique preposition *ab* (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, as 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),²⁷ 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-ʔədán/ > /kadʔan/, cf. /ʔədán-án/ ‘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 probably 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. 4.3.

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 the case-marked genitive and dative phrases, however, the plural NS *da occurred between the preposition and the lexical head, as in (25)h and (27)b. Table 34 shows the P-NUCO reconstructed prepositions with their following singular and plural personal noun specifiers.

²⁷ See sec. 4.2.2 for further evidence of contact between Guinaang Bontok and Guinaang Kalinga.

Table 34. Proto-Nuclear Cordilleran prepositions + personal noun specifiers

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

(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. *Inila=na=s Takcheg.*
 saw=[GEN.3S]=[NS.+PRSN Takcheg]_{NOM}
 ‘He saw Takcheg.’
- d. *Egnar=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.’
- 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. *Egnar=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. *Eꞑateko=ꞑu=to* **an** *Juan*.
 cause.bend=[GEN.2P]=[this.one]_{NOM} [P_{DAT} [Juan]_{NP}]
 ‘Have Juan bend this.’ (p.143)
- f. **Ah** *Panapan, ꞑubli ꞑay tataꞑu...*
 [NS Panapan]_{TOP} [poor LG person]_{PRD}
 ‘As for Panapan, he was a poor person ...’
- g. *Ad uwan=ay natéꞑ 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 ongtaꞑ.*
 eat=[3P]_{NOM} RPRT [NS spirit]_{NOM}
 ‘The spirits eat, they say.’
- j. *Hen andida=ꞑ bakenang ad Saliyok, ay da Onsaꞑ...*
 [NS those=LG rich.ones [P_{LOC} Saliyok]_{TOP} LG [NS.PLRL Onsaꞑ]
 ‘As for the rich people at Saliyok, that is Onsaꞑ and his companions...’
- k. *Hiyadi=n manlaydaꞑ ben tataꞑu=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 & Reid, 2003)

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

4.2 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).

4.2.1 Limos Kalinga

Ferreirinho (1993) 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 the topic-marking preposition *sa*, found also

in P-NUCO, and the Oblique and Locative forms *?ut* and *?ud*. The equivalent forms in NUCO languages have either an *i* or an *a* vowel.

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

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

The NSS (referred to by Ferreirinho as ‘determiners’) are given in Table 36. The final nasal on the proximal and (visible) distal forms is a frozen enclitic ligature, as is found in the NUCO languages. Ferreirinho 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 37.²⁸

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

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

Although Ferreirinho 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. Ferreirinho notes that *di* is the unmarked form, presumably the form that occurs most frequently. She 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

²⁸ 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, p. 15).

Gieser (1972, p. 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 *ʔut*. The sequential combinations of Limos Kalinga case-marking prepositions and nominal specifiers are shown in Table 38.

Table 38. Limos Kalinga case-marking prepositions + nominal specifiers

TOP	UNM		GEN	OBL		GEN	OBL
sa tu-n	tu-n	V]	=n tu-n	(ʔu)t tu-n	C]*	(di) tu-n	si tu-n
sa nat	nat		=n nat	(ʔu)t nat		(di) nat	si nat
sa di-n	di-n		=n di-n	(ʔu)t di-n		(di) di-n	si di-n

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

4.2.2 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 appears 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 in 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 sec. 4.2.4.2).

Table 39. Guinaang Kalinga case-marking prepositions (adapted from Gieser, 1963, p. 50)

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

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

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 the Bontok and Kankanaey languages 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 the nominal specifiers with past reference, KLAGU *sit* and *dit*, which are now apparently monomorphemic.

Table 40. Guinaang Kalinga nominal specifiers (adapted from Gieser, 1963, p. 50)

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

Table 41. Guinaang Kalinga basic demonstratives (Gieser, 1963, p. 79)

PROX	na
MED	nat
DIST	di

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

- a. **si=n** *mankilawan=mi...* *nan manugtugan=da* **si=n** *ʔugsa.*
 [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** *ʔanak=a lalaki, ʔimmoy nangayu*
 [P [NS child=LG male]TOP went collected.wood
 ‘As for the boy, he went to get wood.’
- c. *ʔissa=da pon lumawa si makabulan.*
 NEG=[3P]NOM ADV go.out [P month.period]TEM
 ‘They do not go out for a month.’

- d. *mansaʔul=ta si ʔoblit.*
 exchange=[1+2S]_{NOM} [P skin]_{OBL}
 ‘Let’s exchange skins.’
- e. *mangwa=da=ʔ ʔadamal.*
 [make=[3P]_{NOM}]=[P animal.night.sacrifice]_{OBL}
 ‘They kill a sacrificial animal at night.’
- f. *ʔimbag=n dit luvang si=t baka.*
 told=[P]_{GEN} [NS water.buffalo [P=[NS cow]_{OBL}]
 ‘The water buffalo told (something) to the cow.’
- g. *ʔumivas=ʔami si ʔwoy si=t gattoke=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. *ʔidalpong=no=s nan ʔandi.*
 set.fire.stones=GEN.2S=[P [NS that.one]_{NP}]_{LOC}
 ‘Set (them) as fire stones at that place’
- i. *ʔintaʔod=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 waʔil*
 source [NS stream]_{GEN}
 ‘source of a stream’
- l. *naʔamin pon nivatwat dit ʔissa=da...*
 be.all=[3P]_{NOM} ADV distributed [NS meat=[3P]_{GEN}]_{NOM}
 ‘When the meat was completely distributed...’

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

- a. *magampot ʔad maʔuluban, ʔinisong=mi nan ataknang nan boly,*
ʔad pinutdan=mi
 finish SEQ digging measure=EN.1P [NS height [NS house]_{GEN}]_{NOM}
 SEQ cut=GEN.1P
nan tuʔud=na, ʔad 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 ʔad nan langon, ʔiniva=mi.*
 finish SEQ [NS hair.burning]_{NOM} butcher=GEN.1P
 ‘After the hair is completely burned off, we butcher (it).’
- c. *magampot ʔad nan watwat,, ʔasi=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 ʔad nan ʔusalon=mi=n manʔalad, ...*
 EXIST SEQ [NS use=GEN.1P=LG fencing]_{NOM}
 ‘When all of the things used for fencing are gathered, ...’

- e. *ʔissə=da pon ʔabos ʔad ʔanon dan matipoy...*
 NEG=[3P]_{GEN} ADV also SEQ eat [NS.PLRL vegetables]_{NOM}
 ‘Then they also do not eat vegetables...’
- f. *ʔawni ʔad mabigat ʔad*
 finish SEQ next.day SEQ
 ‘later’ ‘the next day’

(30) Guinaang Kalinga (Gieser, 1963, p. 79)

<i>ʔan na</i>	‘this, proximal’	<i>si na</i>	‘here, proximal’
<i>ʔan nat</i>	‘that, medial’	<i>si nat</i>	‘there, medial’
<i>ʔan 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 Tables 42-44. 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 37), 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. 4.2.5.

Table 42. Proto-Kalinga case-marking prepositions

TOP / PRD		GEN	OBL	LOC
sa	V	*=n	*=s	*=d
	C	=∅	*ʔus / *si	*ʔud / *ʔad

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

4.2.3 Binongan 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 expression] 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, pp. 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.

Binongan 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 *nittu*, *sittu*, and *dittu* 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. Binongan Itneg case-marking prepositions are given in Table 45 and its nominal specifiers in Table 46.

Table 45. Binongan Itneg case-marking prepositions

GEN	OBL	LOC
ni	kan	di

Table 46. Binongan Itneg nominal specifiers

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

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)j,k. Table 48 shows the forms of Binongan Itneg adverbial demonstratives.

Table 47. Development of Itneg deictic specifiers

Genitive

Unmarked

Stage 1

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

	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

REID

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, pp. 53, 57)

PROX	tu
MED	kanta
DIST	kantan

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

- a. *Napan=da di Tomeng-ey inggana di Lowaben, in mangoway.*
 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 idavis=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=na 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’

4.2.4 *P-Kalinga-Itneg reconstructions*

Based on the data presented in the preceding sections, this section provides reconstructions of Proto-Kalinga-Itneg prepositions and singular common noun specifiers in sec. 4.2.4.1, followed in sec. 4.2.4.2 by the reconstructions of the plural common noun specifiers, and in sec. 4.2.4.3 by the reconstructions of personal noun specifiers.

4.2.4.1 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 (Table 49) then appears more like what is found in the Kalinga languages, than in the Itneg languages. The same is true of the reconstructed P-KLA-ITG nominal specifiers (Table 50), and the reconstructed P-KLA-ITG basic deictics (Table 51). 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 singular 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

4.2.4.2 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, see Table 52.

Table 52. Itneg plural deictic prepositions + nominal specifiers

	UNM	OBL
+PLRL	dat	ka=datuwe ka=data
	dad	ka=dadi

(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]_{NOM}
'In the old times some people wore loincloths. (p.11)

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.

4.2.4.3 P-KLA-ITG personal noun phrases

A comparison of the forms marking Kalinga and Itneg singular and plural personal noun 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 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	∅	∅ (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 its source is opaque. Elsewhere in Kalinga, the form is a locative preposition (see Table 54).

Table 54. Kalinga personal noun specifiers

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

The reconstructed Proto-Kalinga-Itneg sequences of prepositions and nominal specifiers is shown in Table 55.

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

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

4.2.5 Proto-North Central Cordilleran reconstructions

Following the pattern set in the preceding sections, we now reconstruct the forms for the next higher subgroup, Proto-North-Central Cordilleran, the parent of the Nuclear Cordilleran and the Kalinga-Itneg languages. Case-

REID

marking prepositions will be reconstructed in sec. 4.2.5.1 and nominal specifiers in sec. 4.2.5.2.

4.2.5.1 P-NCCO case-marking prepositions

Comparing the reconstructions of P-NUCO and P-KLA-ITG case-marking prepositions (Tables 32 and 49), 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.

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 (see Reid, 2006). 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 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

4.2.5.2 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 distinction marked by nominal specifiers in P-NCCO WAS between personal and non-personal nouns. 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 probable that *nan (*na + ligature *=n) was the default

REID

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 basic demonstratives.

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

4.3 Isinai

Isinai is primarily spoken in three *barangays*, Aritao, Dupax, and Bambang, in the province of Nueva Vizcaya. The data that is given here are 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, p. 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 prepositions

marking such phrases were *ʔidi and possibly *ʔudi (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. 4.2.5.1. The *ʔad* ‘sequential adverb’ forms of Guinaang Kalinga, illustrated in (29), probably also have the same source, i.e., 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 P-CCO 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

REID

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	ʔ _i	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 ʔisira=mi.*
EXIST [NS food=GEN.1P]_{NOM}
'We (ex.) have food.' (00024)
- c. *ʔinʔinumar mangiaʔbu si bany?*
how catch [P [pig]]_{OBL}
'How does one catch a pig?' (0007)
- d. *Masaliv di bobat=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=aʔ ʔamoy si bibat?*
NEG=[NOM.1S] go [P [tomorrow]]_{OBL}
'I will not go tomorrow.' (0017)
- g. *Maramʔot si Juan.*
heavy [NS Juan]_{NOM}
'I will not go tomorrow.' (0126.1.1)
- h. *ʔiator=mu di kwarta=r ʔi Maria.*
give=[NOM.1S] [NS money=DET]_{NOM} [P_{DAT} [Maria]]
'Give the money to Maria.' (0092)

- i. *Mango ʔngot di ʔasu=n (ʔan) Juan=ar.*
 black [NS dog= [P_{GEN} [NS Juan]]=DET]_{NOM}
 ‘John’s dog is black.’ (0187.1)
- j. *ʔammaʔi ri beoy (ʔan) Juan=ar.*
 big [NS house [NS Juan]_{GEN}=DET]_{NOM}
 ‘John’s house is big.’ (0188.2)
- k. *Sinʔunu=ra di ʔanaʔ=mu=ar dari?*
 how.many=[3P]_{NOM} [NS child=[GEN.2S]]=DET]_{NOM} [those]_{NOM}
 ‘How many children do you have?’ (0032)

4.4 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 (see Table 61).²⁹

²⁹ Since completing the writing of this paper, further work has been done on the reconstruction of the oblique and locative case-marking prepositions in Proto-Central Cordilleran and its daughter subgroups. The results are somewhat different from those presented here. The reader is referred to Reid (2006) for more information.

Table 61. P-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

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. 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 (see Tables 62 and 63).

Table 62. P-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

5. Conclusion

The writing of this paper began with the goal of completing a reconstruction of the morphosyntax of Proto-Northern Luzon, in particular the reconstruction of the sets of case-marking forms, nominal specifiers, and demonstratives that typically occur in the left-most position of nominal phrases in the languages that constitute this family. Although the general patterns of clause formation are reasonably clear, not differing in too great detail from what is found in other languages of the Philippines, considerable difficulty was encountered in determining the reconstructible forms and functions of the multitude of typically monosyllabic forms that occur in the daughter languages. Despite a number of attempts to reconstruct these forms for early stages of Austronesian languages by the present author and others, it is clear that insufficient attention has been paid to the problems of independent innovation and the underlying motivations for these innovations. This paper then has focused not on widespread comparison of morphemes with similar forms and functions, which cannot distinguish between independent and shared innovation, but rather on the detailed examination of sets of closely related languages within a single subgroup. This kind of 'bottom-up' reconstruction requires an explanation for why morphemes with the same function in each of the languages may differ from one another in subtle ways. For its success, considerable detail is required in the descriptions of the languages, and in particular of the dialectal forms that occur. This paper, then, has succeeded in reconstructing only a relatively small part of the original goal, those forms that may have been present in the parent of only one of the constituent subgroups of the family, Proto-Central Cordilleran.

The discussion has argued for a distinction to be made among the so-called 'phrase markers', recognizing that these forms are constituted of sets with distinct morphosyntactic privileges. Some of the forms clearly primarily mark the case of the phrase which they introduce (case-marking prepositions), while others function to specify semantic features of the lexical noun that they precede (nominal specifiers), but do not specify case. The paper has also introduced some of the factors that have resulted in the irregular developments that permeate the systems. These factors include homophony of the enclitic forms of different full forms, resulting in the development of homophony of the full forms themselves (cf. the development of the Balangao personal noun specifier *ab* from earlier **si*, sec. 4.1.2.3). Another such factor is what I am calling 'vowel grade harmony' by which prepositions introducing different case-marked phrases, such as obliques and locatives which originally may have had different vowels, appear to have had a common vocalic template applied to them (cf. the development of these prepositions discussed in sec. 4.2.5.1). Full discussion of these and other factors will appear in future papers.

Reconstruction of the case-marking prepositions, nominal specifiers, and demonstratives for other subgroups within the Northern Luzon family is required before any attempt is made to reconstruct the forms for Proto-Northern Luzon itself. And only when this is done, can one begin to make claims about equivalent forms at deeper time-depths.

REID

Abbreviations

C.....consonant	LG.....ligature
P.....preposition / plural (following a numeral)	NS.....nominal specifier
S.....singular (following a numeral)	NP.....noun phrase
V.....vowel	PM.....phrase marker
	PP.....prepositional phrase
ADV.....adverb	ANTE.....antedate
DAT.....dative	CNTV.....continuative
DET.....determiner	CONJ.....conjunction
GEN.....genitive	DFNT.....definite
LOC.....locative	DMNS.....demonstrative
MED.....medial	DIST.....distal
NEG.....negative	FUTR.....future
NOM.....nominative	NMLZ.....nominalizer
OBL.....oblique	PLRL.....plural
PRD.....predicate	PROX.....proximal/proximate
REC.....recognitional	PRSN.....personal
SEQ.....sequential adverb	PTTV.....partitive
TEM.....temporal	QUOT.....quotation
TOP.....topic	RLTV.....relative clause
UNM.....unmarked	REMT.....remote
	REPT.....reported event
	SPFC.....specific
	TPLK.....topic linker

Language Names

AGTCC.....Central Cagayan (Gattaran) Agta	ILK.....Ilokano
ALTN.....Northern Alta	ILT.....Ilongot
ALTS.....Southern Alta	ISG.....Isneg
ART.....Arta	ISI.....Isinai
ATT.....Atta	ITG.....Itneg
BLW.....Balangao	ITGBI.....Binongan Itneg
BON.....Bontok	ITW.....Itawis
BONGU.....Guinaang Bontok	KLA.....Kalinga
DGTC.....Casiguran Dumagat (Agta)	KLAGU.....Guinaang Kalinga
DGTEC.....Eastern Cagayan Dumagat (Agta)	KLALI.....Limos Kalinga
DGTP.....Palanan Dumagat (Agta)	KNK.....Kankanaey
GAD.....Gaddang	KSG.....Kasiguranin
IBG.....Ibanag	PNG.....Pangasinan
IBL.....Inibaloi	PRN.....Paranan
IFG.....Ifugao	TAG.....Tagalog
IFGBT.....Batad Ifugao	YOG.....Yogad
IFGKI.....Kiangan Ifugao	
CCO.....Central Cordilleran	P-BON-KNK.....Proto-Bontok-Kankanaey
MCO.....Meso-Cordilleran	P-CCO.....Proto-Central Cordilleran
NCO.....Northern Cordilleran	P-IFG.....Proto-Ifugao
NLZN.....Northern Luzon	P-KLA.....Proto-Kalinga
NUCO.....Nuclear Cordilleran	P-KLA-ITG.....Proto-Kalinga-Itneg
	P-MCO.....Proto-Meso-Cordilleran
PAN.....Proto-Austronesian	P-NCCO.....Proto-North Central
Cordilleran	
PEF.....Proto-Extra Formosan	P-NLZN.....Proto-Northern Luzon
PMP.....Proto-Malayo-Polynesian	P-NUCO.....Proto-Nuclear Cordilleran
PPH.....Proto-Philippines	P-SCO.....Proto-Southern Cordilleran

REFERENCES

- Allen, J. (1978). Kankanaey adjuncts. *Studies in Philippine Linguistics*, 2(1), 82-102.
- Allen, L. P. (1975). Distinctive features in Kankanaey. *Philippine Journal of Linguistics*, 6(2), 23-30.
- Allen, L. P. (1977). Reduplication and cyclical rule ordering in Kankanaey morphophonemics. *Studies in Philippine Linguistics*, 1(2), 280-295.
- Bellwood, P. & Dizon, E. (2005). The Batanes archaeological project and the 'out-of-Taiwan' hypothesis for Austronesian dispersal. *Journal of Austronesian Studies*, 1(1), 1-36.
- Bellwood, P., Stevenson, J., Anderson, A. & Dizon, E. (2003). Archaeological and palaeoenvironmental research in Batanes and Ilocos Norte Provinces, Northern Philippines. *Indo-Pacific Prehistory Association Bulletin*, 11, 141-161.
- Blust, R. A. (1991). The Greater Central Philippine hypothesis. *Oceanic Linguistics*, 30(2), 73-129.
- Blust, R. A. (2004). Austronesian nasal substitution: a survey. *Oceanic Linguistics*, 43, 73-148.
- Blust, R. A. (2005). A note on the history of genitive marking in Austronesian languages. *Oceanic Linguistics*, 44, 215-222.
- Charles, M. (1974). Problems in the reconstruction of Proto-Philippine phonology and the subgrouping of the Philippine languages. *Oceanic Linguistics*, 13, 457-510.
- Conant, C. E. (1911). The RGH law in Philippine languages. *Journal of the American Oriental Society*, 31, 70-85.
- Conant, C. E. (1912). The pepet law in Philippine languages. *Journal of the American Oriental Society*, 32, 246-279.
- Conant, C. E. (1915). Grammatical notes on the Isinai language (Philippines). *Journal of the American Oriental Society*, 35, 289-292.
- Diessel, H. (1999). *Demonstratives: Form, function and grammaticalization*. Amsterdam/Philadelphia: John Benjamins.
- Dyen, I. (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.
- Dyen, I. (1972). Non-gradual regular phonetic change involving sibilants. In J. M.C. Thomas & L. Bernot (Eds.), *Homage à André G. Haudricourt; Langues et techniques* (pp. 95-99). *Nature et Société*, 1. *Approche linguistique*.
- Ferreirinho, N. (1993). *Selected topics in the grammar of Limos Kalinga, the Philippines*. Pacific Linguistics B-109. Canberra: Department of Linguistics, Research School of Pacific Studies, the Australian National University.
- Fukuda, T. (1980). Discourse features in Kadaklan. *Studies in Philippine Linguistics*, 4(1), 71-100.
- Gieser, C. R. (1963). *A grammatical sketch of Kalinga*. Nasuli, Malaybalay, Bukidnon: Summer Institute of Linguistics.
- Gieser, C. R. (1972). Kalinga sequential discourse. *Philippine Journal of Linguistics*, 3(1), 15-34.
- Gordon, R. G., Jr. (Ed.). (2005). *Ethnologue: Languages of the World*. Fifteenth edition. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com/>

REID

- Hettick, D. & Kent, C. (1967). Uses of the particle *di* [in Northern Kankanay]. Ms. Library of the Summer Institute of Linguistics, Manila.
- Hettick, D. & Wallace, J. (1978). Northern Kankanay texts. *Studies in Philippine Linguistics*, 2(2), 1-28.
- Himes, R. S. (1990). An algorithm for the derivation of Isinai from Proto-Central Cordilleran. *Philippine Journal of Linguistics*, 21(2), 1-13.
- Himes, R. S. (1996). Isinai: Reconstructions and relations. *Philippine Journal of Linguistics*, 27(1-2), 83-109.
- Himes, R. S. (1998). The Southern Cordilleran group of Philippine languages. *Oceanic Linguistics*, 37(1), 120-177.
- Himes, R. S. (2004). The relationship of Umiray Dumaget to other Philippine languages. *Oceanic Linguistics*, 41(1), 1-20.
- Himmelmann, N. (1996). Demonstratives in narrative discourse: A taxonomy of universal uses. In A. B. Fox (Ed.), *Studies in Anaphora* (pp. 205–254). Amsterdam: John Benjamins.
- Kikusawa, R. & Reid, L. A. (2003). A Talubin text with wordlist and grammatical notes. *Journal of Asian and African Studies*, 65, 89-148.
- Lambrecht, F. H. (1978). *Ifugaw-English dictionary*. Baguio City, Philippines: The Catholic Bishop Apostolic of the Mountain Province.
- Liao, H.-C. (2004). *Transitivity and ergativity in Formosan and Philippine languages*. Ph.D. dissertation, University of Hawai'i.
- Llamzon, T. A. & Martin, M. T. (1976). A subgrouping of 100 Philippine languages. In D. L. Nguyen (Ed.), *South-East Asian Linguistic Studies Vol. 2* (pp. 141-172). Canberra: Australian National University.
- McFarland, C. D. (1977). *Northern Philippine linguistic geography*. Study of Languages and Cultures of Asia and Africa Monograph Series. Tokyo: Tokyo University of Foreign Studies.
- McFarland, C. D. (1980). *A linguistic atlas of the Philippines*. Study of Languages and Cultures of Asia and Africa Monograph Series. Tokyo: Tokyo University of Foreign Studies.
- Newell, L. 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, C. J. (1965). -AD in Isinai. *Asian Studies*, 3(1), 116-125.
- Racho, A. L. (1979). Some phrase-structure rules for Kiangan Ifugao noun and verb phrases. *Philippine Journal of Linguistics*, 1(2), 85-97.
- Reid, L. A. (1973). Isinai field notes. Unpublished database file
- Reid, L. A. (1974). The Central Cordilleran subgroup of Philippine languages. *Oceanic Linguistics*, 13, 11-560.
- Reid, L. A. (1976). *Bontok-English dictionary, with English Bontok finder list*. Canberra: Pacific Linguistics C-36.
- Reid, L. A. (1979). Towards a reconstruction of the pronominal systems of Proto-Cordilleran, Philippines. In D. L. Nguyen (Ed.), *South-East Asian Linguistic Studies*, vol. 3 (pp. 259-275). Canberra: Department of Linguistics, Research School of Pacific Studies, The Australian National University.
- Reid, L. A. (1981). Proto-Austronesian genitive determiners. In A. B. Gonzalez, FSC & D. Thomas (Eds.), *Linguistics across continents: Studies in honor of Richard S. Pittman* (pp. 97-105). Manila: Summer Institute of Linguistics and Linguistic Society of the Philippines.

- Reid, L. A. (1991). The Alta languages of the Philippines. In R. Harlow (Ed.), *VICAL 2: Western Austronesian and contact languages: Papers from the Fifth International Conference on Austronesian Linguistics* (pp. 265-297). Auckland: Linguistics Society of New Zealand.
- Reid, L. A. (1992). *Guinaang Bontok texts*. Study of Languages and Cultures of Asia and Africa Monograph Series. Tokyo: Tokyo University of Foreign Studies.
- Reid, L. A. (2000). Sources of Proto-Oceanic initial prenasalization: The view from outside Oceanic. In V. P. de Guzman & B. Bender (Eds.), *Grammatical analysis: Morphology, syntax, and semantics*, vol. 29, (pp. 30-45). Honolulu: University of Hawai'i Press.
- Reid, L. A. (2002). Determiners, nouns or what? Problems in the analysis of some commonly occurring forms in Philippine languages. *Oceanic Linguistics*, 41(2), 295-309.
- Reid, L. A. (2006). Vowel grade harmony in historical linguistics. Paper presented at the Center for Research on Language Change Workshop, Conference of the Australian Linguistic Society, University of Queensland, Brisbane, Qld, July 8-9, 2006.
- Reid, L. A. & Savetamalya, S. (1997). An explanation for inconsistent word order typologies in some Southeast Asian languages. In A. S. Abramson (Ed.), *Southeast Asian linguistic studies in honour of Vichin Panupong* (pp. 221-236). Bangkok: Chulalongkorn University Press.
- Reid, L. A. & Liao, H.-C. (2004). A brief syntactic typology of Philippine languages. *Language and Linguistics*, 5(2), 433-490.
- Ross, M. D. (2002). The history and transitivity of western Austronesian voice and voice-marking. In F. Wouk & M. Ross (Eds.), *The history and typology of western Austronesian voice systems* (pp. 17-62). Canberra: Pacific Linguistics.
- Ruffolo, R. (2005). *Topics in the morpho-syntax of Ibaloy, Northern Philippines*. Ph.D. dissertation, Australian National University.
- Scheerer, O. (1918). *The particles of relation of the Isinai language*. 's-Gravenhage: Martinus Nijhoff.
- Shetler, J. (1976). *Notes on Balangao grammar*. Language Data: Asian-Pacific Series, No. 9. Hunting Beach: Summer Institute of Linguistics.
- Tharp, J. A. (1974). The Northern Cordilleran subgroup of Philippine languages. *Working Papers in Linguistics, Department of Linguistics, University of Hawaii*, 6(6), 53-114.
- Thomas, D. D. & Healey, A. (1962). Some Philippine language subgroupings: A lexicostatistical study. *Anthropological Linguistics*, 4(9), 21-33.
- Vanoverbergh, M. (1937). *Some undescribed languages of Luzon*. Nijmegen: Dekker and van de Vegt N.V.
- Vanoverbergh, M. (1955). *Iloko grammar*. Baguio City: Catholic School Press.
- Walton, C. (1979). A Philippine language tree. *Anthropological Linguistics*, 21(2), 70-98.
- Walton, J. (1975). *Binongan Itneg sentences*. Pacific Linguistics B-32. Canberra: Department of Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Zorc, R. D. (1986). The genetic relationships of Philippine languages. In P. Geraghty, L. Carrington & S. A. Wurm (Eds.), *FOCAL II: Papers from the Fourth International Conference on Austronesian Linguistics*, (pp. 147-173). Canberra: Department of Linguistics, Research School of Pacific Studies, The Australian National University.

REID