

A CASE STUDY OF LEXICAL BORROWING: THE TAGAKAULO AND SARANGANI MANOBO LANGUAGES OF THE SOUTHERN PHILIPPINES (ABRIDGED)

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1. Theoretical framework

Sometimes conventional historical and comparative strategies found in textbooks cannot retrieve the information one is trying to obtain, and new methods and strategies consequently need to be developed in addition to the older, tried methods. In this study I present a different strategy to determine contributing factors as to why two adjacent languages, Sarangani Manobo and Tagakaulo, each of which belongs to a different language family, have over 50% shared vocabulary. This figure is compared to less than 20% of shared vocabulary between Tagakaulo and its other adjacent neighbor, Blaan. All three of these languages are distantly related to each other, being members of the Malayo-Polynesian subfamily of Austronesian languages.

This case study begins with the hypothesis that shared lexical terms between Tagakaulo and Sarangani Manobo cannot be assumed to be cognates inherited from a common ancestor language, but rather, that some lexical terms are the result of borrowing that has occurred because of (1) geographical proximity to each other and 2) the constant contact of these two respective language families over a long period of time. Theoretically, language contact began introducing lexical terms from an early Manobo source into Proto-East Mindanao and its subfamily Proto-South East Mindanao at a earlier period. Many of these Manobo lexical terms are retained in the present-day languages of Mansaka and Tagakaulo.

Within the framework I use two approaches to determine the underlying reasons for the high percentage of shared vocabulary between Tagakaulo and Sarangani Manobo. During the 1960s and early 1970s relations between the various Philippine languages were mapped using a modified Swadesh list developed by Elkins (1974) and expanded by Reid (1971) for use in the Philippine context. The results obtained through lexiostatistical studies by Thomas and Healey and others, placed the majority of Philippine languages into two sub-families; the Northern Philippine language family and the Southern Philippine language family, each having a number of sub-families. Secondly, the results of the studies provided some rough time estimates as to when the languages diverged from one another.¹

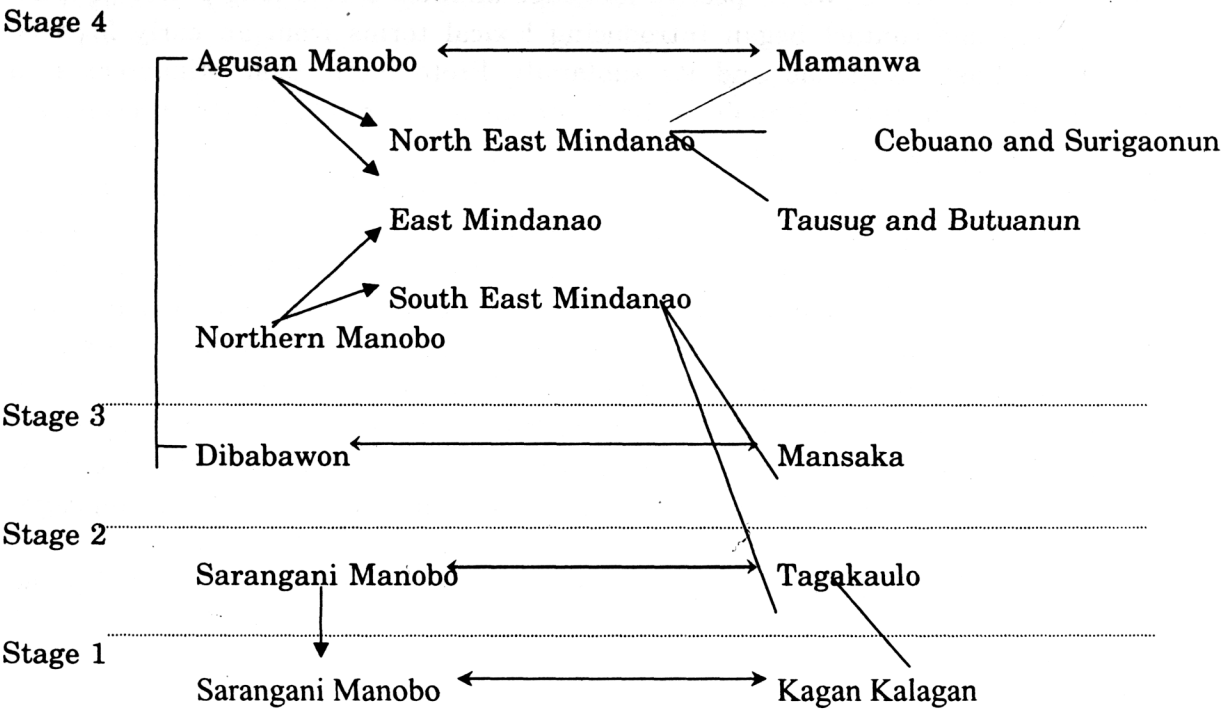
This case study assumes that Austronesian languages came to the Philippine

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¹ Lexiostatistical glottochronology is done with a list of generic and culturally appropriate vocabulary words having little or no cultural or geographical bias collected from each language to be analyzed. The words of each language are then compared to each other, and from the lists genetic 'language trees' are constructed for language families. For each language family, the lower the percentage of cognates, the farther back in history the point of divergence is assumed to be. Conversely, the higher the percentage of cognates, the more recent the point of divergence is assumed to be. The time dating procedure, however, assumes that language change occurs at a uniform rate undisturbed. Since a language community is rarely left undisturbed in the real world, skewing of dates of divergence should be considered.

Islands via Taiwan (Dahl 1973, Shutler and Marck 1975, Foley 1980, Harvey 1982, Reid 1982, and Bellwood 1985); and also assumes that research completed by Zorc, Elkins, Pallesen, Gallman and other Philippinist historical-comparative linguists on Philippine language families is fundamentally correct, and that the relationships between languages and their respective language families are also correct. Both Pallesen and Gallman used lexicostatistical glottochronology studies to futher establish genetic trees for Proto-East Mindanao (PEM), Proto-North East Mindanao (PNEM) (Pallesen 1985), and South East Mindanao (PSEM)(Gallman 1979), and by doing so, produced some estimated dates as to when languages in these families separated (see Appendix). Second, the study assumes that the proto-forms reconstructed from languages within each family are also correct and therefore provide a reliable standard by which one can determine whether a language borrowed or inherited a word. Third, the study assumes that no language in this study was isolated but rather had considerable contact with other languages.

The first approach retraces the established language family trees of both Tagakaulo and Sarangani Manobo, designating specific points of reference representing a point in time or a span of time, and a geographical location. The purpose of this is to separate genetically cognate lexical terms originating from a distant common ancestor language and those that may have been borrowed from each other. These specific reference points I have called "stages". At each of these stages I compare vocabulary from Tagakaulo and Sarangani Manobo or their parent proto-language, applying a set of guidelines I developed to distinguish whether or not lexical borrowing took place at the particular geographical location and point in or span of, time represented by that stage. In this case study I have established four stages with Stage 1 representing the most recent time and last language split; and stage 4 representing the most ancient time in the study.



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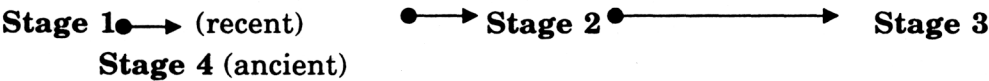


Figure 1. Hypothesis of interaction between Manobo and East Mindanao languages at all stages.

Also included in the first approach is the use of reconstructed proto-words wherever they exist or where enough data is available to make reliable reconstructions. In this case study I rely on the reconstructions of proto-Manobo by Elkins (1984). This is an important list because 1) members of the Manobo language family are found throughout Mindanao and 2) it is the oldest surviving and most established language family of Malayo-Polynesian on Mindanao. With the exception of the Negrito groups who originally spoke non-Austronesian languages, the speakers of the Manobo languages settled Mindanao long before speakers of Proto-East Mindanao (East Mindanao diverged into Proto-North East Mindanao, Proto-Central East Mindanao (PCEM), and Proto-South East Mindanao; and speakers of these language families settled on the eastern coasts of Mindanao from the mouth of the Agusan River to the Gulf of Sarangani).

The second approach used in this case study are the use of semantic domains. The reason for using semantic domains is to isolate certain aspects of culture where one might find a higher percentage of lexical borrowing. Pallesen first used this approach in his study of the Samal languages and Tausug with very good results.

Some consequences of language contact that are revealed by these two approaches are: 1) Some or all lexical domains of one group or culture are replaced by another language group's lexicon. 2) The lexicon of the language that is undergoing intrusion expands to accommodate the new vocabulary resulting in synonymous words. 3) The lexicon expands to accommodate the new vocabulary, but instead of resulting in synonymous terms, semantic shifts occur sometimes creating finer nuances of meaning or filling a semantic void within the language.

There are a number of specific principles I use to determine whether a word is a cognate or a borrowed word. The first guideline concerns lexical comparisons. If Language A and Language B, each from a different language family (Family A and Family B) or their more distantly related parent language families, are in contact with each other, and if the same word with essentially the same meaning is found in both languages, then two possibilities exist: either the words are cognates, or Language A borrowed the word from Language B (or vice versa). To determine which of the two possibilities is true, the proto-language reconstruction of that word for both Language A and Language B must be checked. If the word in Language B matches the proto-form of that word in Family A but not the proto-form in Family B, then we can conclude that Language B borrowed the word from Language A. Conversely, if the word in Language A matches the proto-form of that word in Family B but not the proto-form in Family A, then Language A borrowed the word from Language B.

If two proto-languages have a word with essentially the same meaning, then it is either a cognate inherited from a common ancestor language, or it was borrowed from another language at some point in history. If a word is a cognate, then that word can be traced to a form of the same word in a common parent proto-language. In the Philippine context, the most distant ancestor languages are Austronesian and its offspring Malayo-Polynesian. Therefore, proto-words which can be traced back to the reconstructed proto-forms in Malayo-Polynesian or its parent, Austronesian, are definitely cognates. If a word is borrowed it will not have the link to a parent language like a cognate word would. Also, words that are borrowed into another language

tend to “freeze”—that is, after undergoing a process of “indigenization”, they will not evolve phonologically or semantically like words that are not borrowed.

A second guideline is to observe the consistent patterns of phonological change, including: (1) Innovations within a language or language family, such as Tagakaulo’s consistent deletion of the intervocalic glottal stop in nearly all the words it inherits from PSEM. (2) Nativization, a term used by historical and comparative linguists (Hock 1991:390)—which I prefer to call “indigenization” - to describe phonological processes that occur in speakers’ minds when borrowing a term from any language other than their own. It is the process of making a borrowed word pronounceable by substituting familiar phonological forms. It also includes adjustment of CV syllable patterns to fit already learned CV patterns. Between SEM and Manobo language families, for example, indigenization primarily takes the form of a shift in vowel quality.

Table 1 indicates the indigenization process that occurs between speakers of Tagakaulo (Tgk) and Sarangani Manobo (SarM) at Stage 2, and table 2 between speakers of Mansaka (Msk) and Dibabawon (DbwM) at Stage 3. In table 1, the Tagakaulo /a/ is replaced by the Sarangani Manobo /ə/ and vice versa. Likewise, the Tagakaulo /u/ is replaced by the Sarangani Manobo /o/ and vice versa.

Table 1. The indigenization process between Tagakaulo and Sarangani Manobo

Tagakaulo		Sarangani Manobo
a	↔	ə
i	↔	ɪ
ɪ	↔	i
u	↔	o
o	↔	u

Table 2 indicates that no indigenization occurs when a Mansaka (Msk) speaker borrows a term from Dibabawon or when a Dibabawon speaker borrows a term from Mansaka—simply because the vowel inventories are identical.

Table 2. No indigenization process between Dibabawon and Mansaka

Mansaka		Dibabawon
a	↔	a
i	↔	i
ɪ	↔	ɪ
u	↔	u

A third guideline is to consider words that definitely can be placed in a certain time period based on factors other than linguistic ones. For this study, terms for New World cultigens, that is, plants that were transported to the Philippines from the Western Hemisphere, provide another historical guidepost in addition to that roughly determined through lexiostatistical glottochronology. These plants were introduced with the arrival of the Spanish; therefore, local names for these plants must have been introduced after 1521 AD.

A fourth guideline is to look for factors that can produce ambiguity when comparing languages from two language families, and to consider the significance of time and geography in resolving that ambiguity. The language family tree serves as a crucial “road map” in determining when and how languages diverged. For example, Dibabawon, a Manobo language, shares some

vocabulary with Mansaka, its East Mindanao neighbor. If we want to find out if Dibabawon borrowed words from Mansaka or vice versa, we first compare a Dibabawon word with its Mansaka counterpart, then compare the Dibabawon word with the Proto-Manobo (PMb) word, compare the Mansaka word with the Proto-South East Mindanao word, and finally, compare the two protowords with each other. In table 3 no Proto-Manobo word has been posited so I used a language that well represents the Northern Manobo language family, Binukid (BkdM). Analysis of the data in table 3 could lead to one of two possibilities: (1) Elkins (1974), in his reconstruction of Manobo languages, posited an Eastern Manobo subfamily consisting of Dibabawon and Agusan Manobo (AgM). The data in table 3 demonstrates how a Proto-Eastern Manobo (PEMb) reconstruction for ‘to lie’ could be posited as **galu?*, considering a deletion of the intervocalic /y/. However, it is difficult to test the validity of the Proto-Eastern Manobo reconstructed form without a Proto-Manobo reconstruction to compare it with. In the absence of a Proto-Manobo form, here are some alternative methods: (a) Check the reconstructed Proto-Eastern Manobo word against its counterpart forms in other Manobo languages that have not undergone any possible influence from the East Mindanao form. (b) Consider data from a third Eastern Manobo language that could provide clues to the validity of the proto-reconstruction. (c) Look for the same form in an East Mindanao language such as Mamanwa (Mwa).

TABLE 3. PROBLEMATIC RECONSTRUCTION EXAMPLE

Language family	Stage 4		Stage 3		Stage 2		
	NMb	EMb	EMb	SEM	SEM	SMb	
Gloss	BkdM	AgM	DbwM	Msk	Tgk	SarM	PSEM
‘to lie (falsehood)’	biru?	gayu?	gau?	(ka)garu?	galu?	dokoŋ	galu?

Note: In the Mansaka and Mandaya languages, /l/ is very unstable. In Mansaka, intervocalic /l/ > [r] following /a/, /u/, and /i/. In one Mandaya dialect, intervocalic /l/ > [lʰ] following /a/, /u/, or /i/. In another Mandaya dialect, intervocalic /l/ > [flapped l] following /a/, /u/, or /i/, or intervocalic /l/ > Ø /a/, /u/, or /i/. In all of these, intervocalic /l/ > [l] following /i/.

Note 2: NMb =Northern Manobo language family; EMb=Eastern Manobo language family; SEM=South East Mindanao language family; SMb=Southern Manobo language family; and PSEM=Proto-South East Mindanao.

(2) Table 3 also shows that the Dibabawon Manobo and Agusan Manobo (Eastern Manobo languages) words ‘to lie’ more closely resemble the forms of their South East Mindanao neighbours than they do the forms of Binukid Manobo or Sarangani Manobo. This indicates probable borrowing from Mansaka or PSEM.

Concerning the time of borrowing, PSEM and PEM had contact with Agusan Manobo at an earlier point in time than with Dibabawon. Therefore, we could make the assumption that, if indeed the term was borrowed, Agusan Manobo borrowed it from their PEM neighbours at Stage 4. Then, one of two things happened: 1) either Dibabawon borrowed the same term from Mansaka or PSEM at Stage 3, or 2) the term became a Proto-Eastern Manobo cognate through Agusan Manobo into Dibabawon. In any case, the reconstructed Eastern Manobo proto-form would be considered highly suspected and misleading.

In sum, I have given the theoretical basis for this case study, using new approaches along with old historical and comparative approaches in attempt to answer the question as to why there is such a high percentage of shared vocabulary between Tagakaulo and Sarangani Manobo. These approaches may prove helpful to others as they research their language situations.

2. APPLICATION OF THE ABOVE STRATEGIES TO LANGUAGE DATA

In this section, I integrate the data obtained through the new historical and comparative approaches with historical events, geography, and other non-linguistic factors. I use the guidelines outlined in the previous section to determine whether a word is a cognate or a borrowed word. Since Proto-Manobo was the established language before the arrival of Proto-East Mindanao and its offspring, and since there exists a relatively extensive list of 526 Proto-Manobo reconstructions (Elkins 1984), I have at least one standard with which to compare not only Proto-East Mindanao, but also the various Manobo languages, applying the first guideline. That is, if a word in Language B matches the proto-form of that word in Family A but not the proto-form in Family B, then Language B borrowed the word from Language A. Conversely, if the word in Language A matches the proto-form of that word in Family B but not the proto-form in Family A, then Language A borrowed the word from Language B.

At this point I would like to explain in detail how I used the concept of stages, retracing the established tree diagrams of the various language families in this study (see Appendix). This detailed explanation is important here because these form the points of reference for the analysis.

Stage 1 includes the interaction of Kagan Kalagan with Sarangani Manobo, and Magindanaon or Samal (See figure 2). According to historical records, Kagan Kalagan separated from Tagakaulo within the past 150 years. Stage 2 includes the interaction between Sarangani Manobo, Blaan, and Tagakaulo (See figure 3). Tracing back in time, the next stage is Stage 3, which includes Proto-South East Mindanao before it diverged into two separate branches; the West and East (See figures 4 and 5). Stage 4 occurred in the geographical area around the mouth of the Agusan River and the Surigao Peninsula, where the common parent of these languages, Proto-East Mindanao, developed and evolved (See figure 6.).

All four stages share some similar characteristics: (1) The languages were separated by geographical distance or barrier such as the Davao Gulf (an exception is Kagan Kalagan and Tagakaulo in Stage 1); (2) at each stage, speakers of East Mindanao languages have lived adjacent to speakers of Manobo languages; (3) thus, there has been potential for East Mindanao languages to borrow vocabulary from different branches of Manobo (an exception again are the Kagan Kalagan and Tagakaulo which interacted with Sarangani Manobo).

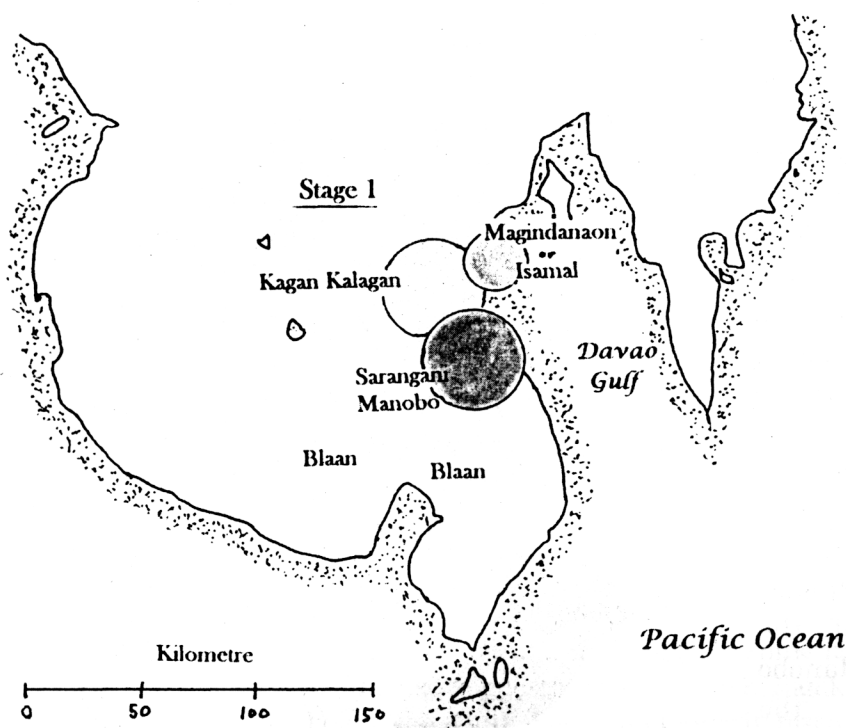


Figure 2. Stage 1

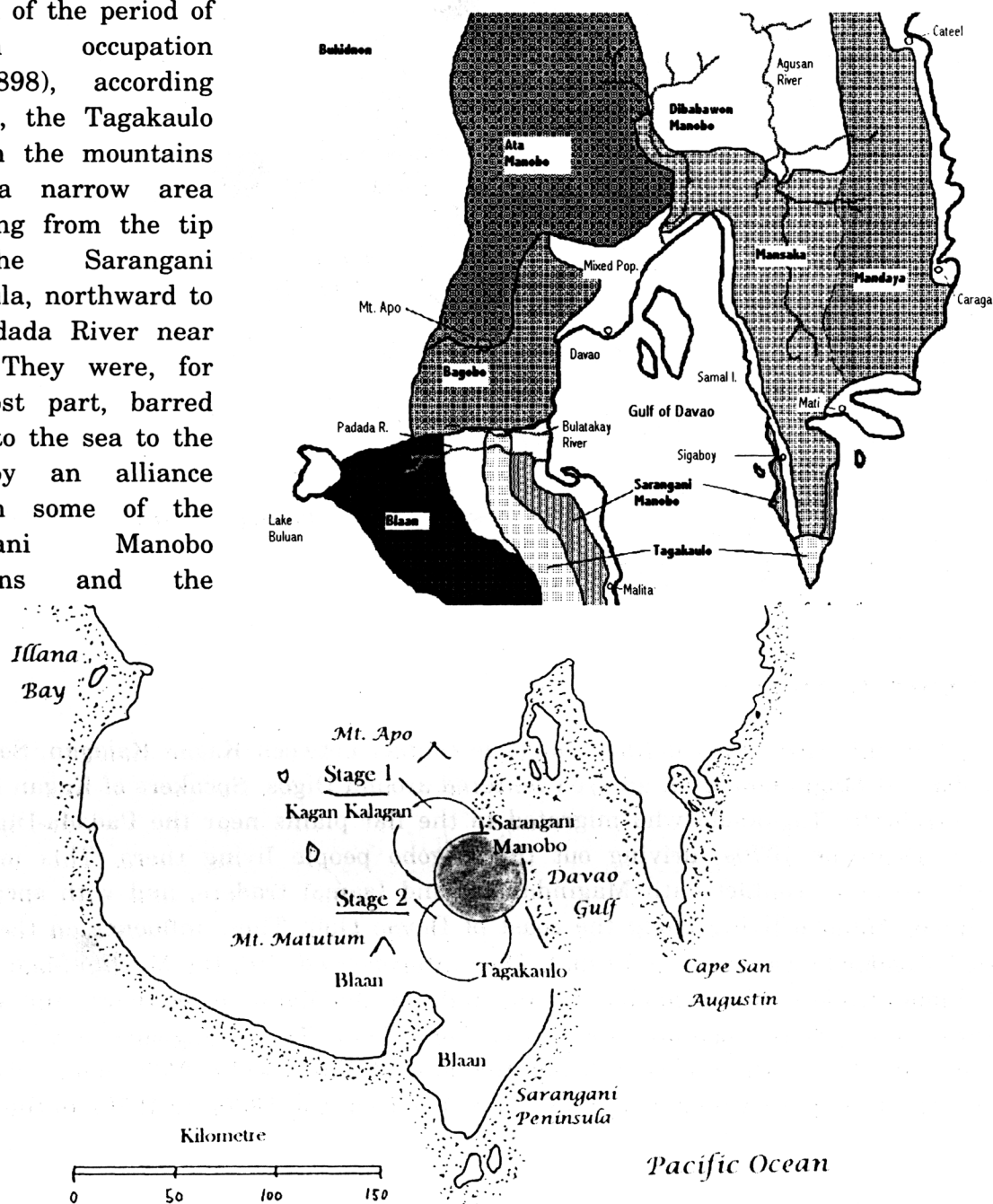
Stage 1 in this case study defines language contact between Kagan Kalagan, Sarangani Manobo and Magindanaon in an area centered around Digos. Speakers of Kagan Kalagan were originally Tagakaulo who migrated to the flat plains near the Padada-Digos area around 1860s or 1870s, driving out the Bagobo people living there. This migration brought them in contact with Magindanaon and Isamal traders, and with speakers of Sarangani Manobo living along the coast of Davao Gulf. Their influence on the newly-settled Tagakaulo was great and rapid. They intermarried with the Muslim Magindanaon and Samal traders, the Manobo, Blaan, and Bagobo living near them, and in time, borrowed new ideas, customs, and dress from them. Their language also underwent change with the most apparent being the loss of intervocalic /l/ in many Tagakaulo words. The time period represented by Stage 1 is from the 1860s or 1870s to the present time.

Figure 3. Stage 2

Stage 2 in this case study defines the interaction between the Tagakaulo and Sarangani Manobo (and to a far lesser degree, Blaan). Based on the Reid's 372 word modified Swadesh list, Tagakaulo and Sarangani Manobo have 52% shared vocabulary, including cognates and borrowed words. Of the 52%, 19.2% are cognates from a distant, common ancestor language, and we can assume the remainder to be a combination of more recent cognates and borrowed words. On the other hand, Tagakaulo and Blaan have only 19.9% shared vocabulary, of which 19.6% are cognates from the same distant common ancestor language, indicating that there is virtually no borrowing between Blaan and Tagakaulo.

Extensive written history about the Tagakaulo (who are also called Kalagan) and the Sarangani Manobo is provided by Fay-Cooper Cole during the R.F. Cummins

Philippine Expedition in 1913 at the beginning of the American colonial era. Towards the end of the period of Spanish occupation (1521-1898), according to Cole, the Tagakaulo lived in the mountains along a narrow area extending from the tip of the Sarangani Peninsula, northward to the Padada River near Digos. They were, for the most part, barred access to the sea to the east by an alliance between some of the Sarangani Manobo chieftains and the



Magindanaon. To the west of this narrow area lived Blaan speakers.

The Sarangani Manobo once controlled all the western coast of the Davao Gulf from the Padada river to Sarangani Bay. Cole records that they were always at war with the Tagakaulo and Blaan, warfare that was motivated by their religion which demanded a human blood sacrifice once a year. They were skilled boat-builders and fisherman, but preferred pursuit of booty and capturing slaves in warfare. The Spanish called them a troublesome people, slave traders and headhunters.

The Tagakaulo were described in the early 20th century as living in small family groups in the mountains, constantly warring among themselves, having customs almost identical to the Sarangani Manobo, and being partners with them in raids on Spanish and American coastal settlements. Presently, the Tagakaulo area extends only as far

south as Mt. Latian, as far north as Malalag, as far west as the Davao-General Santos Highway, and to the Davao Gulf in the east.

Figure 4. The approximate locations of language areas ca. 1913 (adapted from Cole plate 1:1913)

Stage 3 in this case study defines the location and approximate time period when Proto-South East Mindanao was in contact with Dibabawon Manobo up until approximately the time when the east branch and west branch diverged from each other. A comparison here can determine whether or not Manobo words entered into Proto-South East Mindanao languages and eventually into Tagakaulo.

Mansaka well represents the basic core vocabulary of Proto-South East Mindanao for these reasons: First, it is spoken in an area where South East Mindanao languages are most densely grouped.

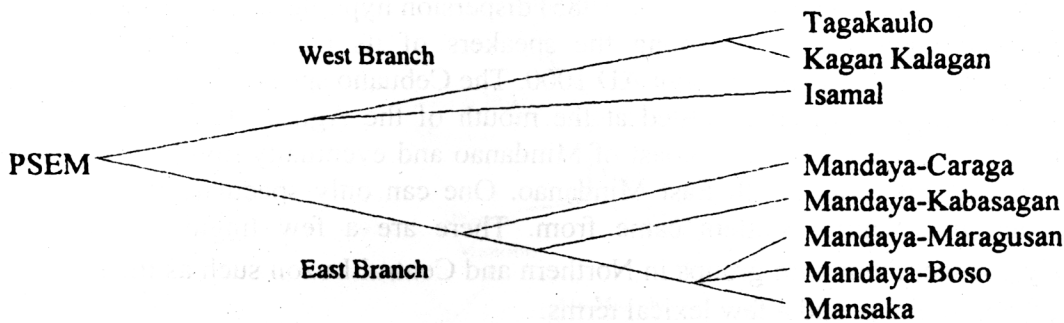


Figure 5. Tree diagram of the South East Mindanao language family

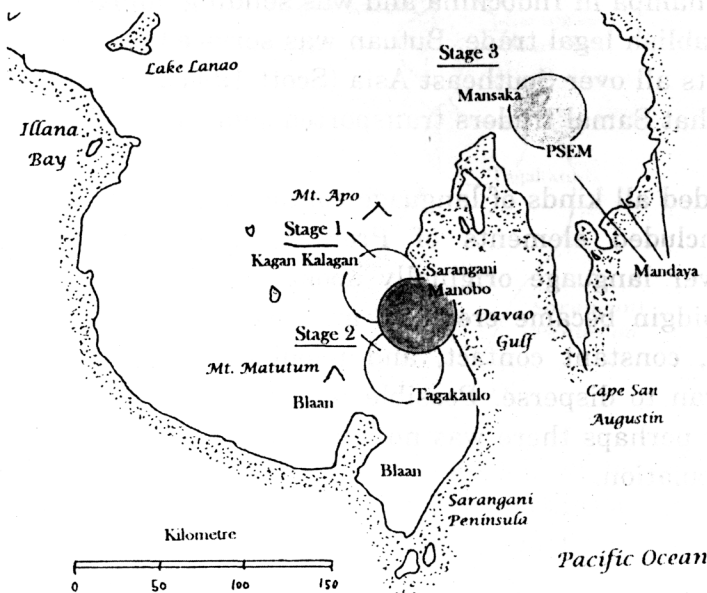


Figure 6. Stage 3

In addition, 88.5% of Proto-South East Mindanao words are found in Mansaka.¹ If additional data were available in the Mandaya languages, we could use their vocabularies to help

¹ I have made additions to Gallman's (1979) Proto-South East Mindanao 425-word list, filling in Mansaka data by using the Mansaka Dictionary (Svelmoe & Svelmoe 1990). With these adjustments, Mansaka words are represented in Proto

reconstruct proto-forms for South East Mindanao in cases where Mansaka differs from Tagakaulo. Then, if the Mansaka forms differed from the proto-forms, we could suspect that Mansaka borrowed from Dibabawon. Even without additional data, we can theoretically approach the core vocabulary of Proto-South East Mindanao by comparing Tagakaulo, Kagan Kalagan, and Mansaka, making adjustments for phonological changes that have occurred in Mansaka after it diverged from the proto-language.

The ancestor language of Dibabawon Manobo or the language speakers themselves lived in the upper Agusan River valley. When SIL linguists began studying this language they were not quite sure what language family it should be categorized under because it had so many shared lexical terms with Mansaka and Mandaya. It was only because Dibabawon still retained Manobo pronouns and other Manobo grammatical features that identified as Manobo.

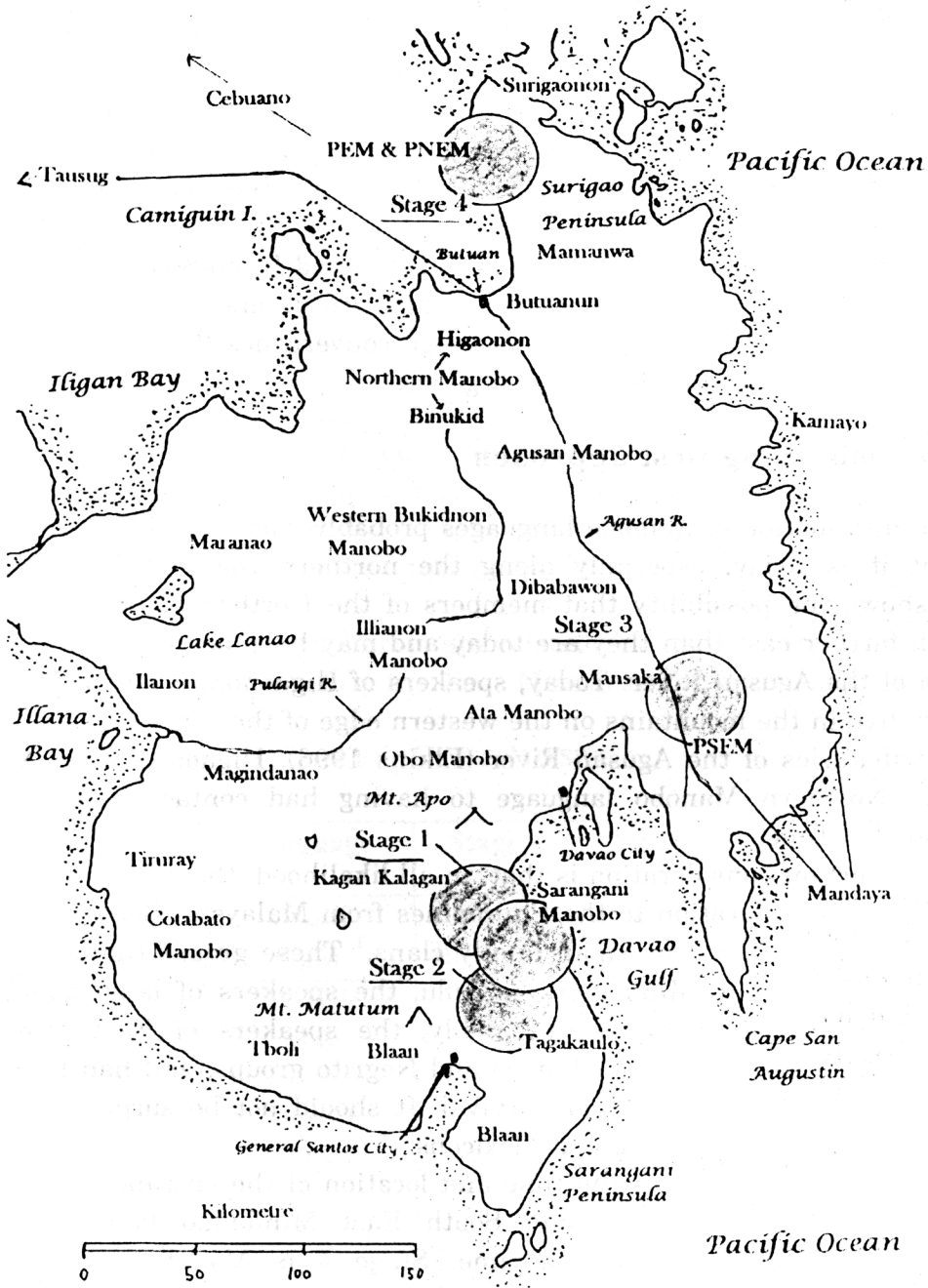
Stage 4 in this case study defines the location and span of time up to when Proto-South East Mindanao, Proto-Central East Mindanao, and Proto-North East Mindanao diverged from Proto-East Mindanao. The focal point for language contact first proposed by Pallesen in 1985 was centered at present-day Butuan at the mouth of the Agusan River. The East Mindanao language family, according to Pallesen's (1985) dispersion hypothesis, began to develop in north-east Mindanao about AD 500 among the speakers of its parent proto-language, Southern Philippine, and began to disperse about AD 1000. The Cebuano speakers migrated northward, the Butuanun and Tausug speakers settled at the mouth of the Agusan River, and another group migrated southward along the east coast of Mindanao and eventually divided into Proto-Central East Mindanao and Proto-South East Mindanao. One can only speculate where the first non-Manobo and non-Negrito settlers came from. There are a few linguistic clues that could tentatively connect them with groups in Northern and Central Luzon such as the λ , \downarrow , and similar variants, the fricative p , and a few lexical terms.

The mouth of the Agusan River provided easy access to the rich interior of Mindanao and was a logical choice for the trading colony. In time it became established as a very important trading center known as Butuan. In the 900s, Butuan had direct trading contacts with Champa in Indochina and was sending ambassadors to the Chinese emperor in order to establish legal trade. Butuan was serviced by the Samal and Chinese who had trading contacts all over Southeast Asia (Scott 1994:164) and with Arab traders. It was during this era that Samal traders transported some Tausug or Butuanun speakers to Jolo Island.

Trade also provided all kinds of language contact and, early on, a pidgin language was created which included elements of Proto-Western Manobo, Agusan Manobo, Mamanwa, and whatever language originally spoken by the colonizing newcomers to Butuan. In time, the pidgin became creolized and eventually evolved into a language. Through intermarriage, constant contact, and population growth, the colony reached "critical mass" and began to disperse. Possible reasons for dispersion might have been for trading purposes, or perhaps there was no longer enough food that could be grown to support the growing population.

South East Mindanao 376 times out of 425. Of the 49 remaining PSEM words that have no Mansakan witnesses, 21 are from the west branch of PSEM, 15 are from the east branch, 8 are shared by both branches, and 4 have witnesses in Mansaka but have undergone a semantic shift.

The second major language family in the equation are the Manobo. The first Austronesian-speaking people who became the Manobo probably entered Mindanao via Surigao, an assumption based on: (1) Bellwood's theory (1985:103-113) that the first Austronesians migrated south from Taiwan through the Philippine Islands onto



Indonesia and beyond; (2) the fact that the majority of present-day Manobo languages and populations is concentrated primarily in the northeast corner of Mindanao; and (3) the fact that the Surigao Peninsula is the focal point from which Manobo expansion on Mindanao radiated.

Figure 7. Stage 4

According to Bellwood's theory of the dispersion of Austronesian languages, the Manobo people entered Mindanao sometime around 2500–2000 BC. They were undisturbed by anyone for at least two millennia, existing alongside and/or assimilating the original Negrito groups already living on Mindanao. The first Manobo peoples, after entering Mindanao via Surigao, discovered the nearby Agusan River, which provided a strategic

waterway into the interior. The Agusan River valley with its tributaries proved to be rich in natural resources, with "abundant wild game and forest products, and rich deposits of gold" (Scott 1994:164). Based on Elkins's (1996) reconstructions of Proto-Manobo, these people probably were skilled in fishing, agriculture, hunting, and iron-smithing, and they preferred permanent dwellings. Subsequently, some of the Manobo terminology for these domains could have found there way into the language of the Proto-East Mindanao speakers.

The language I use to represent the Northern Manobo language family is Binukid. Other languages included in Northern Manobo are: Higaonon, Kinamigan, and Kagayanen (Cagayancillo Island). Agusan Manobo is the representative for Eastern Manobo.

In sum, by comparing Proto-East Mindanao and Proto-South East Mindanao with the Manobo languages, we can determine which words and possibly domains of words can be attributed to relatively recent language convergence (borrowing), and which can be attributed to historical language convergence.

3. Analysis using first approach

The distribution of Manobo languages probably was very different 1000 years ago from what it is today, especially along the northern coast of Mindanao. Linguistic evidence shows the possibility that members of the Northern Manobo language family were much farther east than they are today and may have been located on both sides of the mouth of the Agusan River. Today, speakers of Higaonon, a language closely related to Binukid, live in the mountains on the western edge of the Agusan valley and along the northern tributaries of the Agusan River (Elkins 1996). Higaonon would have been the most alike Northern Manobo language to having had contact with East Mindanao speakers at that time.

An important consideration is that, in all likelihood, the groups that composed the third Austronesian migration to the Philippines from Malaysia, Borneo, and other parts of eastern Indonesia, came as small family clans.¹ These groups (namely, the people of the Muslim migration to Mindanao and Sulu, the speakers of languages in the South Mindanao language family, and presumably, the speakers of East Mindanao) found Mindanao already settled by the Manobo and Negrito groups, and had to depend on the Manobo, at least initially, for their survival. It should not be surprising, then, to find Manobo words in these various groups' lexicons.

Tables 4-9 indicate both the time and location of the entrance of various Manobo words into the East Mindanao and South East Mindanao languages, as well as progression of these words through time. Stage 4 is Manobo's earliest contact in northeastern Mindanao with Proto-East Mindanao and Proto-South East Mindanao speakers, and Binukid is the language I have chosen to represent the Northern Manobo family² at Stage 4. Stage 3 occurs later in time, after PSEM speakers had already migrated to the southeastern part of Mindanao, and the point of contact and comparison is between Mansaka and Dibabawon. Stage 2 is the most recent point represented by the tables and is a comparison of Tagakaulo and Sarangani Manobo.

¹ Contrasted with the recent Visayan "invasion" of Mindanao, in which the Visayan language has come to dominate indigenous Mindanao languages in many areas.

² Since Binukid is closely related to Higaonon, the language that most likely had contact with Proto-East Mindanao speakers.

Table 4 . Gloss: ‘tiny’

Family		Language	Stage 4	Stage 3	Stage 2
Northern Manobo		Binukid [BkdM]	(ma-)yəntək		
East Mind.		Proto-South East Mindanao [PSEM]		*(ma-)yantik	
South East Mindanao		Mansaka [Msk]		(ma-)yantik	
Eastern Manobo		Dibabawon [DbwM]		ʔintik	
South East Mindanao		Tagakaulo [Tgk]			(ma-)yantik
Southern Manobo		Sarangani Manobo [SarM]			dəʔitək

Table 4 provides evidence that the Tagakaulo word for ‘tiny’ in Stage 2 matches the Mansaka word in Stage 3, which indicates that Tagakaulo inherited the word from PSEM rather than borrowing it from Sarangani Manobo. Also, the Mansaka word more closely resembles the Binukid form than it does the Dibabawon form. Therefore, we can conclude that PSEM and PEM acquired this particular word through Northern Manobo contact, not Eastern Manobo contact.

It is evident that the Manobo forms are related to each other but have undergone their own separate development while the East Mindanao form has been “frozen” since Stage 4.

TABLE 5 . GLOSS: ‘TO SPIT’

Family		Language	Stage 4	Stage 3	Stage 2
Northern Manobo		BkdM	ʔiləb		
Eastern Manobo		AgM	ʔilib		
East Mind.		PSEM			
South East Mindanao		Msk		lupad	
Eastern Manobo		DbwM		ʔilib	
South East Mindanao		Tgk			ʔilib
Southern Manobo		SarM			təbtəb
Proto-Manobo		PMb	*ʔiləb		

From table 5 we can deduce that Tagakaulo did not borrow the verb ‘to spit’ from Sarangani Manobo, but rather inherited the word through PSEM from either Northern Manobo languages or from Agusan Manobo. We can hypothesize that after PSEM diverged into east and west branches, Tagakaulo retained the original PSEM form, while Mansaka adopted another form.

TABLE 6 . GLOSS: ‘MOSQUITO’

Family		Language	Stage 4	Stage 3	Stage 2
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Northern Manobo		BkdM	tagənək	*tagnik tagnik hilam tagnik tagənək
Eastern Manobo		Agusan Manobo [AgM]	tagnik	
East Mind.		PSEM		
South East Mindanao		Msk		
Eastern Manobo		DbwM		
South East Mindanao		Tgk		
Southern Manobo		SarM		
Proto-Manobo		Proto-Manobo [PMb]	* tagənək	

Note: PSEM * *tagnik*, Butuanun [But.] *hilan*, Surigaonun [Sur.] *hilam*, Proto-South Mindanao [PSM] **blabaŋ*, Cebuano [Ceb.] *lamuk*, Tagalog [Tag.] *lamok*,Tausug [Tsg.] *hilam*. In Cebuano the word *tagnok* is a ‘kind of gnat’.

In table 6 the PSEM word * *tagnik* ‘mosquito’ is borrowed from Manobo at Stage 4. Because **tagnik* was already a proto-word in PSEM, it is not likely that Tagakaulo borrowed the word from Sarangani Manobo at Stage 2, but rather inherited it from PSEM.

The word *tagnik* for ‘mosquito’ is used only on Mindanao. The word for ‘mosquito’ used in other areas of the Philippines and especially in Northern Luzon is either *namok* or *lamok*. In the South Central Philippine family of languages of which Proto-East Mindanao is a member, the words *namok* or *lamok* ‘mosquito’ also occur.

It is very possible that either *namok*, *lamok*, or *hilam* was the original word for ‘mosquito’ in Proto-East Mindanao and was replaced by the Manobo word *tagnik*. Because the proto-Manobo word is **tagənək* we can assume that Dibabawon borrowed the Proto-North East Mindanao word **hilam* ‘mosquito’. Therefore, the Proto-Manobo word for ‘mosquito’ came into East Mindanao languages at Stage 4.

TABLE 7 . GLOSS: ‘SHOULDER BLADE’

Family		Language	Stage 4	Stage 3	Stage 2
Northern Manobo		BkdM	Ø	Ø	ʔaliʔiʔ
Eastern Manobo		AgM	ʔalipʔip		
East Mind.		PSEM			
South East Mindanao		Msk			
Eastern Manobo		DbwM		Ø	
South East Mindanao		Tgk			
Southern Manobo		SarM			Ø

Since the word *ʔalipʔip* ‘shoulder blade’, (See table 7.) occurs in Agusan Manobo at Stage 4 and again in Tagakaulo at Stage 2 but not at Stage 3, this form probably entered PSEM through a Manobo source at Stage 4. The word *ʔalipʔip* does not occur in Sarangani Manobo at

Stage 2 so it could not have entered into Tagakaulo from that Manobo source. Also at Stage 2 the stop [p] becomes a fricative [ɸ].¹

TABLE 8. GLOSS: ‘TO TEACH OR GIVE INSTRUCTION’

Family		Language	Stage 4	Stage 3	Stage 2
Northern Manobo		BkdM	naʔu	banad ʔanad	(pal)naʔu toladaʔ
Eastern Manobo		AgM	ʔanad		
East Mindanao		PSEM			
South East Mindanao		Msk			
Eastern Manobo		DbwM			
South East Mindanao		Tgk			
Southern Manobo		SarM			

Table 8 provides possible evidence of early Manobo input into PSEM languages. Although the difference between the Mansaka word and the Tagakaulo word prevents the reconstruction of a PSEM word, it is conceivable that the Tagakaulo word came from a Northern Manobo source at Stage 4. After Proto-South East Mindanao diverged, Tagakaulo in the west branch retained the word, whereas Mansaka in the east branch adopted a Manobo word from an Eastern Manobo source, namely Dibabawon.

TABLE 9. GLOSS: ‘SMOKE’

Family		Language	Stage 4	Stage 3	Stage 2
Northern Manobo		BkdM	ʔəbəl	*ibil ʔibil ʔibii	ʔibil ʔəbəl
Eastern Manobo		AgM	ʔibiy		
East Mindanao		PSEM			
South East Mindanao		Msk			
Eastern Manobo		DbwM			
South East Mindanao		Tgk			
Southern Manobo		SarM			
Proto-Manobo		PMb	*ʔəbəl		

In table 9 the probable input into PSEM came from Northern Manobo at Stage 4. The Manobo input was obviously not from the Eastern Manobo family (Agusan Manobo and Dibabawon). Although it is possible Tagakaulo borrowed its word for ‘smoke’ from Sarangani Manobo at Stage 2, this does not seem likely. The reason is that Tagakaulo had already inherited its word for ‘smoke’ from PSEM and the phonological sound change /ə/ to /i/ had taken place at either Stage 4 or Stage 3. The proto-word **ibil* in Proto-South East Mindanao can be reconstructed by comparing the Mansaka word *ʔibil* with the Tagakaulo word *ʔibil*.

¹ The fricative [ɸ] sound is rapidly disappearing in many Tagakaulo speaking areas and is being replaced by the stop [p] used in Cebuano, Ilonggo, Tagalog, and English because Tagakaulo speakers regard these as higher status languages and they do not want to sound like “hill folk” when they are around speakers of these other languages.

4. Analysis using semantic sets

In the second approach I use semantic sets to isolate domains in the culture that may give some clues to events in the past. Some domains contain actions that are by tradition primarily performed by women such as food gathering and preparation, or childbearing and rearing, which may indicate intermarriage between members of the two language groups. The intermarriage may have been the result of wives taken in raids. Conversely, there are domains that are traditionally performed exclusively by men such as hunting and fishing. Some examples of the domains I chose, following Pallesen's semantic domain sets are: adornment and clothing, parts of the body, wild animals, insects, rice, actions of the body, geographic terms, parts of a house; cultigens, cosmology, and grammatical functor words. Other possible semantic domains are birth, marriage, death, elements, natural phenomena, betel chewing, abaka processing, coconut, corn, palm, other hunting, trapping, and fishing. In this section I will present a sample from the original research.

Table 10 provides evidence for probable lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of 'Adornment and Clothing'.

TABLE 10. EVIDENCE FOR PROBABLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN 'ADORNMENT AND CLOTHING'

Stage 2	Stage 3	Proto		Stage 2	Stage 3	Proto		
	Gloss	Tgk	Msk	PSEM	Dir.	SarM		PMb
(1)	‘woman’s ornate top’	dagum	dagum	*dagum	⇒	dagom		¹
(2)	‘ornamental leg bands’	tikis			⇐	tikəs		*tikəs
(3)	‘belt’	?ilin	?irin	*?ilin	⇒	?ələn		²

Note: Dir. Indicates direction of borrowing.

Table 11 provides evidence for probable lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of 'parts of the body'. Table 12, indicates semantic shifts of meaning between Mansaka in the eastern branch of PSEM and Tagakaulo in the western branch. The word *miniŋ* 'index finger' in Mansaka is glossed as 'ring finger' in Tagakaulo. Likewise, in Mansaka the word for 'ring finger' *pundaritay* has a similar form to the Tagakaulo word for 'little finger' *dalitay*. In both Mansaka and Tagakaulo the word for 'middle finger' is assigned a definition indicating either temporal or supernatural power.

TABLE 11. EVIDENCE FOR PROBABLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN 'PARTS OF THE BODY'

Stage 2	Stage 3	Proto		Stage 2	Stage 3	Proto
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¹ In Binukid, *dagəm* 'black and blue colored bruise'. The color of the Tagakaulo and Sarangani Manobo cloth that a *dagum* is made from is black or dark blue. It is not known what the source of this word was or where the semantic shift may have occurred.

² BkdM *bagəs*, AgM *bagkis*

	Gloss	Tgk	Msk	PSEM	Dir.	SarM	PMb
(1)	'head hair'	lugay	lugay	*lugay	⇒	logay	*bəŋət; *bulbul
(2)	'little finger'	dalitay	kiŋkiŋ	[kiŋkiŋ] ¹	⇒	ʔindəlitay	
(3)	'sole of foot'	ɸalaɸala	parapara	*palapala	⇒	palapala	*palu

I have indicated in number 2 in table 11, that Sarangani Manobo borrowed the term for 'little finger' from Tagakaulo. This deduction is based on evidence that a semantic shift occurred after Tagakaulo split from PSEM. A semantic shift is evident between the Mansaka word *pundaritay* 'ring finger' and the Tagakaulo word *dalitay* 'little finger'. In all probability *kiŋkiŋ* is the original SEM word for 'little finger', with an apparent Manobo source (Binukid *ʔaŋiŋiŋkiŋ* or Agusan Manobo *kiŋkiŋ*). The word *kiŋkiŋ* 'little finger' is also found in Tausug.

TABLE 12. SEMANTIC SHIFTS FOR THE NAMES OF FINGERS

	Gloss	Tgk	Msk
(1)	'index finger'	tulliʔay	miniŋ
(2)	'middle finger'	datuʔ	tulus ²
(3)	'ring finger'	miniŋ	pundaritay
(4)	'little finger'	dalitay	kiŋkiŋ

TABLE 13. OTHER SEMANTIC SHIFTS IN THE DOMAIN 'PARTS OF THE BODY'

	Gloss	Tgk	Msk	PSEM	Tsg
(1)	'ankle'	ɸanagiŋtiŋ	bukubuku	*bukubuku	kaantiŋ ³
(2)	'knee'	bukubuku	tuʔud	*tuʔud	tuhud

In table 13 a hypothesis for the semantic shift occurring between Tagakaulo and Mansaka is this: In Tagakaulo, *tuud* has two meanings: (1) **tuʔud* 'purpose, objective, goal'; and (2) *tuʔəd* 'stump of tree'. The former was inherited from PSEM and the latter came from a Manobo source. A Tagakaulo phonological innovation is the loss of the glottal stop between vowels in words inherited from PSEM. As a result, two homophonous forms exist. Perhaps in order to avoid a third homophonous form *tuud* in the Tagakaulo lexicon, Tagakaulo has shifted the meaning of the PSEM proto-word **bukubuku* 'ankle' to mean 'knee'.

A number of the words from the domain 'parts of the body' are cognates extending back to Proto-Austronesian and Proto-Malayo-Polynesian. From the data researched in this semantic domain it is evident that the following words are cognate in PMb, PEM, and SEM, and suggest a common ancestor: 'brain', 'intestines', 'liver', 'eye', 'ear', 'body', 'neck', and 'elbow'.

Table 14 provides evidence for probable lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of 'wild animals'.

¹ In Tausug and Mansaka, *kiŋkiŋ*. Also, Binukid *ʔaŋiŋiŋkiŋ* and Agusan Manobo, *kiŋkiŋ*. I have indicated a tentative proto reconstruction in East Mindanao but by all indications it is borrowed from Manobo. Secondly, in Mansaka the word for 'ring finger' is *pundaritay* indicating that a semantic shift has occurred.

² The word *tulus* in Tagakaulo is 'supernatural power'; *datuʔ* has also come to mean a 'person wielding prestige, power, and control over a group of people' in most of the southern Philippines.

³ In Tausug, *bukubuku siki* 'ankle bone'.

TABLE 14. EVIDENCE FOR POSSIBLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘WILD ANIMALS’

Stage 2		Stage 3		Proto		Stage 2		Stage 3		Proto	
	Gloss	Tgk	Msk	PSEM	Dir	SarM	DbwM	PMb			
(1)	‘baby monkey’	φilas			←	pilas		*pilas ¹			
(2)	‘a buck’	lagasgas			←	[lagasgas] ²	lagaslas				
(3)	‘young pig’	baktin	baktin	*baktin ⁴	⇒	bakətin					

The few words shown in table 14 suggest possible borrowing between Tagakaulo and Sarangani Manobo. In the domain ‘wild animals’, however, the majority of the words are not shared by these two languages, suggesting that each language inherited its own set from its own language family, which further implies that both groups were traditionally hunters. Of the 37 definitions researched in both Tagakaulo and Sarangani Manobo, 19 forms are shared by the two.

TABLE 15. SEMANTIC SHIFTS WITHIN THE DOMAIN ‘WILD ANIMALS’

	Gloss	Tgk	Msk	PSEM	SarM	PMb
(1)	‘deer’	şuwagan	ʔusa		sələdaŋ	*sələdaŋ
(2)	‘pig’		babuy	*babuy	ʔosa	*babuy
(3)	‘wild pig’	ʔusa			ʔosa tə kəbənəsan	
(4)	‘wild female pig’	taliʔ				
(5)	‘wild boar’	pakit	pakit	*pakit		
(6)	‘domestic pig’	takuʔ				
(7)	‘domestic female pig’		takuʔ			
(8)	‘domestic boar’	butakal	butakal	*butakal		

Note: Tsg ʔusa; Mwa ʔosa; AgM ʔusa; Msk ʔusa; DbwM ʔusa ‘deer’.

Note: BkdM ʔusa ‘wild pig or deer’.

Note: Mwa *bakit* ‘old boar’.

The word ʔusa in Binukid is defined both as ‘wild pig’ and ‘deer’. Assuming there was early Northern Manobo contact with Proto-East Mindanao speakers, it is possible this word was

¹ Reconstructed from forms in Binukid and Cotabato Manobo (Elkins 1984:224).
² In Sarangani Manobo *lagasgas* is defined as ‘an old stag’ rather than ‘young buck’. In Tagakaulo, Mansaka and Sarangani Manobo *gasgas* is ‘to rub up against something; to rub or scrap off’.
³ In AgM, *damaliŋ* ‘mature buck’. There is no term listed for ‘a buck’ in BkdM.
⁴ Also **baktin* PEM and PNEM.

originally generic for ‘wild game’. The word also existed in the parent proto-language of Proto-East Mindanao, since forms of the word *?usa* ‘deer’ are found in a number of languages of the northern Philippines, and also in Samal and in Sangil. The Northern Manobo definition and the East Mindanao definition clashed. Both definitions were carried south by PSEM speakers, and when PSEM diverged into the eastern and western branches, each member defined the meaning of the word more precisely, so that instead of having a generic definition ‘wild game’ it attained a specific one, either ‘wild pig’ or ‘deer’. Mansaka chose *?usa* as ‘deer’, whereas Tagakaulo chose to define *?usa* as ‘wild pig’. With *?usa* defined as ‘wild pig’ in Tagakaulo, another term had to be found for ‘deer’. Therefore, Tagakaulo refers to a ‘deer’ as a *suwagan* ‘that which has antlers’, from *suwag* ‘antler’.

Sarangani Manobo may have borrowed the word for ‘wild pig’ from Tagakaulo and independently narrowed its definition further to *?osa tə kəbənəsan* [lit. pig of the jungle], or it survived intact as a cognate from a distant ancestor common to both language families. Evidence for the latter hypothesis is that the word *?usa* ‘wild pig’ also occurs in Tasaday, a member of the Southern Manobo language family. Evidence for the former hypothesis includes three points: (1) The two languages are adjacent to each other, facilitating lexical borrowing. (2) The Proto-Manobo word for ‘pig’ is **babuy* whereas Sarangani Manobo uses *?osa*, which is the same form as the Tagakaulo word for ‘wild pig’ except for the phonological change of /u/ to /o/. (3) The Sarangani Manobo were forced to flee from the coast and to depend on the Tagakaulo for survival after their alliance with the Magindanao was ended by the Spanish about a hundred years ago, facilitating the adoption by Sarangani Manobo speakers of Tagakaulo terminology. The Sarangani Manobo term **səladən* ‘deer’ is inherited from Proto-Manobo.

Table 16 provides evidence for possible lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of ‘Insects’.

TABLE 16. EVIDENCE FOR POSSIBLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘INSECTS’

Stage 2	Stage 3	Proto		Stage 2	Stg 3	Proto
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	Gloss	Tgk	Msk	PSEM	Dir.	SarM	PMb
(1)	‘cockroach’	taŋa	taŋa	*taŋa	⇒	taŋa	¹
(2)	‘coconut borer’	kama?uŋ	kama?uŋ	*kama?uŋ	⇒	kəmaʋoŋ	²
(3)	‘chicken lice’	?aɸaw	?apaw	*?apaw	⇒	?apaw	³
(4)	‘torch for smoking out bees’	namu	namu	*namo	⇒	namo	⁴
(5)	‘insect’	mannanaɸ			⇒	mənənanaɸ	*?ipəs
(6)	‘honeycomb / bee larva’	?anila?	?anila?		⇒	?ənida?	*tadu

Although table 16 presents possible borrowings, it is too early to determine if the majority of Sarangani Manobo words in this domain were borrowed from Tagakaulo or inherited from PMb. Of the 35 definitions researched in both Tagakaulo and Sarangani Manobo words, 25 forms are shared by the two.

¹ BkdM ?ampal, bakukaŋ; DbwM ?ipis, taŋa; AgM ?ipis, ?ampac.
² I found no word for this in either BkdM or DbwM; AgM *?abatid*.
³ I found no word for this in either BkdM, AgM, or DbwM.
⁴ I found no word for this in either BkdM, AgM, or DbwM.

Table 17 provides evidence for probable lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of ‘Rice planting, Harvest, and Preparation’.

TABLE 17. EVIDENCE FOR PROBABLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘RICE PLANTING, HARVEST, AND PREPARATION’

Stage 2		Stage 3		Proto		Stage 2		Stage 3		Proto	
	Gloss	Tgk	Msk	PSEM	Dir.	SarM		PMb			
(1)	‘rice plant’	ʔumay	ʔumay	*humay	⇒	ʔomay		¹			
(2)	‘unhulled rice’		tipalay		⇒	tipalay		²			
(3)	‘rice granary’	ɸuul	puʔul		⇒	pol		³			
(4)	‘to plant rice’	ɸangas	pangas		⇒	pangas		⁴			
(5)	‘chaff’	ʔapa	ʔapa	*ʔapa	⇒	ʔapa		⁵			
(6)	‘swidden field’	pawaʔ	pawaʔ	*pawaʔ	⇒	pawaʔ		⁶			

The data in table 17 supports the historical record that the Sarangani Manobo extensively borrowed Tagakaulo terminology for upland rice technology. However, the fact that words such as *bəgas* ‘hulled rice’, *kanən* ‘cooked rice’, *sidi* ‘a method of winnowing rice’, *ʔəlu* ‘pestle’, and *ləsoŋ* ‘mortar’ are in the Sarangani Manobo lexical inventory is evidence that they were at least familiar with rice and likely acquired it from their neighbors even if they did not grow it themselves. These particular forms and their glosses are common to many languages of the Philippines, whereas the forms in table 17 are restricted primarily to SEM languages.

Even though the term for ‘rice plant’ is *həmay* in Binukid and *humiy* in Agusan Manobo, it is not likely that Sarangani Manobo inherited the word from a Manobo source. This can be deduced because Sarangani Manobo has a phoneme /h/ in its inventory and would have no reason to drop the /h/ from the inherited word *ʔomay*. A more likely explanation for the Sarangani Manobo form *ʔomay* is that it was borrowed from Tagakaulo.

Table 18 provides evidence for possible lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of ‘actions of the body’.

TABLE 18. EVIDENCE OF POSSIBLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘ACTIONS OF THE BODY’

Stage 2		Stage 3		Proto		Stage 2		Stage 3		Proto	
	Gloss	Tgk	Msk	PSEM	Dir.	SarM		PMb			
(1)	‘to bite something’	baŋaʔ	kagat; [baŋaʔ] ¹	*kagat; *baŋa	⇒	baŋaʔ		*kagat			

¹ BkdM *həmay*, AgM *humiy*.
² BkdM *tipaka*, AgM *humiy*.
³ BkdM *bugawan*, AgM *tambubun*.
⁴ BkdM *paməgas*, AgM *bakæ* ‘plant by drilling’, *tanim* ‘replant wetland rice’.
⁵ BkdM *ʔukap*, AgM *ʔuhut*.
⁶ BkdM *ʔəlab*, ʔuma, AgM ʔuma.

(2)	'to call'	tawag	tawag	*tawag	⇒	tə̌tawag	*ʔumaw
(3)	'to slap'	dapiʔ	dapiʔ	*dapiʔ	⇒	dapi	*tagpiʔ
(4)	'to dream'	tagayniɸ	tagaynip	*tagaynip	⇒	tə̌gə̌ynip	²
(5)	'to plant'	tanim	tanim	*tanim	⇒	tanim	³

Of the 62 definitions researched in both Tagakaulo and Sarangani Manobo, 31 forms are shared by the two.

Table 19 provides evidence for possible lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of ‘Geographical Terminology’.

TABLE 19. EVIDENCE OF POSSIBLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘GEOGRAPHICAL TERMINOLOGY’

Stage 2	Stage 3	Proto		Stage 2	Stage 3	Prot o
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	Gloss	Tgk	Msk	PSEM	Dir.	SarM	DbwM	PMb
(1)	'mud'	ɸasak	pasak	*pasak	⇒	pasak	bagsak	⁴
(2)	'forest'	kagulaŋan	kaguraŋan	*kagulaŋan	⇒	kə̌golaŋan	guwaŋan	⁵
(3)	'mountain'	buntud	bitay	*bukid; *buntud	⇐	bontod	ʔuntud	⁶

Forms of the word *kagulaŋan* are found in a number of languages in the Central Philippines, but not in any other Manobo languages besides the two listed. Agusan Manobo has a form of the word, but the meaning is ‘a fully mature plant’. It is probable that Sarangani Manobo borrowed the term from Tagakaulo.

Of the 25 definitions researched in both Tagakaulo and Sarangani Manobo, 14 forms are shared by the two. Words that have their source from a more distant ancestor in the language family are: *dagat* ‘sea’ and *batu* ‘stone’.

Table 20 provides evidence for possible lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of ‘Cultigens’.

TABLE 20. EVIDENCE OF POSSIBLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘CULTIGENS’

Stage 2	Stage 3	Proto		Stage 2	Stage 3	Proto
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	Gloss	Tgk	Msk	PSEM	Dir.	SarM		PMb
(1)	'maize'	batad	batad	*batad	⇒	batad		

Table 20 shows a one-to-one correlation between Tagakaulo and Sarangani Manobo words related to maize. If we hypothesize that the PSEM speakers were the first ones to call ‘maize’ *batad*, then probably Sarangani Manobo borrowed these words from Tagakaulo.

1

In Mansaka, ‘to hold in mouth’.

2

BkdM *damugu*, Tsg *tagaʔinup*

3

Cotabato Manobo (*hi-*)*mula*, Tasaday (*hini-*)*mula*, OboM (*pa-*)*mowa*, BkdM (*pa-*)*mula*, AtaM (*pa-*)*mula*.

4

BkdM *basák*, Western Bukidnon Manobo *basák*, AgM *bagsak*, DbwM *bagsak*

5

Sur *kaguyaŋan*, Tsg *gulaŋan*, AgM *guyaŋ* ‘fully mature plant’, Cotabato Manobo *kayukayu*.

6

Western Bukidnon Manobo *buntud*, DbwM *ʔuntud*, AgM *bubunjan*.

Mansaka Dictionary (Svelmoe and Svelmoe 1990) makes no reference to the words listed in the table, other than for ‘maize’, but it does have words for ‘maize silk’ *?ayuba* and for an ‘ear of maize’ *pusu nan batad*, besides words for ‘maize cob’, ‘boiled maize’, and ‘a stage of growth of maize’.

Of the 8 definitions researched in both Tagakaulo and Sarangani Manobo words, all 8 forms are shared between them. One of them is a calque presumably from Tagakaulo to Sarangani Manobo: In the same way that Tgk *?untu* means ‘tooth’ and *?untu na batad* means ‘kernel (tooth of maize)’, SarM *ɲipən* means ‘tooth’ and *ɲipən tə batad* means ‘kernel’.

Table 21 provides evidence for possible lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of ‘Functors’.

TABLE 21. EVIDENCE OF POSSIBLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘FUNCTORS’

		Gloss	Tgk	Msk	Dir.	SarM
(1)	adv.	‘about to; almost’	?agɸit	?agpit	⇒	?agpit
(2)	conj.	‘but’	manan	[barasi]	⇐	mənən
(3)	conj.	‘even though’	ɸanɰkay	[saʔan]	⇐	pənɰkay
(4)	adv.	‘only’	?oloʔ	[kuman]	⇐	?oloʔ
(5)	adv.	‘perhaps’	basi	[kuraw]	⇐	bəsi
(6)	adv.	‘until’	mundaʔ	[ʔangan]	⇐	mondaʔ

TABLE 22. SEMANTIC SHIFTS

	Term	Tgk Gloss	Msk Gloss
(1)	sayda	‘to do something alone’	‘only child’
(2)	tigkan	‘all of a sudden; immediately’	‘until; yet’

Compared with the variety of mood particles, conjunctions, adverbial forms, and other kinds of functors found in the lexicons of other members of the SEM and Manobo language families, both Tagakaulo and Sarangani Manobo have relatively few functors. For example, Mansaka has a much richer inventory of these types of words than does Tagakaulo. Either they were innovations characteristic of Mansaka, or they have been lost by Tagakaulo speakers since the time PSEM diverged into east and west. In order to compensate, Tagakaulo and Sarangani Manobo have shared these types of words with each other. It is difficult to determine what sociolinguistic factors may have contributed to this situation, but it may be due in part to relatively recent increased contact and better relations between the Tagakaulo and Sarangani Manobo.

Second, Mansaka and Tagakaulo are grammatically very different in the kinds of morphology used. Tagakaulo morphology has more in common with Manobo languages than with languages within its own language family. Tagakaulo morphology is a hybrid mixture of two grammar systems minus the complexity of each one. Likewise, Tagakaulo has not retained the complex deictic pronouns that Mansaka has.

Table 23 provides evidence for probable lexical borrowing between Tagakaulo and Sarangani Manobo in the domain of ‘Cosmology’.

TABLE 23. EVIDENCE OF POSSIBLE LEXICAL BORROWING BETWEEN TAGAKAULO AND SARANGANI MANOBO IN THE DOMAIN ‘COSMOLOGY’

	Gloss	Tgk	Msk	PSEM	Di r	SarM	DbwM
(1)	‘Creator God’	t ^h umanim	t ^h umanim	*t ^h umanim	⇒	timanim	tagginihit

Tagakaulo and Mansaka are the only two languages that refer to the ‘creator God; owner of creation’ as *Tyumanim*. The Sarangani Manobo have indigenized this word by using their own ‘agent focus, begun’ infix *-im-* to replace the Tagakaulo ‘begun + agent focus infix’ *-y- + -um-*. (The verb *tanim* means ‘to plant’; therefore *Tyumanim* literally means ‘the one who planted’.) A number of the other Manobo languages use the term *Manama*.

This domain still needs more investigation, but it could shed some light on the origins of the first East Mindanao speakers. It could also suggest which route the Tagakaulo took when they migrated to the western side of the Davao Gulf, and could reveal linguistic evidence as to whether they spent any time farther north than their present location today. Tagakaulo does share a few cosmological words with a Bagobo language spoken around Mt. Apo.

Of the 20 definitions researched in both Tagakaulo and Sarangani Manobo, 15 forms are shared between them. Only the word, *kilut* ‘abode of the dead’, is of Blaan origin.

5. Other factors that influence language contact and lexical borrowing that are relevant for this case study

5.1 The arrival of Islam in the Philippines

Migration by Muslims from the Malay Peninsula was precipitated first by the Portuguese intrusion into the East Indies for trade and colonization, followed by the Dutch and Spanish. These intrusions by European powers caused the consolidation of the Islamic religion in the East Indies and its spread eastward to the Philippines (Majul 1973:44). Some of these Muslims arrived on the shores of Mindanao and settled at the mouth of the Pulangi River between 1460 and 1515. There they became established through inter-marriage with neighboring indigenous communities and through political alliances. These settlers and their descendants became known as the Magindanaon.

In 1515, Muslim missionaries also arrived among the Magindanaon with Sharif Muhammad Kabungsuwan (Majul 1973:64), and by the late 1600s, alliances had been established between the royal families of Sulu, Magindanaon, and Ternate in the Maluku. They established a hierarchical system of government and this centralised system of government was a new concept to most indigenous cultures of Mindanao. Modeled after a Malay-Arabic system with a sultan as supreme leader, and a number of *datus* serving as regional chiefs and clan leaders, the Magindanaon and their allies were able to control and dominate their neighbours.

The Magindanaon had extensive trade and religious connections with the Malay Peninsula, Sumatra, northern Borneo, China, Sulu, and Brunei. The Magindanaon also recognized the natural wealth of Mindanao and exploited it. Because of the demand for products found in the interior forests, coercion or enslavement of people of neighboring indigenous communities became necessary. This factor, and the need of European colonizers in the East Indies for slave labor, was to become the driving economic force for the slave trade. The slave raiding of the coasts dramatically affected the linguistic and cultural map of Mindanao. There

was virtually no place that was not affected by their slave trading. For example, in 1543 when the Villalobos expedition landed some 10 kilometres west of Sarangani Bay in order to grow enough rice to feed themselves, they were attacked by indigenous bowmen. But with the rise of slave raiding shortly after this time, many of these indigenous people fled into the interior of Mindanao and settled around Mt. Apo (Scott 1994:173).

The Magindanaon spread their power and influence over the Manobo, Blaan, and other groups upstream along the Pulangi River and its tributaries. By the beginning of the 1600s there had been two sultanates established, one at the mouth of the Pulangi River and the other upstream at Buayan. By the mid-1600s the Magindanao were exerting control over the area around Sarangani Bay and the Davao Gulf (Majul 1973:70), which probably began in 1625 when Sultan Quadarat attacked Sarangani Island (Majul 1973:28).¹ This attack on Sarangani Island was precipitated by a dispute for control between the Sangir² and the Magindanaon over the coastal people living in and around Sarangani Bay. These people "...supplied the forest products which were major items of both domestic and foreign trade, especially wax. They were also a major source of rice..." (Scott 1994:173). It was probably at this same time that perhaps by necessity the Sarangani Manobo allied themselves with the Magindanaon. In any case, the Manobo gave the Magindanaon³ parts of the coastline at the mouth of several rivers in exchange for help in the fight against the Tagakaulo and Blaan (Cole 1913:149).

Once an alliance was established between these two groups, the Magindanaon organized the Sarangani Manobo into a hierarchical *datu* system with a head *datu* ruling from a place known as Kulaman. With this system in place, the Sarangani Manobo were able to exert their control over the Tagakaulo, forcing them to migrate into the mountains away from the coastal areas of Davao Gulf and Sarangani Bay.

It was not only the Magindanao, however, who were slave raiding. The Tausug and their allies, the Samal, were notorious for slave raiding during the seventeenth, eighteenth, and especially the nineteenth century. Jolo became a clearing-house for slaves. Slaves were brought there by Muslim raiders and resold throughout Malaysia and the East Indies. Slave raiding required an extensive and potent naval force. The Spanish, Dutch, British and other European powers who had interests in the region and who had the naval strength to exert their influence in that era were unsuccessful in stemming the power of Muslim naval forces. The reason for the Muslim success was the ability of their boats which could be sailed or rowed, to out-maneuver larger warships powered only by sail, and to overwhelm an opposing vessel by sheer numbers of boats and men. Only after western navies began using steam as an alternative propulsion for their warships were the European powers eventually able to succeed in destroying the power of the Muslim naval forces.

Toward the end of the Spanish era, the Spanish conducted a series of campaigns called the "Moro wars". The last stage of the so-called "Moro wars" began a period of decline in power of the Muslim sultanates of Jolo, Buayan, and Magindanao. This was brought about by infighting among the Muslim royal families and hastened by continuous Spanish military pressure. This pressure was supplemented by the effective use of steam-powered gunboats first introduced in 1848 (Majul 1973:274), high-powered cannons, and rapid-firing guns. From 1851 until 1898, through a series of successful military campaigns by the Spanish against primarily Muslim groups in Sulu, many of the naval vessels used in slave raids were destroyed, fortifications

¹ Majul (1973:125) notes that the Dutch began to show interest in purchasing slaves from the Magindanaon to work on Dutch plantations in the Maluku. With this new trade commodity, slave raids began to increase into the Visayan Islands and other parts of the Philippines.

² The leader of the Sangir, who lived on Sarangani Island, was related to the ruling family of Buayan.

³ Cole does not identify the Muslim group whom he refers to as the Moros, the Spanish name given to followers of Islam in the Philippines. However, the Magindanaon began establishing settlements along the coast at and near where General Santos City is located today. There are also a number of Magindanaon fishing villages along the eastern coast of the Davao Gulf. In this case study, I refer to the Moros as Muslims, which includes not only the Magindanaon and Tausug but also includes their allies, the Samal, the Sangir, the Maranao, and members of Islamized groups outside the Philippines.

burned, and Spanish garrisons placed in the heart of Muslim-controlled territory. The sultanates began to respect the superior firepower of the Spanish, although the Muslims still took every opportunity to exploit any weakness they could find (Gowing 1977:11–12, 331).

By 1846, the Magindanaon Sultan Iskandar Qudratullah had lost control of the Davao Gulf region to a Sulu *datu* named Datu Bago, who had carved out a small kingdom for himself where Davao City is located today and exerted some control over the cultural communities in the region (Majul 1973:273). At the same time, the Spanish government in Manila, unaware of Qudratullah's loss of control of the Davao Gulf, began talks with him about their desire to develop that region, and gave Jose Oyanguren, a businessman from Manila, some Spanish troops to carry out the development projects. When they arrived in the region, however, they learned of Datu Bago's control and subsequently, in alliance with Christianized Samal there, defeated Datu Bago and took control of the Gulf and the surrounding coastal areas (Majul 1973:273). The decline of the power and influence of the Magindanaon in the Davao Gulf (1) marked the beginning of the end of the alliance between the Magindanaon and Sarangani Manobo, and their domination over the Tagakaulo, and (2) provided opportunities for the Tagakaulo speakers to expand their territory. This change of events coincides with the timing of the migration of some Tagakaulo clans north into the Padada-Digos plain area at which time they took control of the area from the Bagobo. This migration precipitated the language contacts included at Stage 1 in this study.

5.2 The impact of the arrival of the Spanish on the indigenous communities of the Philippines

A number of scholars estimate that the total population of the Philippine Islands at the time of the Spanish arrival was between 500,000 and 1.5 million. The majority of the population lived in the lowlands along the coasts or by major rivers. One basis for this assumption is that their dietary needs for starch could not be sufficiently met by plants available in the inland forests. Their needs were hardly sustainable even in coastal areas and waterways even though the soil in these regions was lush (Scott 1994:35–36). The few sources of starch growing in the forests were difficult to find, and most varieties had to be processed in order to leach out poisons contained in the roots. Roots and wild yams acquired from the forests served only as emergency food for the majority of the people, but rice and millet served as their primary source of starch (Thomas Headland, *pers. comm.*). Rice, however, yields only one or two crops per year and is consumed quickly. Other sources of starch before the time of the Spanish arrival were sago palm, taro root, and bananas.

When Magellan and subsequent expeditions by Legaspi came to the Philippines, they had difficulty acquiring enough food to feed and resupply their ships. The island populations could only grow barely enough rice and other foods to feed their own people. Easy sources of protein were from fish and other seafood. Therefore, it was not until the Spanish brought maize, sweet potatoes, cassava, and a number of other New World cultigens that people were able to have enough variety of starchy food sources to survive away from the coasts and waterways, i.e. in the mountains and forests where soil was marginal. It is ironic then that the migration away from the coasts was partially the result of slave raiding fuelled by colonial interest of European powers in the East Indies, and yet it was the Spanish who made it possible for large numbers of people to migrate inland away from the ocean shore by introducing New World cultigens to the Philippines.

Because of the New World cultigens, the Tagakaulo were able to survive in the forested mountains of the Sarangani Peninsula between the Sarangani Manobo on the coast and the Blaan to the west. Although the Tagakaulo have traditionally grown upland rice and millet, they also depend to a large degree on maize (*batad*), sweet potatoes (*kasila?*) and cassava (*kasila? kauy*) for their intake of starchy foods. The Sarangani Manobo, however, continued to dwell along the Davao Gulf coast. As a result, they still have a rich vocabulary of marine terminology.

Another factor to take note of during the early part of the Spanish era, is that the area from Butuan to the Sarangani Gulf was inhabited by a people the Spanish called Caragan and they essentially spoke one language, "Visayan". When slave raiding along the seacoasts intensified due in part to the establishment of the Muslim sultanates, and in part to European colonial intervention in the East Indies and their need for labor on plantations, this homogeneous group of people began to break up and evolve into what eventually became separate language communities of Mandaya, Mansaka, Kalagan, and Tagakaulo Kalagan. These groups still retained a trade language between them called Davaweño just until the 1960s and 1970s when Cebuano began to take over.

So in sum, a combination of slave raiding by the Muslims and the introduction of New World cultigens by the Spanish during the same period of time contributed to the movement of indigenous language communities into the interior of Mindanao. This movement away from the coasts and waterways to safer regions began during the early to middle part of the Spanish era, the sixteenth to mid-nineteenth centuries, as slave raiding by Muslims became increasingly common along the coasts. This movement inland accelerated the dispersion and diversification of the Manobo groups, and possibly contributed to the further migration of Proto-South East Mindanao speakers to the south-eastern corner of Mindanao and the Davao Gulf.

Also the Magindanaon and indirectly the Sultanate of Jolo had an important effect on the linguistic history of Mindanao and have particular relevance to this study. Specifically: (1) The destruction of the alliance of the Magindanaon and the Sarangani Manobo is one in a set of factors that produced the high percentage of shared vocabulary between Sarangani Manobo and Tagakaulo. (2) The practice of slave-raiding intensified with the establishment of the Muslim sultanates and their allies, which provided a catalyst for movement of indigenous groups inland away from the coasts and therefore caused the disruption of the linguistic map of Mindanao.

6. Conclusions

Today the language communities on the Sarangani Peninsula are quite different to what they were reported in 1913. There are no longer any known Tagakaulo communities south of Mt. Latian, which is a considerable loss of territory considering the present Tagakaulo population is between 70,000-100,000. The Blaan and Sarangani Manobo occupy nearly all the area south of Mt. Latian. In the 1950s the Tagakaulo population was estimated at only 10,000. Second, in a recent genealogical study I discovered that a significant percentage of the Tagakaulo (this numbers several thousand) living in the western part of the language area can trace their ancestry to one location in the northern part of the Municipality of Alabel, dating back to roughly 100-130 years ago. This is outside the area reported by Cole and Cummins Expedition in 1913, and is very close to Blaan and Magindanaon settlements along the northern shore of Sarangani Bay (around what is presently General Santos City). A question that arises is this; what happened to the Tagakaulo living south of Mt. Latian? At this time one can only speculate, 1) that the Sarangani Manobo under the alliance with the Magindanao raided most of the Tagakaulo clans into extinction, killing or selling the males and making the females wives and personal slaves, or 2) that when the Spanish and Americans began creating plantations along the western Davao Gulf coast, this pushed the Sarangani Manobo into the territory held by the Tagakaulo, and the Tagakaulo with their backs against a Blaan wall were forced to move elsewhere, or 3) that the Tagakaulo fought each other in inter-clan warfare, or 4) the Sarangani Manobo and Tagakaulo voluntarily intermarried. These four possibilities did occur based on the historical record at Stage 2. Also, when the Spanish and later on the Americans broke up the Magindanao-Manobo alliance and later the Manobo-Tagakaulo alliance in raids on coastal plantations through military operations,

the Sarangani Manobo were forced to flee into the mountains living with the Tagakaulo who already lived there and relying on them for food. This explains why Sarangani Manobo borrowed all of its present rice-growing terms from Tagakaulo.

Tables 4-9 present evidence that Manobo words came into East Mindanao languages at an early date. A sample of words provided in the tables indicate that the Manobo words came primarily from a Northern Manobo source and underwent the process of indigenization when necessary. Once these phonological changes occurred, the form of the word remained frozen and the words were carried by their speakers from the northeast corner of Mindanao at Stage 4 to the south-east corner at Stage 3. At that time speakers of the East Mindanao languages were using what has been reconstructed by Gallman (1979) as Proto-South East Mindanao. At Stage 3 Proto-South East Mindanao split into the eastern (Mansaka and Mandaya) and western branches (Tagakaulo and Kagan Kalagan), and the Manobo words that had become part of the lexicon of South East Mindanao languages are still used by Tagakaulo and Mansaka speakers. I have also presented evidence that the high percentage of shared vocabulary between Tagakaulo and Sarangani Manobo is not solely the result of local contact, but is also the result of historical contact of the parent language of Tagakaulo with members of the Manobo language family.

Based on the evidence of Northern Manobo influence, Pallesen's dispersion hypothesis (1985) may need adjustment. He places the location at which South East Mindanao and Central East Mindanao separated from East Mindanao near the tip of the Surigao Peninsula. In order for Northern Manobo to have had an influence into East Mindanao, the location for that separation must be placed further west, closer toward the mouth of the Agusan River. The Agusan Manobo were probably closer to Lake Mainit and the Mamanwa speakers than previously thought, based on evidence of linguistic convergence between these two groups.

Regarding the date of PSEM speakers arrival to southeastern Mindanao, Pallesen's dispersion hypothesis places the split of the eastern and western branches of the Proto-South East Mindanao in the time period of ca. AD 1100. Based on agricultural and linguistic clues, however, I believe this date may be far too early.

One clue is found in the use of the word *batad* (see table 20). In Binukid, our Northern Manobo language family representative *batad* is defined as 'a kind of sorghum'. In both Cebuano and Tagalog, it is defined as 'a kind of millet'. However, in Tagakaulo and Mansaka, and also in Agusan Manobo and Dibabawon, *batad* is defined as 'maize'. This suggests the possibility that maize, which was not grown in the Philippines but is a New World cultigen, was introduced by the Spanish in north-east Mindanao and PSEM speakers carried maize with them along established trading routes to the Davao Gulf area at a time when PSEM was still a homogeneous language group. Since its introduction, maize ranks next to rice as an important source of starch carbohydrates for many cultural communities of Mindanao.

The introduction of maize and other New World cultigens into the diet of PSEM speakers has made it easier for them to live away from the coastal areas and in the mountains, because they no longer have to depend on just one or two rice crops per year for their main source of starch carbohydrates.

A second clue is indicated by recent additions of Mansaka lexical data to the PSEM data (Gallman 1979). The new calculation that 88.5% of Mansaka vocabulary is cognate with PSEM is higher than the previous figure of 74.5%. The higher percentage of cognates between Mansaka and PSEM suggests that the split of eastern and western

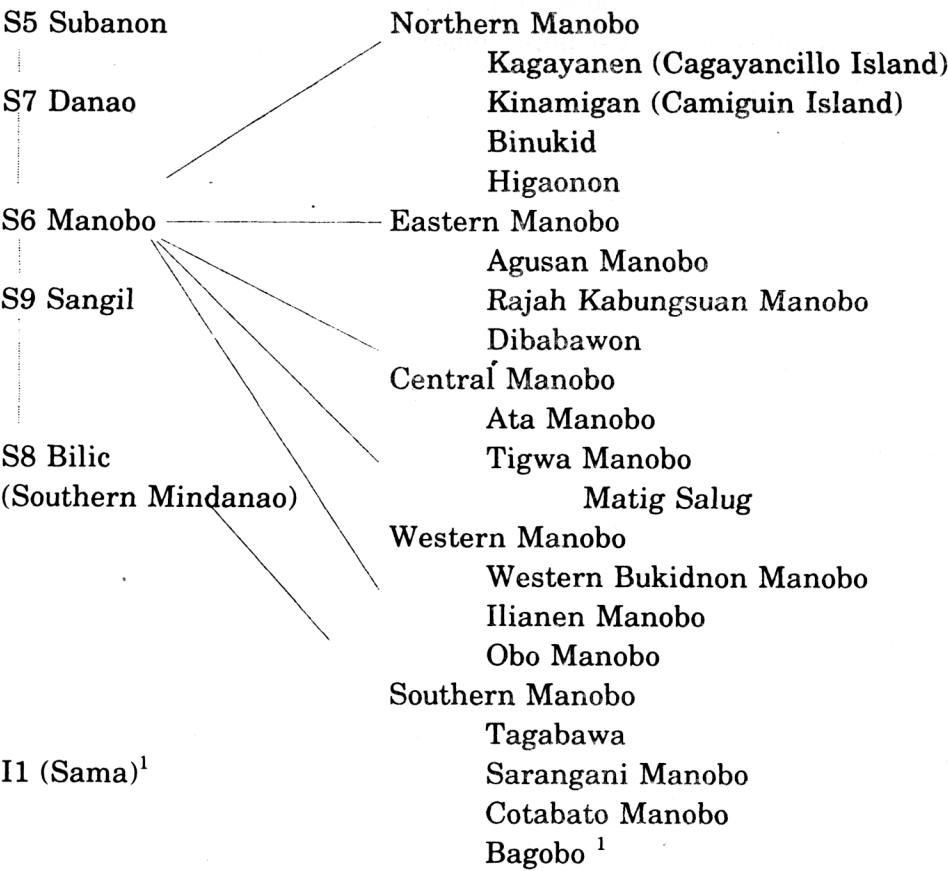
branches of PSEM occurred at a more recent date than that posited by Pallesen (1985). If the split had occurred at an earlier date, we would expect a lower percentage of cognates between the two branches.

A third clue for a later date is the fact that there has been very little phonological change between the languages of the eastern branch and the western branch of PSEM. If the PSEM split had occurred much earlier in time, as suggested by Pallesen, we would expect more innovations to have occurred within both Tagakaulo and Mansaka, and between the two. As it is, there is very little change at all.

In sum, I have presented two additional approaches that can be used along with conventional historical and comparative linguistic strategies to determine whether lexical terms entered a language through language contact and borrowing or are cognate with a parent language family. By retracing the established language trees, establishing the location where contact took place and comparing lexical terms against proto-words, one can get a good idea who borrowed from whom, and when it occurred. Secondly, by comparing lexical data in semantic sets, one can begin to determine why whole domains are borrowed by one group from another. By combining linguistic information, with historical information one can begin to deduce the kinds of contact and interaction between language communities.

7. Appendix

Figure A. The genetic relationships of southern Philippine languages.



¹ McFarland (1980) includes the Sama in his classification; Zorc (1984) classifies them as an extra-Philippine group.

Tasaday

Tboli

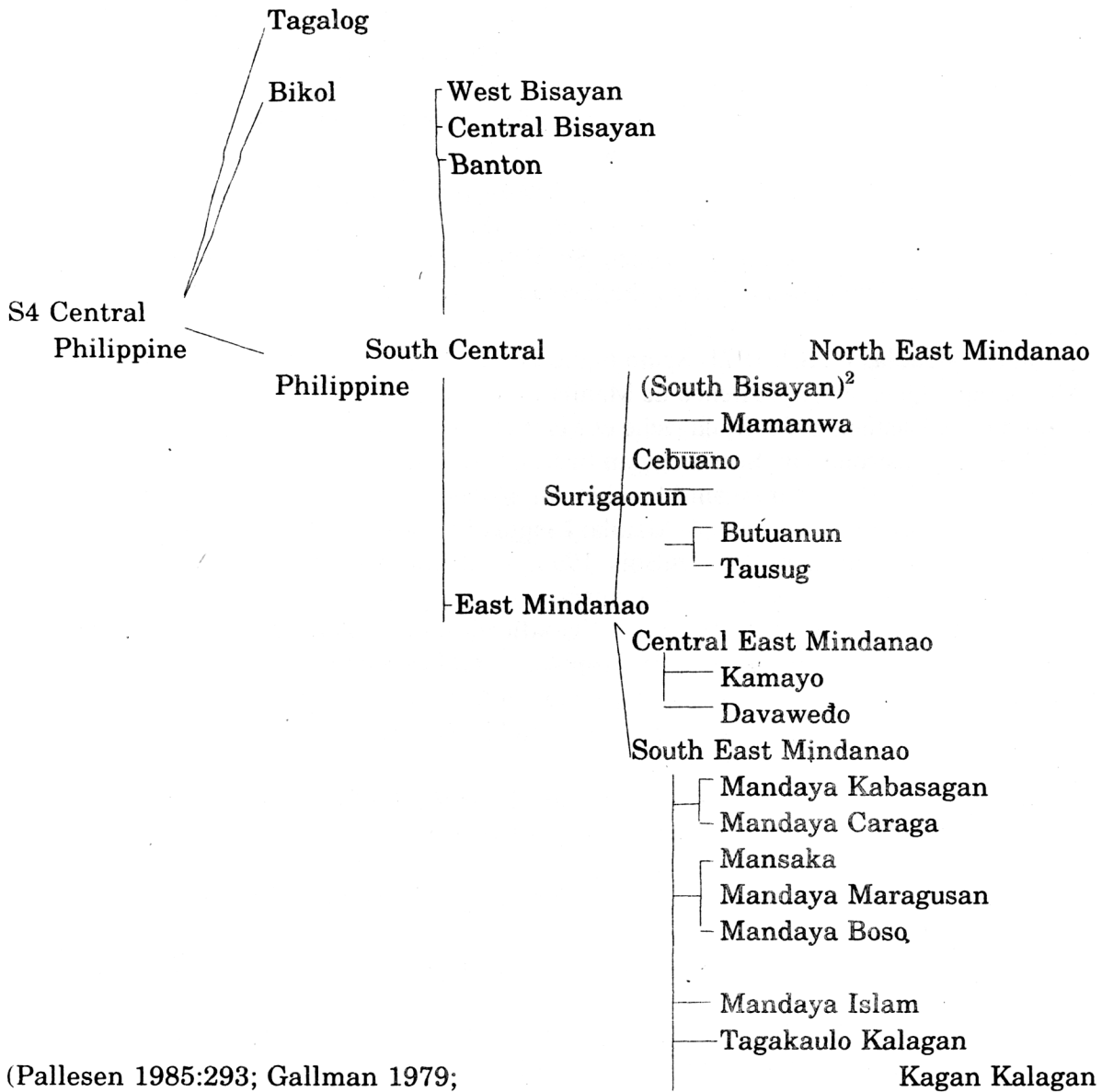
Tiruray

Giangnan (also called Bagobo)

Blaan

(McFarland 1980:60–61; Zorc 1984:139,145–147; Elkins 1974:603) The letter/number designations are Zorc's.

Figure B. The genetic relationships of the Central Philippine subfamily.



(Pallesen 1985:293; Gallman 1979; Zorc 1977; McFarland 1980:60–61)

¹ There are two languages called Bagobo, one a South Mindanao language and one a Manobo language. McFarland originally placed 'Bagobo' in the South Mindanao group.

² McFarland's designation (1980).

BIBLIOGRAPHY

1. (anonymous), 1905. Index to Philippine Photographs. vol. 2 series 8 27.5, pp. 289 & 291. Manila.
2. Bellwood, Peter. 1985. Prehistory of the Indo-Malaysian Archipelago. Sydney: Academic Press.
3. Benedict, Paul K., 1975. Austro-Thai: language and culture with a glossary of roots. New Haven, CT: HRAF Press.
4. Burton, Scott L., Becky A. Burton, Francis B. Dawson, Don Murray and Mary Murray. 1996. The Tagakaulo-Kalagan-English Dictionary. Unpublished manuscript in preparation.
5. Cole, Fay-Cooper. 1913. The Wild Tribes of Davao District, Mindanao. vol. 12.2, pp. 158–161. Chicago: Field Museum of Natural History.
6. Conant, Carlos Everett. 1973. "F" and "V" in Philippine Languages, part 2. Readings in Philippine Linguistics. eds. Andrew Gonzalez, F.S.C.; Teodoro Llamzon, S.J. and Fe Otanes. pgs 213–219 Manila : Linguistic Society of the Philippines. (originally published in 1908 from article of same title by the Bureau of Science, Division of Ethnology, Manila.
7. Cushner, Nicholas P., S.J. 1971. Spain in the Philippines. Institute of Philippine Culture Monograph, Quezon City: Ateneo de Manila University.
8. Dahl, Otto Christian. 1951. *Malagache et Maanyan*. Oslo: Egede Instituttet.
9. 1973, Proto-Austronesian. Scandinavian Institute of Asian Studies Monograph 15.
10. DuBois, Carl D. 1976. Sarangani Manobo: An introductory guide. Philippine Journal of Linguistics Special Monograph 6. Manila: Linguistic Society of the Philippines.
11. DuBois, Carl D. and Lauretta J. DuBois. 1993. Sarangani Manobo-English Dictionary. Unpublished, Summer Institute of Linguistics.
12. Dyen, Isidore. 1965. A Lexicostatistical Classification of the Austronesian Languages. Indiana University Publications in Anthropology and Linguistics, Supplement to International Journal of American Linguistics. Volume 31, Number 1, Memoir 19.
13. Elkins, Richard E. 1974. A Proto-Manobo word list. Oceanic Linguistics. 13:601–641. Honolulu: University Press of Hawaii.
14. 1984a. An Extended Proto-Manobo Word List. Panagani (Essays in Honor of Bonifacio P. Sibayan on his sixty-seventh birthday). ed. Andrew Gonzalez, FSC, 218–229. Manila: Linguistic Society of the Philippines.
15. 1984b. comp., Gail R. Hendrickson, ed. A Sampling of Philippine Kinship Patterns. Manila: Summer Institute of Linguistics.
16. 1996. Hints from a Proto-language: notes on Proto-Manobo lifestyle. Unpublished manuscript.
17. Foley, W.A. 1980. History of migrations in Indonesia as seen by a linguist. The Flow of Life: Essays on Eastern Indonesia. Fox, James J. (ed.) 1980: 75–80.
18. Forster, Jannette and Myra Lou Barnard, n.d. Dibabawon-English Dictionary. Manuscript on microfiche.
19. Gallman, Andrew F. 1979. Proto-South-East Mindanao and its internal relationships. Papers in Philippine Linguistics 10. 1–52. Also see: Pacific Linguistics Series A-No. S5. Canberra: The Australian National University.
20. Gowing, Peter Gordon. 1977. Mandate in Moroland: The American Government of Muslim Filipinos 1899–1920. Quezon City: Philippine Center for Advanced Studies—University of the Philippines.
21. Harvey, Mark. 1982. Subgroups in Austronesian. In Amram Halim. Lois Carrington. and S. A. Wurm, (eds.), Papers from the Third International Conference on Austronesian

- Linguistics, Vol. 2: Tracking the Travelers, pp. 47–99. Pacific Linguistics Series, C–75. Canberra: Australian National University.
22. Hassan, Irene U., Seymour A. Ashley and Mary L. Ashley. 1994. Tausug-English Dictionary: Kabtangan Iban Maana. 2nd ed. Sulu Studies 6. Jolo, Sulu and Manila, Philippines: Notre Dame of Jolo College and the Summer Institute of Linguistics.
 23. Hermosissima, Tomas V. and Pedro S. Lopez. 1966. Dictionary: Bisayan, English, Tagalog. Manila: Pedro B. Ayuda and Company.
 24. Hock, Hans Henrich. 1991. Principles of Historical Linguistics. New York, NY: Mouton de Gruyter.
 25. Majul, Cesar Adib. 1973. Muslims in the Philippines. Quezon City: University of the Philippines Press.
 26. McFarland, Curtis D. 1980. A Linguistic Atlas of the Philippines. Study of Languages and Cultures of Asia and Africa, Monograph 15. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
 27. Montano, Joseph. 1879. Rapport A.M. Le Ministre de L'Instruction Publique Sur une Mission aux iles Philippines. Archives des Missions Scientifiques et Litteraires Troisieme Serie 11., pp. 425–457.
 28. Pallesen, A. Kemp. 1985. Culture Contact and Language Convergence. Linguistic Society of the Philippines 24. Manila: Linguistic Society of the Philippines.
 29. Post, Ursula and Mary Jane Gardner. 1992. Binukid Dictionary. Studies in Philippine Linguistics. Vol 9, No. 2. Manila: Linguistic Society of the Philippines and the Summer Institute of Linguistics.
 30. Reid, Lawrence A. 1971. Philippine Minor Languages: word lists and phonologies. Oceanic Linguistics Special Publication 8. Hawaii: University of Hawaii Press.
 31. 1982. The demise of Proto-Philippines. In A. Halim, Lois Carrington, and S. A. Wurm, eds., Papers from the Third International Conference on Austronesian Linguistics. Tracking the Travelers. Pacific Linguistics Series C–75. Vol. 2., pp. 201–216. Canberra: The Australian National University.
 32. Savage, Timothy Dale. 1986. A Reconstruction of Proto Southern Mindanaon. Studies in Philippine Linguistics. 6.2: 181–223. Manila: Linguistic Society of the Philippines and Summer Institute of Linguistics.
 33. Scott, William Henry. 1994. Barangay. Quezon City: Ateneo de Manila University Press.
 34. Schumacher, Ron L. and Donna R. Schumacher. 1995. Agusan Manobo-English Dictionary. Unpublished manuscript. Summer Institute of Linguistics, Philippines.
 35. Shutler, R. and J.C. Marck. 1975. On dispersal of the Austronesian horticulturalists. Archaeology and Physical Anthropology in Oceania, 10: 81–113.
 36. Svelmoe, Gordon and Thelma Svelmoe. 1990. Mansaka Dictionary. Language Data: Asia-Pacific Series 16. Dallas: The Summer Institute of Linguistics.
 37. Swadesh, Morris. 1950. Salish Internal Relationships. International Journal of American Linguistics. 16: 157–167.
 38. Thomas, David and Alan Healey. 1962. Some Philippine Language Subgroupings: a lexicostatistical study. Anthropological Linguistics. 4.9: 21–33.
 39. Wendel, Dag. 1986. The Use of Reported Speech and Quote Formula Selection in Kagan Kalagan. Studies in Philippine Linguistics, 6.1: 1–79. Manila: Linguistic Society of the Philippines and Summer Institute of Linguistics.
 40. Zorc, R. David Paul. 1977. The Bisayan Dialects of the Philippines: Subgroupings and Reconstruction. Pacific Linguistics, C-44. Canberra: The Australian National University.
 41. . 1984. The Philippine Language Scene--The Sociolinguistic Contributions of Historical Linguistics. Panagani (Essays in Honor of Bonifacio P. Sibayan on his sixty-seventh birthday), ed. Andrew Gonzalez, FSC. 135–148. Manila: Linguistic Society of the Philippines.

NGÔN NGỮ NAM Á VÀ NGÔN NGỮ TAI-KADAI TRONG CÁC BỘ TỪ ĐIỂN LIÊN LỤC ĐỊA (TÓM TẮT)

Bernard Comrie và Ilia Peiros

Việc biên soạn các đại từ điển đối chiếu nhằm giới thiệu sự đa dạng từ vựng trong phạm vi một khu vực hay trong một ngữ hệ là một trong những vấn đề quan trọng nhất của các nhà ngôn ngữ học hiện đại. Yêu cầu đối với các từ điển như vậy không phải là một vấn đề mới mẻ và các từ điển ấy đã được biên soạn từ thế kỷ XVIII. Tuy nhiên việc sử dụng các bộ đại từ điển đối chiếu rất phức tạp và vì thế các tư liệu phong phú trong đó không được khai thác đến mức tối đa. Các cơ sở dữ liệu điện tử hiện đại đã mở ra một hướng mới cho các bộ từ điển đối chiếu.

Marie Ritchie Kay đưa ra dự án biên soạn các bộ Đại từ điển liên lục địa (IDS) nhằm mục đích tạo ra các cơ sở dữ liệu mà trong đó việc so sánh các dữ liệu về từ vựng xuyên lục địa được tiến hành. Các bộ đại từ điển liên lục địa (IDS) dựa trên sự liệt kê thống nhất về mặt ngữ nghĩa của từ, phần lớn dựa theo cách mà Buck đã làm đối với các ngôn ngữ Ấn Âu, có những bổ sung tương ứng với khu vực được điều tra. Hướng biên soạn một từ điển như vậy cho thấy cách mà nghĩa của từ được truyền tải trong từng ngôn ngữ riêng lẻ. Do đó hướng biên soạn này, thực ra chỉ là sự liệt kê các từ đồng nghĩa. Một số từ điển tuân theo nguyên tắc chung của IDS đã hoặc đang được biên soạn gồm có *Từ điển so sánh các ngôn ngữ Nam Đảo* của D. Tryon và *Từ điển các ngôn ngữ ở Nam Mỹ* của M. R. Kay.

Một bộ Đại từ điển liên lục địa mới sẽ bao gồm trong đó các ngôn ngữ Nam Á lẫn ngôn ngữ Tai-Kadai. Tuy nhiên với nhiều ngôn ngữ có trong bộ từ điển như vậy thì việc có sẵn các từ vựng đầy đủ là điều không thể, do vậy việc thu thập từ vựng cho đầy đủ là mục tiêu đặc biệt của dự án này. Chúng tôi đang tìm kiếm các đối tác có quan tâm đến việc tham gia thu thập các dữ liệu ban đầu và xa hơn nữa là việc cùng hợp tác nghiên cứu.

Những thành quả chính của dự án này sẽ là những cơ sở dữ liệu được công bố trên mạng internet.