

21 *The reconstruction of a dual pronoun to Proto Malayo-Polynesian*

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1 Introduction¹

The presence of first person dual pronouns in contrast with first person inclusive pronouns in many Western Malayo-Polynesian languages such as those in the Philippines is common knowledge. Cysouw (2003:154) labels such systems as ‘Maranao-type’ and renames ‘dual’ and ‘inclusive’ as ‘minimal inclusive (1+2),’ and ‘augmented inclusive (1+2+3),’ respectively, noting their widespread occurrence in other language families.²

The form of the dual pronoun, especially in many Philippine languages, *kita* ‘NEUT 1+2’,³ =*ta* ‘genitive 1+2’, compared with reconstructed Proto Austronesian **ita* ‘NEUT 1+2+3’ (Ross 2006) suggests that the dual pronoun was originally a first person inclusive pronoun, the reference of which has been restricted to a single first person and a single second person. In these languages, the form of the first person inclusive pronoun typically has an additional formative, labeled here as an EXPANDER, the shape of which appears to be cognate with either a first person singular pronoun (=ku), a second person singular pronoun

¹ It is a pleasure to be able to offer this paper in honour of Malcolm Ross, whose contribution to Austronesian and Papuan linguistics over the last two decades has been enormous. Malcolm made a somewhat late entry into these fields, stimulated by the diverse linguistic environment during his time as an English master at Keravat National High School and later Principal of Goroka Teacher’s College, both in Papua New Guinea, during the 1980s. His mid-career shift in interest, however, has benefited Austronesian and Papuan linguistic research tremendously.

² According to Cysouw such systems are found also in the non-Pama-Nyungan languages of Australia, one language in southeastern New Guinea, also in the East Papuan languages Santa Cruz and Nanngu. They are also found frequently in Africa, mainly in Cameroon and Nigeria, both in the Niger-Congo and Chadic families, and also in some languages of the West Coast of the USA (California and Oregon).

³ Ross’s term ‘neutral’ is labeled ‘un-casemarked’ in some published works, and is commonly labeled ‘nominative’, ‘independent’, ‘free’ or ‘long form’ in others. The dual form *kita* ‘you (SG) and I’ found in many Philippine languages is not to be confused with the common Tagalog compound pronoun *kita* ‘I (GEN) – you (NOM)’ as in Tag *inibig kita* ‘I love you.’ I wish to thank John Wolff and Hsiu-chuan Liao for commenting on an earlier version of this paper.

(=*mu*), a second person plural pronoun (=yu), or a third person plural pronoun (=da). The irregular distribution of these added formatives has led to the conclusion that there is no possible form that can be reconstructed to their parent language, and that their development in today's languages is the result of convergent development, or drift. This paper reaches a different conclusion. Evidence suggests that a distinction between first person dual and first person inclusive plural pronouns (labeled hence forth as 1DU and 1IPL, respectively) IS reconstructable to the parent of all Philippine and other Austronesian languages outside of Taiwan, and that clear paths of development can be shown for each of the languages that maintain the distinction.

2 Proto Malayo-Polynesian Pronominal Reconstructions

To date there has only been one systematic attempt to provide a comprehensive account of the reconstruction and development of the pronominal system of the parent language of all Philippine and other Austronesian languages outside Taiwan (Plessis 1996). Plessis refers to this language as both Proto Philippine (PPH) and Proto Malayo-Polynesian (PMP),⁴ implying that data from other Malayo-Polynesian languages do not affect the reconstructions that are based on Philippine language data alone (see Table 1a-b).

Table 1a: The Proto Philippine and Proto Malayo-Polynesian pronominal system
(adapted from Plessis 1996:89)^a

	THEME1	THEME2	RELATIONAL		
			Independent	Preposed	Postposed
1	i-aku	aku	n-akən	akən	-ku
2	i-kaw	ka[w]	n-imu	imu	-mu
3	[i-ia]	Ø, [ia]	n-iya	iya	-na
12(2)	i-kita	kita	n-atən	atən	-ta
122	i-kita[mu][yu]	kita[mu][yu]	(n-atən[mu][yu])	(atən[mu][yu])	-ta[mu][yu]
13	i-kami	kami	n-amən	amən	-mi
22	i-ka[mu][yu]	ka[mu][yu]	n-i[mu]yu	i[mu]yu	-[mu]yu
33	[i-ida]	Ø, [da]	n-ida	ida	-da

^a The labels of these tables are originally in French.

⁴ In recent publications I have referred to this parent language as Proto Extra-Formosan (PEF), and still consider it to be the most appropriate label for the immediate parent of all Philippine and other Austronesian languages outside of Taiwan (including also Yami, politically part of Taiwan, but clearly a member of the Bashiic subgroup of Philippine languages). However, in deference to the honoree of this volume, who disagrees with my use of the term, I forgo it for now.

Table 1b: The Proto Philippine and Proto Malayo-Polynesian pronominal system (adapted from Plessis 1996:89)

	REFERENTIAL		
	[+dynamic] [-proximate]	[-dynamic] [-proximate]	[+dynamic] [+proximate]
1	si-akən	di-akən	kV-akən
2	(si-imu)	di-imu	kV-imu
3	si-ia	di-ia	kV(n)-ia
12(2)	(si-atən)	di-atən	kV-atən
122	(si-atən[mu][yu])	(di-atən[mu][yu])	kV-atən[mu][yu]
13	(si-amən)	di-amən	kV-amən
22	(si-imuyu)	di-imuyu	kV-i[mu]yu
33	n-ida	di-ida	kV(n)-ida

Plessis reconstructs a single form *-ta for both 1DU and 1PL ('postposed relational') forms, but adds [mu][yu] to the latter form, implying that it may have been possible to distinguish the pronouns by adding one or the other (or both?) of the two syllables to the base.

More recently, Malcolm Ross (2006) has provided a comprehensive account of the reconstruction and development of PAN pronouns, including a 'very tentative' reconstruction of PMP pronouns (see Table 2).⁵

Table 2: Ross' reconstruction of Proto Malayo-Polynesian pronominal forms (adapted from Ross 2006:542)

	NEUT	NOM1	NOM2	GEN1	GEN2	PSR
1SG	i-aku	aku	=(h)aku	=ku	=n(a)ku	[y]akən
2SG	ikahu	(i)kahu	=ka(hu)	=mu	=nihu	imu, ihu
3SG	siya	iya	=∅, =ya	=ya	=niya	—
1PL	i-kita, ita	kita, i-ta	=ta	=ta	—	[y]atən
1EPL	i-kami	kami	=kami	=mi	=mami,	[y]amən
2PL	i-kamu	kamu	=kamu	—	—	—
	i-ka-ihu, kamu-ihu	ka-ihu	=ka-ihu, =kamu-ihu	=ihu, -mu-ihu	=nihu	hu, inihu, imu-ihu
3PL	—	sida	=da	=da	=nida	—

Ross' reconstructions are supplemented by proposals regarding the innovations which distinguish his PMP reconstructions from the system he reconstructs for PAN. He does not make a distinction between 1DU and 1PL forms. Systematic reconstruction has also been done of the pronominal systems of a number of the generally recognised subgroups within the Philippines: Bashiic (Plessis 1996), Cordilleran (Reid 1979), Northern Cordilleran

⁵ The table is rotated from its original orientation to provide ease of comparison with other tables in this paper.

(Tharp 1974), Southern Cordilleran (Himes 1998), Sambalic (Plessis 1996), Danaw (Allison 1979), Manobo (Harmon 1979), and Bisayan (Zorc 1977), and extensive pronominal data is available for most Philippine languages. Philippine language data have also been used to support individual forms that have been reconstructed for Proto Austronesian (PAN) and PMP (Dempwolff 1938; Dyen 1974; Dahl 1976; Blust 1977).

The most recent study which examines Philippine pronominal systems is Liao (2008). In this carefully researched paper, Liao notes that while all accounts of PMP or PAN pronominal systems distinguish between first person inclusive (I IPL) and exclusive (I EPL) forms, none reconstructs a distinct first person dual pronoun (1DU) for either protolanguage, even though dual pronouns are widespread throughout Western Malayo-Polynesian languages.⁶ Her paper provides a typology of first person dual pronouns in Philippine languages with the aim of determining whether or not a distinct dual form is reconstructable to the parent of these languages. Liao (2008:6) states that:

[b]ased on data that are available to me, *no* distinct 1D pronoun forms are found in the following groups: (i) Bashiic, (ii) Inati, (iii) Kalamian, and (iv) the Subanun group of the Greater Central Philippine microgroup

and concludes, based on the distribution of the different innovated formatives in the I IPL form that appear to have developed when the earlier inclusive form was restricted to marking only dual pronouns, that they are not reconstructable to PMP and developed in the languages that have them as a result of convergent development or drift. In Reid (1979:260), I also suggested the possibility that the parent language of the Philippines may not have had a distinct dual form, although it is probable that a dual form existed in Proto Northern Luzon [=Proto Cordilleran]. I have now, however, come to the conclusion that PMP (and Proto Northern Luzon) must have had a distinction between dual and inclusive plural pronouns and that those languages that no longer show the distinction have lost it.

In order to limit the scope of this paper, I shall restrict my discussion solely to the formally simpler, typically enclitic, genitive and nominative pronouns, since if a distinction between 1DU and I IPL exists in these sets, it will usually be found with similar marking in other sets. I shall draw on data from other sets only when they are relevant to the discussion at hand. It should be noted that Liao's paper contains an extensive list of tables containing Philippine pronominal data and the published (and unpublished) sources from which they are drawn. The less accessible Plessis (1996) also contains extensive pronominal tables from Philippine and non-Philippine Austronesian languages.

My tentative reconstruction of PMP first and second person genitive and nominative clitic pronouns is presented in Table 3. There are a number of questions that arise from Ross' PMP reconstructions, apart from whether or not the language had a first person dual pronoun, but these need to be addressed in a separate paper.

⁶ Apparently Liao did not have access to Plessis (1996) which suggests a possible distinction between PMP 1DU and I IPL forms.

Table 3: Proto Malayo-Polynesian first and second person clitic pronouns^a

	GENITIVE	NOMINATIVE
1SG	=ku	=aku
1DU	=ta	=ta
2SG	=mu	=kaʔu
1IPL	=ta[mu]	=ta[kamu]
1EPL	=mi	=kami
2PL	=mu[yu]	=kamu

a Square brackets indicate dialectally distinguished pronominal formatives.

2.1 First person dual and inclusive pronouns in Philippine languages

The development of a distinction between 1DU and 1IPL forms has been addressed by Blust (forthcoming). He suggests that (cited by Liao):

... [t]he most likely explanation of these special dual forms arises from the pragmatics of the speech act: most conversations take place between a speaker and a single hearer. As a result, the use of an inclusive pronoun would normally involve only the conversational dyad of speaker and hearer, whereas this would not necessarily hold for the corresponding exclusive form, since speakers commonly refer to themselves and others rather than a single other. Frequency of usage alone would lead reflexes of *kita to become de facto duals, creating a need for new plural inclusive forms, which were then cobbled together from the existing reflex of *kita plus parts of other pronouns (*-ihu*, *n-ihu*, *-m(u)* ‘2SG’, *-da* ‘3PL’, etc.).

Liao (2008) provides full details of the ways each Philippine language has supposedly ‘cobbled together’ parts of existing pronouns in order to form the new 1IPL forms. These are summarised as follows:

1. In Central Cordilleran languages the form appears to be first singular (1SG), *=ta ‘1DU’ + *=ku ‘1SG’ > =*taku* ‘1IPL’.
2. In Central Luzon languages, Northern and Southern Alta, some of the Northern Cordilleran languages, Arta, and Umiray Dumaget, the form appears to be second singular (2SG), *=ta ‘1DU’ + *=mu ‘2SG’ > =*tamu*, =*tam* ‘1IPL’.
3. In the Danaw languages, Itneg, Southern Cordilleran languages, Ilokano, Tausug, Tagalog, some Manobo languages, Aborlan Tagbanwa, Palawan Batak, Tboli, etc., the form appears to be second plural (2PL), *=ta ‘1DU’ + *=yu ‘2PL’ > =*tayu* ‘1IPL’.⁷
4. In the Northern Cordilleran languages, Isnag, Malaweg, and Itawis, the form appears to be third plural (3PL), *=ta ‘1DU’ + *=(i)da ‘3PL’ > =*tada*, =*tida*, =*téra* ‘1IPL’.

⁷ Various other forms appear, as noted in the Blust quote, differing according to the actual development of second person plural forms in the languages, thus for example, the Aborlan Tagbanwa 1IPL form is =*tami*, where =*mi* is not a ‘cobbled’ 1EPL form, but is the genitive 2PL pronoun that developed from *=muyu (see §2.2 below), and Brooke’s Point Palawano is =*tiu*, apparently by analogy with Brooke’s Point Palawano =*miu* ‘GEN.2PL’.

5. Other means have also been used to form the distinction, such as vowel alternation in Balaan: *ta* ‘1DU’ versus *to* ‘1IPL’.

While Blust is no doubt correct in his explanation of why a distinction between these two forms developed, I believe he is incorrect in assuming that languages simply chose to randomly cobble together forms from parts of other pronouns to create new forms. The fundamental question arises, why would a language choose a singular form such as ‘I’ or ‘you (SG)’ to extend the function of a dual pronoun to an inclusive one? There seems to be no available pragmatic or semantic explanation. The semantics of an inclusive first person pronoun (‘we all’) is not achieved by adding ‘I’ or ‘you (SG)’ to ‘we (two)’.

Probably, the most widespread of the expanders used for forming the 1IPL (genitive) pronoun is what appears to be a reflex of PMP **=mu* ‘GEN.2SG’. Although a semantically unexpected ending, it appears not only in many of the Negrito languages noted for their conservative morphology (such as Arta, a first order branch of the Northern Luzon family and the Altan languages, two very different languages forming a sister branch with the Central and Southern Cordilleran languages in Northern Luzon) (Reid 1989, 1991), and all the Negrito languages of North-East Luzon, including Umiray Dumaget (possibly a Central Philippine language (Himes 2002)), as well as in some of their sister languages in the Cagayan Valley branch of Northern Cordilleran. It appears also in the Ayta Negrito languages and all of the other members of the Central Luzon family, including Sinauna and Kapampangan. Although Ivatan in the far north of the Philippines does not distinguish first person dual from inclusive (as noted by Liao), the distinction does exist in Yami with the inclusive pronoun being commonly formed in the same way (see §2.4 below). It is also the expander in all the languages of Mindoro, including the northern group, Tadyawan, Alangan and Iraya, as well as the genetically dissimilar southern group, including Hanunoo and Buhid. In the far south of the Philippines, Tiruray, a member of the Southern Mindanao family distinguishes two of the first person genitive pronouns (‘Set C’) as follows: *to* ‘1DU’ versus *tom* ‘1IPL’ (Schlegel 1971), where /o/ is one of the Tiruray reflexes of PAN **a* (Blust 1992).

The other semantically unexpected expander, the apparent reflex of first person singular **=ku* is relatively restricted, occurring in most of the fairly closely related set of Central Cordilleran languages in northern Luzon.

The other widespread expander used for forming the 1IPL pronoun is a not unexpected second person plural pronoun, forming the semantics of ‘I, you (SG), and the rest of you’. It is often a reflex of a genitive **=yu*, or **=niyu*. These appear in some of the northern languages of the Philippines, such as Ilokano and the various Itneg languages,⁸ all of the Southern Cordilleran languages, a few of the Central Philippine languages, such as Tagalog and Tausug (as *=niyu*),⁹ in the Danaw languages (as *=nu*), in some of the Manobo languages, and in some of the languages of Palawan, such as Palawano, Aborlan Tagbanwa and Batak.

There are a few languages, noted above, in which the expander is a third person plural form. This is not unexpected in that it produces the semantics of ‘I, you (SG), and the others.’

⁸ Itneg is a closely related group of Central Cordilleran languages strongly influenced by Ilokano.

⁹ The modern Tagalog 1IPL form *=táyo* is a nominative clitic and is distinct from an old nominative dual *=kata*, still used in some rural areas. The genitive 1IPL form *nátin* is used today in contrast to dual *=nita* (Schachter and Otnes 1972:88).

The major problem then, lies in finding some explanation for the most widespread of the expanders. Under the explanation proposed by Blust (and endorsed by Liao) that the distinction between first person dual and inclusive pronouns is not reconstructable to the parent language of the Philippines, one must assume that a semantically inappropriate second person singular form was independently chosen from among the various available pronouns as the most appropriate ending for the inclusive form, not once, but numerous times, as it occurs in a number of primary subgroups or individual languages from one end of the Philippines to the other. This, to me, seems highly unlikely.

2.2 On the development of *=tamu* forms in Malayo-Polynesian languages

In an oft-cited paper, Blust (1977) demonstrates that PMP **=mu* ‘GEN.2SG’ reflects the PAn clitic **=mu* ‘2PL’, replacing the earlier PAn **=Su* ‘GEN.2SG’, a change that constitutes one of the defining innovations of his PMP and which he labeled as ‘the second politeness shift’ (see also Ross 2006:541–542). If we assume that **=ta* became restricted to 1DU with the concurrent development of a new 1IPL form in PMP *prior* to the shift of the second person genitive pronoun from plural to singular, we have a reasonable explanation for **=mu* ‘GEN.2PL’ being chosen as the combining form for the new pronoun **=ta[mu]* ‘GEN.1IPL’, and we have an explanation for its widespread occurrence in Philippine languages. These are inherited forms, not innovations.

With the shift of meaning of **=mu* from second person plural to second person singular and the breakup of the parent language and dispersal of its daughters, widespread reformation of the 1IPL pronoun occurred. The nature of these changes suggests that the combined form was not fully lexicalised in PMP, that is, for some native speakers the expanded form was interpreted as a single morpheme, while for others the expander was interpreted as a second morpheme. Variation also probably occurred,¹⁰ with some dialect areas using the combined form while others did not, a situation not unlike the *you/you [all]* variation of the second person pronoun in English. This may account for the few subgroups which still today do not have any contrast between dual and inclusive first person forms. There is clear evidence, however, that some languages have lost the contrast in relatively recent times. Although dual forms are known for some dialects of Tagalog, for example, the historically newer first person inclusive forms are commonly used today for both 1DU and 1IPL. Similarly, although there is no contrast between the two forms in Ivatan, its sister Bashiic language, Yami in Taiwan, maintains the contrast (see §2.4).

Languages that still retain the full form *=tamu* (including all of the Central Luzon languages) appear to have fully lexicalised the pronoun, in that they have not substituted the semantically inappropriate second person singular ending with a more appropriate plural ending. Others maintain it, but have reduced it to *=tam*. In the Negrito languages of Northeastern Luzon, the Altan languages, and several of the Cagayan Valley languages this could have developed by analogy with the genitive second person singular variant *=m* that in all these languages occurs after vowel-final words. But the shortened form *=tam* also occurs in languages such as Arta, and Casiguran Dumagat that do not have a shortened second person singular variant *=m* following vowel-final words, implying that, at least in these languages, the final consonant of the form is not identified as a second person singular ending. Tiruray in the south of Mindanao also has a reduced form *=tom*, but only has *=mu* as the second person singular form. I consider it most likely that in all the

¹⁰ Hence its representation as PMP **=ta[mu]*, rather than **=tamu*.

languages that have the shortened form *=tam*, it is the result of vowel erosion, rather than by analogy with the shortened form *-m* of the genitive second person pronoun.

Languages that inherited **=ta[mu]* as a sequence of meaningful parts, rather than as a single lexicalised pronoun, replaced the inappropriate ending following its shift from second person plural to second person singular. The most common substitution was with the form *=yu*, a second person plural pronoun that possibly developed after **=mu* changed its meaning. The source of this form is of some interest and requires us to evaluate the reconstructions that have been made, specifically those proposed by Ross (2006). He lists the set of changes related to Blust's 'second politeness shift' as follows:

- a. The PAN plain neutral **i-Su* 2SG is lost, and PMP **ikahu*, reflex of PAN polite **i-ka-Su*, becomes the default neutral 2SG pronoun.
- b. PMP **=mu* GEN:2SG reflects the PAN clitic **=mu* 2PL, and the PAN clitic **=Su* 2SG is lost (although the long clitic **=nihu*, reflex of PAN ** (=)ni-Su* continues).
- c. PMP has new additional forms, neutral **[i]ka-ihu* and **kamu-ihu* and genitive **=ihu*, **=nihu*, **=mu-ihu* which incorporates **-ihu*, apparently reflecting PAN neutral **i-Su* 2SG. (Ross 2006:542)

While this set of changes provides a 'top-down' account for the proposed PMP reconstructed forms suggesting the paths of development from earlier PAN forms, problems arise when attempting to account for their reflexes in Philippine languages. The first problem has to do with the forms; the second problem has to do with their function.

It is a well-known fact of PMP phonology¹¹ that PAN **S* > PMP **h* and that **h* was lost in all languages of the Northern Luzon subgroup,¹² possibly accounting for the development in these languages of a new second person plural genitive *=yu* (< **=ihu*). But PMP **h* was retained in other Philippine subgroups, so we would expect to find in these other languages at least some second person plural genitive forms with the shape *=ihu*, *=nihu* or *=mu-ihu*. We do not. What we find instead are forms without *h*, such as *=yu*, *=niyu*, *=muyu* and the like. Such forms are found throughout the languages of Central Luzon, Central Philippines, Manobo, Danao, and other Philippine subgroups. *=muyu* is also found in languages in Borneo, while the analogically changed *=miyu*,¹³ *=myu* or *=miu* is found in Itbayaten, Brooke's Point Palawano¹⁴ and Northern Alta in the Philippines, as well as in Chamorro and Palauan, some of the languages of Sulawesi, Eastern Indonesian and Oceania (Harvey 1982; Plessis 1996:78). The shortened form *=mi* 'GEN.2PL' is found in Aborlan Tagbanwa,¹⁵ and also some Sulawesi languages (e.g., Uma and Da'a) (Himmelman 1996). Either we need to claim that PMP **h* was independently lost in just these forms in the parent of each of these subgroups or that the reconstructions tentatively claimed in Ross (2006:542) and originally proposed by Blust (1977) need to be revised.

¹¹ 'It is clear that by PMP times the sibilant reflexes of **S* were completely lost outside of Formosa' (Zorc 1982:121).

¹² For example: PMP **húRas* > Tagalog *húgas*, but Batad Ifugao *ūlah* 'wash'; PMP **buek* > Tagalog *buhúk*, but Bontok *fu ñík* 'hair', PMP **tebuh* 'sugarcane' > Tagalog *tubúh-an* 'sugarcane field, plantation', but Bontok *tífú* 'leaf, plant', etc.

¹³ The initial vowel appears to have been changed by analogy with the genitive first person exclusive pronoun *=mi*.

¹⁴ Information courtesy of Bill Davis.

¹⁵ Data provided by Neva Bisquer, a native speaker of the language.

2.3 On the development of *=taku* forms in Central Cordilleran languages

While the development of **=tamu* and **=tayu* forms follows naturally from the reconstruction of PMP **=ta[mu]* ‘1IPL’, and **=mu[yu]* ‘2PL’, an explanation of reflexes of what has been reconstructed as Proto Central Cordilleran (PCCo) **=taku* ‘NOM/GEN.1IPL’ (Reid 1974, 1979) is needed. The claim being made here is that *=taku* forms are **not** the result of the cobbling together of a dual form *=ta* and a first person singular form *=ku*, as has been repeatedly claimed in the literature, but rather the expander *=ku* is a reduced form of the nominative second person plural clitic *=kayu*. Evidence for this claim comes from several languages.

In Philippine languages nominative second person **singular** clitic forms are typically reflexes of a PMP **=kaʔu* > **=kaw*, as in TAG *ʔikaw* ‘2SG’. Ross (2006:542) reconstructs it as PMP **=ka(hu)*,²⁰ however no forms are found outside of Taiwan with a reflex of a medial **h*.²¹ That the form was disyllabic, rather than monosyllabic **ka[w]* as reconstructed by Plessis (1996), is supported by the presence of disyllabic forms in Chamorro as well as some of the lesser known languages of Mindoro in the Philippines, such as Alangan *kaʔu*, Hanunoo and Iraya *kawu* ‘NOM.2SG’, as well as in a number of languages south of the Philippines, with forms such as Minangkabau and Banjarese Malay *kau* ‘2SG’ (Adelaar 1992:113). The reconstruction of a medial glottal stop in PMP **=kaʔu*, is controversial. That the form was disyllabic is clear, but whether the onset of the second syllable was a glottal stop (as in other reconstructed PMP and Proto Philippine forms, such as **laʔun* ‘long; slow’, **ha:ʔun* ‘remove from fire’, **baʔug* ‘rotten (eggs), sterile’, etc. (Zorc 1982:128–129, 1996)), or some other transitional consonant, such as **w*, following the loss of an earlier consonant, or whether there was no consonantal onset to the second syllable is unclear. I assume however that the sequence **aCu* > **a[ʔ]u* > **a[w]u* > **a[∅]u* > *aw* is more natural than **aCu* > **a[w]u* > **a[ʔ]u* > **a[∅]u* > *aw*,²² or any other permutation of these changes.

The equivalent **plural** form was PMP **=kamu* ‘NOM.2PL’, a form that, like PMP **=tamu* ‘GEN.1IPL’, was not fully lexicalised in that following the shift of **=mu* to second person singular, it was replaced with the ‘appropriate’ plural form **=yu*, resulting in *=kayu* ‘NOM.2PL’ in many languages.

²⁰ Ross (2006:524) indicates that forms in parentheses either did, or did not occur.

²¹ Bonggi, a language of Sabah, Malaysia, which according to the Ethnologue (Gordon 2005) is one of the Palawano languages, closely related to Molbog of Balabac Island in the south of Palawan in the Philippines, has a medial *h* in several pronouns, including: *uhu* ‘NOM.2PL’ and *dihu* ‘DAT/ACC.2PL’ (Boutin 1988:5, 2002:215). It is clear however that Bonggi /h/ has developed from PMP **k*, and not from PAN **s*. The published data suggest that voiced and voiceless bilabial and velar stops have fricative variants as evidenced from the pronominal alternations recorded in Boutin (1988:5): *ku/hu* ‘GEN.1SG’, *kita/hita* ‘NOM.1DL’ *kiti/hiti* ‘NOM.1IPL’. Kroeger (1992:295) notes that ‘for many speakers, /k/ does not spirantise to [h] in stressed syllables’. At the onset of unstressed syllables, however, it seems the change is complete, as in the second person pronouns cited above. The evidence suggests that the sound change is still in progress in initial (stressed) position. In addition to the consonants, regular sound changes relate the final syllables in Molbog *kitey* [kitəy] and Bonggi *kiti/hiti* ‘NOM.1IPL’, and Molbog *ekew* [əkəw] and Bonggi *uhu* ‘NOM.2PL’, while the initial *u* in the 2PL form is a result of one of the Bonggi vowel harmony rules (Kroeger 1992) by which high vowels can spread from left to right, or right to left, as in /dabu/ + -an > [duʔbuan] ‘fall’.

²² The symbols in square brackets indicate transitional consonants which may or may not have had phonemic status in the language.

In many Philippine languages, *=ta* ‘1DU’ is both a nominative and a genitive pronoun, similarly *=taku* and *=tayu* ‘1IPL’ are both nominative and genitive pronouns. Evidence suggests, however, that nominative and genitive forms were originally distinct, that is *=tayu* ‘1IPL’ was formed with a combination of *=ta* and a **genitive** second person plural *=yu*, while *=taku* was formed with a combination of *=ta* and a **nominative** second person plural *=kayu*, each of which subsequently extended their function to cover both cases. The presence of a reflex of **=taku* ‘NOM.1IPL’ has generally been considered to be one of the distinguishing features of the Central Cordilleran subgroup of Northern Luzon languages, but there is one Central Cordilleran language, Kalinga, as spoken in Manabo, Abra that maintains a reflex of what must be an earlier form **=ta[kayu]* ‘NOM.1IPL’ as shown in Table 4.²³

Table 4: Manabo Kalinga personal pronouns
(adapted from McFarland 1977:13)

	GEN	NOM
1SG	<i>=ku/=k</i>	<i>=ʔak</i>
1DU	<i>=ta</i>	<i>=ta</i>
2SG	<i>=nu/-m</i>	<i>=ka</i>
3SG	<i>=na</i>	<i>siya</i>
1EPL	<i>=mi</i>	<i>=kam</i>
1IPL	<i>=takay</i>	<i>=takay</i>
2PL	<i>=yu</i>	<i>=kay</i>

An explanation is needed for the high vowel of the final syllable of *=taku* in other Central Cordilleran languages, if in fact it developed from **ta[kayu]*. One possible explanation is that the disyllabic form was reduced by analogy with the first person singular genitive pronoun **=ku*, but one might expect that if this was the case, then the pronoun would have developed as **=tak*, since in all of the Central Cordilleran languages in which *=taku* occurs, *=ku* ‘GEN.1SG’ is reduced to *=k* on vowel final forms. A different type of phonological explanation is probably more satisfactory. Stress in all languages which have a full reflex of **=ka'yu* ‘NOM.2PL’ is invariably on the ultimate syllable. The low vowel in the initial syllable of the form is unstressed and is susceptible to assimilation to the stressed high back vowel of the final syllable. Although there are no reflexes in any of the Central Cordilleran languages showing raising of the unstressed vowel in the 2PL form, in Batad Ifugao the vowel is lost when it is part of the medial syllable of the formerly trisyllabic neutral or nominative second person plural pronoun **daka'yu*, reflected as *daʔyu* ‘NEUT.2PL’.²⁴ Nevertheless, Ifugao does show the same assimilation in the initial weak vowel of its reflex of **=ta'ku* ‘NOM/GEN.1IPL’, IFGBT *=tu'ʔu* ‘NOM/GEN.1IPL’ (see Table 5).

²³ Manabo Kalinga has lost final high vowels in what were originally di- or tri-syllabic pronouns. It should be noted also that *=nu* ‘GEN.2SG’ is probably analogically changed from earlier **=mu* ‘GEN.2SG’, to match the alveolar initial consonant of the third singular pronoun (*=na* ‘GEN.3SG’), and thus has a different source than *=nu* ‘GEN.2PL’ found in some Cagayan Valley languages that appears to have developed from earlier **=niyu*. The reduced form *-m* of **=mu* ‘GEN.2SG’ is retained as a second person singular agreement feature on vowel-final words in Manabo (and other Itneg-Kalinga languages) (Reid 2001).

²⁴ PAN **k* regularly became /ʔ/ in Batad Ifugao.

Table 5: Some Batad Ifugao personal pronouns
(adapted from Newell 1993:211)

	Nominative	Genitive
1SG	= aʔ	= ʔu, = ʔ
1DU	= ta, dita	= ta
2SG	= ʔa, daʔa	= mu, = m
1EPL	= ʔami, daʔmi	= mi
1IPL	= tuʔu, dituʔu	= tuʔu
2PL	= ʔayu, daʔyu	= yu

However, there are at least two languages outside of the Cordilleran area that have replaced the inherited expander on the second person plural pronoun *=kamu with the semantically appropriate second person genitive ending *=yu, giving *=ka'yu, and have then assimilated the vowel in the first syllable to that in the final. The Northern Mangyan language, Iraya, maintains the full form =kuyu 'NOM.2PL', while the Southern Mindanao language, Tboli, has reduced the form from earlier *=kuyu to *kuy* '2PL', and this is the form that has been added as an extender to the dual pronoun to produce the current first person dual form *tekuy* (see Table 6). The claim then is that the Central Cordilleran languages underwent the same processes of assimilation and elision that eventually resulted in the form =*taku* '1IPL'.

Table 6: Some Tboli first and second person pronouns
(adapted from Porter 1977:35–36; Forsberg 1992:22)

	NON-FOCUSED PRONOUNS	
	Set III- <i>u</i> class	Set IV- <i>dou</i> class
1DU	te	kut
2SG	-em/-hem/-m	kóm
1IPL	tekuy	tekuy
2PL	ye	kuy

2.4 On the development of dual first person forms in Yami

Yami, spoken on Botel Tobago Island in Taiwan, has long been recognised as a sister of Itbayaten, Ivatan and the other Bashiic languages, possibly as a result of back-migration from the Philippines within the last millennium or so. Its position outside of direct influence from Philippine languages therefore makes the fact that it has a distinction between 1DU and 1IPL pronouns of considerable relevance to the issue as to whether or not PMP had a dual pronoun. There has been no mention of a dual pronoun in any of the available materials on the language, such as Ho (1990), although Asai (1936:42) lists two first person inclusive forms, *ta* and *takamu*, and Rau and Dong (2006:123) list three ('bound') first person inclusive forms =*ta*, =*tamo* and =*takamo*, but without any discussion of the different functions of the forms. An examination of the extensive text materials for Yami that are available in Rau and Dong (2006) (henceforth RD) as well as the Yami translation of the New Testament (NT) provides clear evidence that while =*ta* is used for both dual and inclusive pronouns, extended forms are restricted to first person pronominal reference with more than two people.

There are more than 75 non-singular, first person references in the RD texts, at least 53 of which can be unambiguously identified from context as having dual reference. None of the dual pronouns uses one of the ‘new’ extended forms.²⁵ Of these dual references, =*ta* is used to encode genitive possessors (9 times) as in (1), genitive actors of a transitive construction (17 times) as in (2), and nominative actors of an intransitive construction (16 times) as in (3). The other pronouns with dual reference are encoded with independent casemarked long forms, either *yaten* for nominative patients of a transitive construction (6 times) as in (4), or as fronted sentence topics as in (5), *niaten* for the oblique patient of an extended intransitive construction (once) as in (6), and *jiaten* for the locative patient of a subjunctive transitive verb (twice) as in (7). For these independent pronominal forms, no contrast between dual and inclusive pronouns exists. In the examples which follow, the relevant pronouns are bolded.

- (1) *among ta* ‘our (DU) fish’ (RD18.6)
- (2) *mi ta moaen o ovi* ‘let’s (DU) go plant the yams’ (RD14.2)
- (3) *mi ta manazataza* ‘let’s (DU) go fishing’ (RD18.2)
- (4) *ta na yaten zakaten* ‘because he has come to kill us (DU)’ (RD1.21)
- (5) *yaten rana ya am...* ‘as for us (DU) already ...’ (RD14.23)
- (6) *o ito so manci niaten a rarakeh a* ‘the old man is calling to us (DU)’ (RD11.6)
- (7) *ji abo kaji na zakatan jiaten* ‘he will surely kill us (DU)’ (RD16.81)

In contexts in which the first person pronoun can be unambiguously identified as referring to more than two people, the extended form =*tamo* is most commonly used in both RD and NT. It encodes the nominative 1IPL actor of an intransitive construction (7 times) as in (8)–(9) and the genitive 1IPL actor of a transitive construction (3 times) as in (10).

- (8) *mangay tamo do Jihaod ori* ‘let’s (all) go to Jihaod’ (RD11.10)
- (9) *Meyoli tamo pa do Yotay a pongso.* ‘Let us (all) go back to Judea.’
(John *Yohani* 11:7)
- (10) *kalaen tamo pala sira* ‘let’s (all) look for them’ (RD15.28)

The longer extended form, =*takamo* appears in RD only as the genitive 1IPL actor of a transitive construction (5 times) as in (11), but it is also found in NT as the nominative 1IPL actor of an intransitive construction as in (12).

- (11) *kabkaben takamo o vahay da* ‘we (all) will tear open their roof’ (RD15.25)
- (12) *O ney manma na nimamizing nyo a nanao am masicyakarilaw takamo an.*
‘The very first teaching you heard was that we (all) love-one-another.’
(1 John *I Yohani* 3:11).

²⁵ There is one identified instance in the NT where St. John is writing to one person but uses *tamo* for dual reference, e.g., *Inaoy si makeykai ko rana makacita jimo a kawalawalam tamo rana makacita so kadwan jyaten.* ‘I wish that I will soon see you (SG) and we will be together to see each other.’ 3 John v.14. This has been confirmed by a native speaker as a mistranslation. The underlined form should be *kawalawalam ta na*, confirming the analysis presented in this section.

While genitive actors of transitive sentences distinguish 1DU from 1IPL forms, in that the extended forms are only used to encode the latter, genitive possessors in noun phrases do not distinguish them; =*ta* is used to encode both 1DU, as in (1) above, and 1IPL. Extended forms do not encode genitive possessors; this is true for both RD and NT texts. Thus in (13), the first pronoun is the nominative actor of an extended intransitive construction, while the second pronoun is the possessor of the noun expressing the oblique patient; both are first person inclusive plurals and have the same reference, but the forms are different. Similar examples are found in (14)–(16).

- (13) *mi tamo milolo so kayo-kayo ta* ‘Let’s (all) go drag our wood.’ (RD6.1)

One other factor that is apparent from the NT data, is that all three forms can alternate to encode the genitive 1IPL actor of a transitive sentence, although in RD, =*ta* does not appear with this function. Examples (14)–(16) are almost identical in meaning but show different pronominal forms.

- (14) *Isaray ta ji Ama ta do to a Ama na ni Yeso Kizisto a Panirsirngen ta.*

‘We (all) thank our Father, the Father of Jesus Christ our Savior.’

(Ephesians *Ivoso* 1:3)

- (15) *Isaray tamo ji Ama na ni Yeso Kizisto a Panirsirngen ta.*

‘We (all) thank the Father of Jesus Christ our Savior.’

(2 Corinthians 2 *Kedinto* 1:3)

- (16) *Isaray takamo si Ama ta do to a Ama na ni Yeso Kisizto a Panirsirngen ta ...*

‘We (all) thank our Father above, the Father of Jesus Christ our Lord ...’

(1 Peter 1 *Pite* 1:3)

Just as it is possible to infer from some languages in the Philippines that dual forms were expanded by both genitive and nominative second person pronouns, =*yu* and =*kayu* respectively, to form plural inclusive forms, the same may have been true also for PMP, given that reflexes of both *=*mu* and *=*kamu* occur as dual expanders. There are no languages today however in which the expanded forms are distributed accordingly.

Today, the Yami genitive second person plural form corresponds to that found in Ivatan, =*nyo*, from earlier *=*niyu*. There is at least one example found in NT which shows a reformation of the 1IPL pronoun by replacing the inherited expanders that appear to be semantically inappropriate, with the current 2PL form to create a new 1IPL pronoun, =*tanyo*, as in (17).

- (17) *Cyaha, ta tanyo apiya.* ‘Nevermind, because we (all) are fine.’

(1 Thessalonians 1 *Tesalonicya* 5:3)

3 Conclusion

The recognition that PMP must have had a contrast between first person dual and inclusive plural pronouns began with the question of why a language would have chosen to add a singular first or second person pronoun as an expander to a dual form in order to reconstitute the semantics of an inclusive form. It seemed improbable that most Philippine subgroups and some non-Philippine groups speaking Malayo-Polynesian languages would have independently chosen a second person **singular** pronoun (*=*mu*) as the expander to create a distinction between 1DU and 1IPL pronouns, as had been claimed. Recognizing that this form was a second person **plural** pronoun in Formosan languages, accounting for its

reconstruction as such to PAN, provides an explanation for its widespread occurrence as an expander forming a contrast between *=ta ‘1DU’ and *=tamu ‘1IPL’. This explanation is only possible if the contrast actually existed in PMP, prior to the shift of *=mu from second person plural to second person singular (Blust’s ‘second politeness shift’) and accounts for its wide distribution among PMP languages.

I claim that following the shift from second person plural to singular, the inappropriate semantics of *=ta+mu as a first person inclusive plural form resulted in the replacement of the expander by the new second person plural form *=yu in those daughter languages that had not fully lexicalised the combination and were thus associating the expander with the second person singular pronoun. This shift accounts for the widespread occurrence of *=tayu ‘1IPL’.

The claim that the first person singular pronoun (*=ku) was the source of the expander of =ta ‘1DU’ to =taku ‘1IPL’ in the Central Cordilleran languages was problematic not only because of the irregular semantics, but also because in all of these languages there is a vowel-less variant of =ku when cliticised to any vowel-final form, so that one would expect the inclusive plural pronoun to have been *=tak, if the first person singular pronoun had in fact been the source of the expander. The occurrence of reflexes of a nominative second person plural form *=ka'yu, in which the unstressed first vowel had assimilated to the stressed final high vowel as =ku'yu, along with evidence that *=ka'yu ‘NOM.2PL’ was the expander in one of the Central Cordilleran languages provided an explanation that this was the source of the =ku expander in the other languages of that subgroup.

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