

Phonological Features of Contemporary Spoken *Binukid*

Teresita C. Hermocilla-Borres

College of Education, Central Mindanao University

Abstract

This paper attempts to describe the phonological features of *Binukid* language, which is one of the indigenous languages spoken by the *lumads*, particularly the *Umajammen* tribe, in *Bukidnon*, Southern Philippines. The study anchored its framework of analysis from the International Phonetic Alphabet (IPA) in *Ladefoged* (2012) for the phonetic notations and standardized representations. Proper research protocols were observed such as the seeking of consent from the National Commission on Indigenous Peoples (NCIP) in the Province, the tribal informed consent, and the conduct of the traditional *pamuhat* ritual. Informants were properly identified and qualified based on language use in the home domain. Results revealed that *Binukid* has 16 consonants: the /b/, /k/, /d/, /g/, /h/, /j/, /l/, /m/, /n/, /ŋ/, /p/, /r/, /s/, /t/, /w/, and /y/. It has five vowels: the /a/, the *pepet* /e/, /i/, /o/, and /u/; and finally, it has five diphthongs: the high-front /ei/, the front central /au/, the low central back /ai/, the central /fÓi/ and the back central /ow/. Significant findings include the following: identification of the *pepet* /e/, the alveo-palatal affricate /j/; and the presence of the five diphthongs: the /fÓi/, /au/, /ai/, /f^ai/, and /ow/. These findings were not mentioned in the early descriptions of related *Binukid* phonology in the studies of Atherton (1953, 1963); Post (1965, 1968), and Post & Gardner (1965). Finally, the study found interchangeability of some vowels and consonants among the elderly in the community, and the preponderance of the /a/, the *peppet* /e/, and the /j/ in the corpus.

Keywords: *Binukid*, consonants, diphthong/indigenous language, *pepet* /e/, vowel/s

1. Introduction

1.1 Background of the Study

Philippines is a multi-lingual country and a home to many languages; however, a number of Philippine Languages (*henceforth*, PLs) still remain under-explored (Tajolosa, 2012). *Binukid* is one of these PLs, particularly belonging to a minority language category. It is a language spoken by the indigenous groups of *Bukidnon* Province at the north-central part of Mindanao, the largest island in Southern Philippines. These indigenous communities are often referred to as *lumads*, composed of seven (7) ethnic tribes, namely: the *Bukidnons*, the *Tigwahanons*, the *Umajamnens* or the *Umayamnons*, the *Talaandigs*, the *Higaonons*, the *Manobos*, and the *Matigsalugs*. Each tribe speaks a variant of *Binukid*, distinct from the other; thereby creating a rich ethnolinguistic landscape of the province. However, this rich cultural linguistic heritage has remained under explored as there are very scanty studies conducted on the language up to the present time. If ever there were, these studies were conducted decades ago, leaving a minimal documentation and description of the language, as it has evolved through time. In addition, its literature in standardized form is not yet widespread and sustainable, as pointed out by Lewis, Simons, and Fennig (2016). It is on this context that this study is conceptualized, specifically to describe the contemporary spoken *Binukid* language in terms of its segmental phonemes, particularly the consonants, the vowels, and the diphthongs.

1.2 Review of Related Literature

To date, studies on indigenous languages in the Philippines, particularly with *Binukid* language in Southern Philippines were very scanty. If ever there were, these studies were dated more than five decades ago. To recall, *Binukid* was the subject of study by the Summer Institute of Linguistics (SIL), through Atherton described *Binokid* phonemes in 1953, *Binokid*verb morphology in 1963, *Binokid*pronouns [*n.d*], and some minimal grammatical pairs in *Binokid*

[n.d]. Atherton's studies were more of identifying the features exhibited in the language; thus, from 1965 to 1978, Ursula Post, another SIL fellow, continued to describe the language a little further, this time with the grammatical aspects of the language. Her studies included Morphophonemic Alternations in *Binukid* (1965), Nuclear Nonpredicate Tagmemes of Verbal Clauses in *Binukid* (1965), The Phonology of *Binukid* (1965), *Binukid* Clause Structure (1968), *Binukid* Phrase Structure (1968), *Binukid* Sentence Structure (1968), and *Binukid Folk Tale Texts* (1978). However, these earlier studies were largely based on the *Binukid* language as spoken by bigger ethnolinguistic groups but not by the marginalized group of *Binukid* speakers.

Binukid language is to a large degree, belonging to the Manobo language family since it is spoken by *Agusan* Manobo to the east, *Ata* Manobo to the southeast, *Tigwa* Manobo to the southwest, and Western *Bukidnon* Manobo to the west. Moreover, due to the influx of migrants from the *Visayas* islands located north across Mindanao sea, it is also influenced by the Visayan language family. The language is related to *Cinamiguin* and *Cagayano* — the first branch in the family tree of Manobo languages within the Malayo-Polynesian language category. The term “*Bukidnon*” is a Visayan word that means “people of the mountains” and these people speaking the language are called “*Bukidnons*”, while the language spoken is commonly termed as “*Binukid*” (Post, 1978).

Aside from these early studies on *Binukid* language, other studies on PLs are found quite similar to this present study to some extent. The study of Liao (2004) pointed out that although the languages differed syntactically, Philippine-type languages were not as distinct as linguists originally assumed. She proved that the traditional conception about Philippine-type languages was incorrect; rather, she proved that the languages of the type apparently fitted in the general structures of different world languages.

In addition, the study of Ruffolo (2004) on *Ibaloy* of Northern Philippines which described *Ibaloy*'s phonology and the major phonological processes involved in *Ibaloy* as a language, is also similar to the present study as it provides a language description of a Philippine language.

Dita's (2007) study is also related to the present study as she studied *Ibanag* where she came up with a reference grammar of *Ibanag* and where descriptions of the consonants and vowels are included. In 2012, Santos described the grammar of contemporary Hiligaynon using radio broadcasts, short stories, and news reports that were available online. As a framework for analysis, she used the articulatory model and acoustic phonetics, specifically the Praat computer program to explain the phonology of language. Her study is related to the present study in describing the phonological features of a language, only that she used a computer software in describing the segmental phonemes of the contemporary *Hiligaynon*. So, from 1900s, studies on PLs were so few and most of those were done by foreign scholars. This is the gap that the present study hopes to address, that is, to describe the phonological features of contemporary *Binukid*, as spoken by the *Umajammen* tribe.

1.3 Research Aims

The study attempted to describe the phonological features of the contemporary *Binukid* language by specifically considering to:

1. Identify the consonants in contemporary *Binukid*;
2. Describe the vowels present in contemporary *Binukid*; and
3. Find out the presence of diphthongs in contemporary *Binukid*.

1.4 Theoretical Framework

In order to attain these aims, the study adopted the International Phonetic Alphabet (IPA) in Ladefoged (2012) as its point of reference, particularly in providing the phonemic transcription and description of the *Binukid* segmental phonemes.

2. Methodology

2.1 Research Design

This study was basically descriptive and highly qualitative in nature. It generally used the field method elicitation technique as espoused by Shobhana and de Reuse (2011), specifically the analytical, analysis-controlled, target-language translation elicitation. This kind of data-gathering technique requires the close coordination of the researcher and the consultant in such a way that the targeted data shall be elicited from the sources. This technique entailed re-visits to the setting, whenever necessary, for verification and re-validation of the data.

2.2 Sources of Data

The chief sources of data were the members of the *Umajammen* tribe as the informants. It started with 21 participants, grouped together according to intergenerational age gaps (15 years old and below, 16-30 years old, and 31 to 60 years old). Later, they were trimmed to one family-informant, with members ranging from 30-50 years of age. These informants were carefully chosen as they played a very critical role in identifying the language data. In addition, three language experts were consulted with regards to accuracy and authenticity of the informants' answers. These experts were consulted from time to time until the study was finally done. Vegafria (2014) mentioned that the selection of participants of the study is one of the critical parts of a qualitative study. Creswell (2007) pointed out that intent in qualitative research is to elucidate the particular and the specific details of the study.

2.3 Research Procedure

Proper research protocols were observed by the researcher, making sure that the necessary permits were obtained prior to gathering of data. First, permit was sought from the provincial office of the National Commission for Indigenous Peoples (NCIP). When the permit was finally granted, the researcher sought the

Datu's approval and arranged for the dates of data gathering, which covered more than a year.

Proper indigenous research protocols were followed. Since the researcher is not affiliated with their ethnic community, the traditional *pamuhat* was required to be performed. It is the tribe's belief that their religious deity *Magbabaja* would bestow blessings of the activity if the ritual is performed, which is required to anyone coming into their community, asking to obtain certain data on *Binukid* customs, culture, and tradition.

2.4 Ethical Considerations

All informants were given sufficient information about the study. They were given time to make informed decisions. From the start, they were told that confidentiality is the researcher's top most priority; that at all time, anonymity would be observed during or after the interview. They were made to sign in the consent form. They were also assured that pseudonyms would be used in the discussion to ensure confidentiality. It was emphasized that their participation was purely voluntary and that at any time, they could discontinue their participation if they so desire and this will not be taken against them.

2.5 Elicitation Protocol

There were three (3) sets of elicitation protocol used in the study. First was the use of questionnaires eliciting responses for informant's background, and their lexical and sentence translation tests in the *Binukid* language. The second was the interview protocol whereby the informants were asked for their language preferences and the reasons for using or not using their language. The last elicitation protocol was the situational, controlled, analytic, target-language translation elicitation whereby one set of the informants or one family was asked to record their conversations at home, their narratives and short stories that they used to tell their children, usually during their leisure times (Shobhana and de Reuse, 2011).

2.6 Transcription of the Data

Following the steps provided by Gumperz (1982), the recorded data were transcribed. After the transcription, the data were then translated into Cebuano so that the language experts could confirm the authenticity and accuracy of the transcribed data. Finally, the transcribed data were further translated into English, to provide the analysis and understanding of its phonological features.

3. Results and Discussions

Phonology is the study of how sounds are organized and used in natural languages and the distribution and patterning of speech sounds in a language including the tacit rules governing pronunciation. This is basically the same concept applied in this study, where the minimum meaningful unit is called a phoneme, with specific focus on segmental phonemes which include the consonants, vowels, and diphthongs.

3.1 The Consonants in Contemporary *Binukid* Language

In consonants, there are three types of articulatory features, namely the manner of articulation, the place of articulation, and the voicing. The place of articulation include labial, dental, velar, alveolar, palatal, and glottal, whereas the manner of articulation include the consonant class as to stops, nasals, fricatives, affricates, laterals, trills and glides. Further classification is whether the sound is voiced or voiceless.

Based from the corpus, this study has identified sixteen (16) consonant sounds in the spoken *Binukid*. These consonant phonemes are reflected in *Figure 1* and discussed in details that follow.

Figure 1. The Consonant Chart in *Binukid* Language

Manner of Articulation	CONSONANT CLASS	Place of Articulation											
		LABIAL		DENTAL		ALVEOLAR		PALATAL		VELAR		GLOTTAL	
	STOPS	/p/	/b/	/t/	/d/					/k/	/g/		
	NASAL		/m/		/n/						/ŋ/		
	FRICATIVE					/s/						/h/	
	AFFRICATE						/j/						
	LATERAL						/l/						
	RETROFLEX						/ɽ/						
	GLIDE							/y/		/w/			
State of Glottis													
Voiceless							Voiced						

As shown in the figure, there are 16 consonants, namely : /b/, /k/, /d/, /g/, /h/, /j/, /l/, /m/, /n/, /ŋ/, /p/, /r/, /s/, /t/, /w/, and /y/, with retroflex /ɽ/ and affricate /j/ added to the earlier descriptions of the language, which were not included in the earlier descriptions of Post (1965, 1968, 1978). However, Otones and Wrigglesworth (1992), mentioned the /d/ phoneme, but not the alveo-palatal affricate /j/. This shows that what was found in the earlier studies of the language could be enriched in the contemporary spoken *Binukid*. It is significant to note further that the contemporary *Binukid Umajammen* speakers are fond of the phoneme /j/, which was observed to be used in replacement of the phoneme /y/, as in *Umajammen-Umayamnon*; where the phoneme /j/ replaced the phoneme /y/; thereby making it ‘*Umajammen*’, instead of saying ‘*Umayamnon*’.

The Stops.

These are produced by blocking the air flow, then releasing it afterwards. Based on articulation and voicing, it can be further grouped as bilabial, dental, velar, and glottal. Those articulated without aspiration or a puff of air are considered voiceless, while those articulated with a puff of air are considered voiced. The bilabial stops of contemporary *Binukid* are composed of the voiceless /p/, as shown in *pamanampera* (to make it half, in English) and the voiced /b/, as shown in *baoo*’ (monkey) and *mahegbet* (loud voice), which are found in the initial and medial positions, respectively. It must be noted, however, that the *Binukid* bilabial

stop /p/ is not aspirated when produced by the speakers in contrast to the English /p/, which is aspirated in the initial position.

The Dental Stops.

Two (2) dental stops were identified in the study. First is the voiceless /t/, as shown in *tawag* (call), *hangtud* (until), and *namatoy*(died), which are in the initial, medial, and final positions, respectively. Second is the voiced /d/, as in *dajun* (then) and *maranid* (near or close to), which are both in the initial and final positions, respectively. It is also significant to note that the voiceless initial /t/ phoneme in contemporary *Binukid*, is not at all aspirated if found in the initial position, unlike the voiceless /t/ phoneme in English, which is produced with a puff of air when found in initial positions.

The Velar Stops.

There were only two velar stops in contemporary *Binukid*. The first is the voiceless velar stop /k/ as in *kandan* (they) in the initial position, and *nekey* (what) in the medial position. The second is the voiced velar stop /g/ as in *kahinog*(ripe), *uwog* (drop down), and *sugot*(agree), which are located in the initial, medial, and final positions, respectively. In English language, the velar stop /k/ is aspirated when found at the initial position, but among the contemporary *Binukid*, this velar stop is produced without aspiration.

The Nasals.

There were three (3) nasals: the bilabial /m/, the dental /n/, and the velar /ŋ/. The bilabial /m/ is produced by closing the air stream of the lips as found in *tanem* (plant), and *namaanan* (known of), which are both located in final and medial positions. The nasal /n/ is produced by obstructing the airflow in the mouth and the tongue pressing the upper teeth or the alveolar ridge as found in *namaanan* (known of), which has both the initial and final positions. Then, the velar /ŋ/ is formed by obstructing the airflow in the mouth at the velum as found in *saging* (banana) in final position, *ginganga* (opened mouth) and *langhag* (closed eyes),

which are both in medial positions. It is so significant to note that all these three are voiced.

The Fricatives.

The study identified two fricatives: the voiceless alveolar /s/ and the glottal fricative /h/. The voiceless alveolar /s/ is produced similar to the English /s/ as in the initial and final /s/ in the word ‘semantics’. Examples of fricative /s/ are: *saging* (banana), *asoem* (tomorrow), and *makaindes* (feels like defecating), which are located at the initial, medial, and final positions, respectively. On the other hand, examples of the glottal fricative /h/ are: *huo* (yes) and *langha g*(to look up), with positions in the initial and medial positions.

The Affricate /j/.

This is the only one and voiced alveo-palatal affricate found in the contemporary *Binukid* language. This is produced like the English /j/ as in /joke/. According to the informants, it is represented in the orthography as the same /j/ as in *seja* he/she), *marejew* (much), and *nahathantajay* (felt), which could be located in the initial, medial, and final positions. It is more interesting to note that only the *Binukid* spoken by the *Umajammen* tribe exhibited this 16th consonant phoneme in addition to the earlier identified fifteen (15) consonant phonemes from the study of Atherton (1953 & 1963), Post (1965, 1967, 1968, 1975 & 1978), Post and Gardner (1965 & 1966), Post, Gardner, and Kyle (1982), and in Otones and Wrigglesworth (1992). This significant finding is another new discovery in the field of *Binukid* phonology.

The Liquid /l/.

The liquid alveolar consonant /l/ is pronounced as dental lateral in all environments. Similar to *Ibanag* in Dita (2007), this phoneme of *Binukid* language does not have a velarized variant like in English /l/ in syllable final position, as in: *langhag*(look up to), *kasugilen* (story) and *kuli-kuli* (swaying), which denote initial and final positions. Another interesting feature is that this phoneme is one

of the least occurring phoneme in *Binukid*, and in cases where it occurs, these terms are most likely an evolved or borrowed term from the dominant language. For instance, *langhag*, which could be surmised as borrowed from the dominant Cebuano term *yanghag*, meaning ‘to look up to’. In addition, the Binukid term /*kasugilën*/, or ‘story’ in English, could be surmised as a borrowing from the dominant Cebuano language ‘*kasugilanon*’, or ‘story’. The paucity of other data in this present investigation implies for a more in-depth study on *Binukid-Umajammen* lexical borrowings.

The Retroflex /r/.

In this study, the /r/ is considered a retroflex, rather than the trill /r/ because it resembles like the /r/ in English such as /rat/. Other examples are: *roen* (there is/are), *karaeg-daeg* (to lose), and *pamares-pares* (dizzy), which illustrate the initial, medial and final locations.

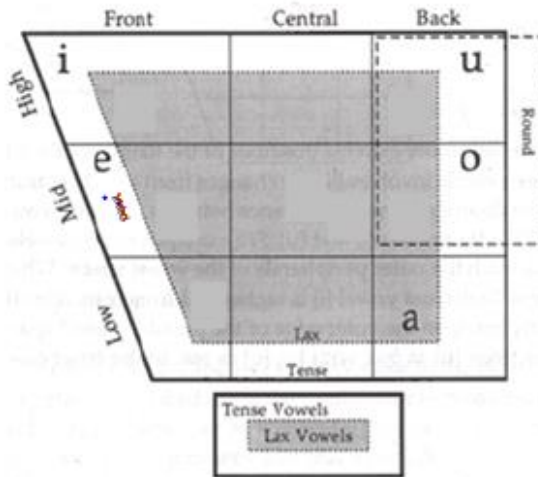
The Glides.

There are two glides in contemporary *Binukid* language: the /w/ and /y/. The labio-velar /w/ is formed with rounded lips and some obstruction of the velar part of the mouth, while the labio-velar /y/ is formed with unrounded lips with some obstruction of the mouth. The following samples illustrate the labio-velar /w/ in the initial, medial and final positions: *wehig*(water), *buwa* (both), and *migpasiw* (to ensure); whereas, the following also illustrate the labio-velar /y/ in the initial, medial, and final locations: *yan* (‘tis), *nekey* (what), and *pataw-tawagay* (called each other).

3.2 The Vowels in Contemporary *Binukid*

Based on the elicited data, the study has derived five (5) vowels as shown in Figure 2, which indicates how these five (5) vowels are produced in an utterance, whether front, center, and back, or whether high, middle, or low.

Figure 2. The vowels in contemporary *Binukid* language



As shown in the figure, the contemporary *Binukid* vowels are: the central low /a/; the middle back *pepet* /e/; the front, high /i/; the back, low /o/; and the back, high /u/. Each of these would be described thoroughly in the following pages.

The Central Low Vowel /a/.

This vowel is observed as the most dominant among all vowels in contemporary *Binukid*. This vowel is a voiced phoneme /a/, produced similar to the English vowel /a/, as in /kaba-kaba/, meaning 'butterfly'. Other manifestations of the vowel /a/ could be seen from this *Binukid* folk song entitled, “*MgeKaba-kaba*” (The Butterflies) that follows.

- (1) *Mgekabakabaniglalajang-lajang*
tesangatekajo, nigpakukuli-kuli
KaMagbabajatelangit, mig-aha tekabakaba
nemiglajang –lajangtesangatekajomigpakukuli-kuli.

‘The butterflies were flying,
on tree branches, swaying;
God in heaven is watching the butterflies,
flying, on tree branches, swaying. (BFOS- 1 to 2)

From (1), the terms: *kaba-kaba*, *niglalajang-lajang*, *sanga*, *kajo*, *nigpakukuli-kuli*, *ka*, *Magbabaja*, *langit*, *mig-aha*, *miglalajang-lajang*, all of these terms carry the vowel /a/. From this very short *Binukid-Umajammen* folk song alone, there are already thirty-three (33) occurrences. From the other set of elicited data, specifically from the transcribed family conversation, this vowel has occurred 3,923 times, while from the *Binukid* short story, entitled “*Amu Dow Baoo*” or “The Monkey and the Turtle” in English, this vowel has occurred 4,524 times; whereas in the *Binukid* folktale “*Nanangen*”, this vowel has occurred 11,181 times, signifying that this vowel is indeed a dominant vowel in spoken *Binukid* by the *Umajammen* tribe based on the given corpus.

The early works of Atherton (1953 & 1963), Post (1965, 1967, 1968, 1975 & 1978), Post and Gardner (1965 & 1966), Post, Gardner and Kyle (1982), and Otones and Wrigglesworth (1992) had identified this vowel. Other studies of PLs such as the work of Dita (2007) also mentioned the dominance of this vowel in *Ibanag*; likewise, Ruffolo (2004) mentioned this low central vowel as the most common vowel in Ilocano language.

The *Pepet* /e/.

Conant in Pallesen (1979) has started the term *pepet* /e/ vowel and defined it as original, indifferent vowel, colorless and indifferent in pronunciation. The *Binukid* dictionary in Otones and Wrigglesworth (1992), mentioned that this sound is made at the back of the mouth with a rounded lip position. However, previous studies of *Binukid* language such as that of Atherton (1953 & 1963), Post (1965, 1967, 1968, 1975 & 1978), Post and Gardner (1965 & 1966), and Post, Gardner and Kyle (1982), did not mention this phoneme in their description of *Binukid* vowels.

From the corpus, the following samples containing this phoneme were categorized and described accordingly. First example is from the introduction of the folktale, “*Amu Dow Baoo*”, in sample (2):

- (2) *Iyan ta kasugilensabaoodowsejaamo ne migla`agi. Iyan da tinawagay ran teBájok so pasabot ne migpasiwsiguruhay, migparewrejawaykandan, migaamanikabaoodowkaamuBajok da kaigtawag, igpataw-tawagay. Na nekeykamandoenteigkasugilen ta roentekuwabaoodowkaamunaremdeman en tekuwaamutekuwakagi “Bajok, hangtodasoemtehangtodte peg duruma ta ne nekeynaanbuwakapanginabuhian ta? Igkabuhi ta kekenakigpananom?”*

‘Our story is about the monkey and the tortoise who were very good friends. They even called each other “*Bájok*”, to really mean their closeness. One day, the monkey asked the tortoise, “*Bájok*, since we’ve been together for long, what do you think is a good source of living for us? Can we survive if we do not plant something for food?”

Regardless of its location in the syllable or in the lexicon, this vowel is produced with the tongue positioned back in a low-mid position, as in *ne* (DET), *katel* (itchy), and *masing-et* (pungent). From the gathered corpus: this vowel has occurred 1,151 times from the family conversation, 8 times from *Binukid* folk song, 1,954 times from the folktale, and 5,281 times from the *Nanangen*. Thus, based on frequency of occurrences, this vowel is observed to be the second in frequency of occurrences from the gathered corpus. Hence, it is considered the second most dominant vowel in the *Umajammen* tribe, next to the central vowel /a/. The study of Ruffolo (2004) mentioned the presence of this vowel in Ilocano. The study of Dita (2007) also mentioned that this vowel /e/ is present in *Ibanag*, and it has a clear distinction from the other vowel /i/.

Based on the earlier studies of PLs, where this vowel was termed as *pepet* /e/, in Otones and Wigglesworth (1992) and Conant (1912) in Pallesen’s (1979) work with *Sama-Bajaw*, this study also adheres into the term “*pepet* /e/” to refer to this vowel sound. Regardless of which part in the lexicon this vowel is located, it is uniformly produced as the *pepet* /e/, where there is a little obstruction at the back of the tongue. This unique significant feature of spoken *Binukid* could be similar to what Liao (2004) has generalized that PLs are fit in the general structures of different word languages; and in the case of the spoken *Binukid* language, the identification of this vowel is an indication that indeed, this

language has this unique and definite phonological structure, which may either be similar or distinct from the other languages in the world.

The Vowel /i/.

Based on data, the next vowel is /i/, which is produced as high front, unrounded position, and produced similarly to the English vowel /i/. From the *Binukid* folk song, “*MgeKaba-kaba*”, there were ten (10) occurrences of this vowel, 1,371 from the family conversation; 1,578 times from the *Binukid* short story “*Amu Dow Baoo*”; and 3,397 occurrences from the *Binukid* folktale, “*Nanangen*”.

This finding is similar to Atherton (1953 & 1963), Post (1965, 1967, 1968, 1975 & 1978), Post and Gardner (1965 & 1966), Post, Gardner, and Kyle (1982), and Otones and Wrigglesworth (1992), who had already included the description of this vowel among *Binukid* phonemes. In studies of other PLs, Dita (2007), Rubino (2004), and Liao (2004) had already described this vowel.

The Vowel /o/.

Another vowel is the low, back /o/ vowel. From the introduction of the *Binukid* short story, entitled “*Amu Dow Baoo*”, this vowel has already occurred sixteen (16) times, 777 times from the family conversation; 1,064 times from the *Binukid* short story “*Amu Dow Baoo*”; and 2,449 times from the *Binukid* folktale, “*Nanangen*”.

The presence of this vowel was already noted in the early works of Post (1965, 1967, 1968, 1975 & 1978), Post and Gardner (1965 & 1966), Post, Gardner and Kyle (1982), and Otones and Wrigglesworth (1992).

Another salient observation on this vowel is how it can be interchangeable with the vowel /u/, especially among the old folks in the tribe in the case of *Umajammen* and *Omajammen*, for instance. Interestingly however, this vowel is distinctively produced by the young, especially those who were able to attend school. This was also confirmed by the consultant that there were instances of interchangeability of these two vowels among their old folks; however, they do

exhibit mutual intelligibility that these two vowels could have similar meanings in their corpus, across age groups.

The interchangeability of this vowel with /u/ was also noted in the earlier works of Atherton (1953 & 1963), where he used /o/ instead of /u/ in the term “*Binokid*” in his studies on “*Binokid* Phonemes”, “*Binokid* Verb Morphology”, “*Binokid* Personal Pronouns”, and the rest of his works with the SIL-Philippines. Moreover, the *Binukid* dictionary published in 1992, in Otones and Wrigglesworth (Eds), has also noted this interchangeability, although no further elaborations were given to justify the claims. In another study of PLs, Dita (2007) also claimed that the vowel /o/ and /u/ are sometimes used interchangeably. Thus, this interchangeability of the vowels /o/ and /u/ could be a shared feature on PLs.

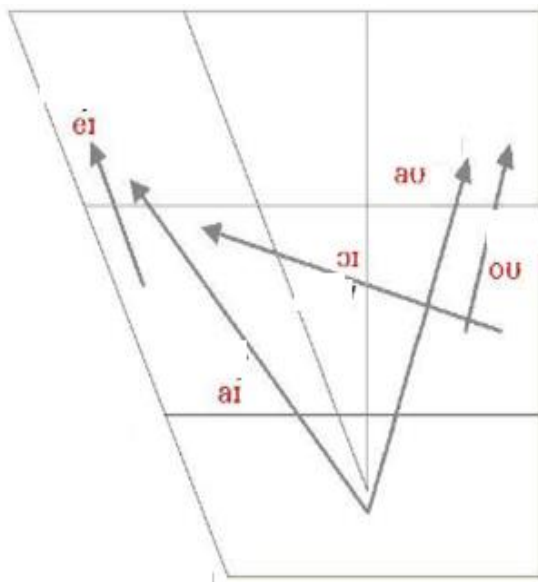
The Vowel /u/.

The last vowel phoneme /u/ is a close back rounded voiced vowel which may be produced from high position, as in *amu*, meaning 'monkey'; or produced from mid position, as in '*nigpakukuli-kuli*', meaning 'swayed'. From the entire corpus of the study, this vowel has exhibited 434 occurrences from the family conversation; 552 occurrences from the *Binukid* short story “*Amu Dow Baoo*”; and 1,312 occurrences from the *Binukid* folktale, “*Nanangen*”. However, as mentioned in the preceding pages, this vowel is used interchangeably with the vowel /o/, especially among the old speakers. The younger speakers, particularly those who have gone to school could already produce this vowel distinctively from /o/. As previously stated, Dita (2007), in her study with *Ibanag*, also noted that the vowels /o/ and /u/ are used interchangeably among Ilocano and Cebuano speakers. Ruffolo (2004), in her study of Ilocano, justified that the vowels /o/ and /u/ originally constituted one phoneme. She reiterated what Pallesen (1979) hypothesized that some phonological variation could be attributed to any of the following possibilities: a) that the variant feature in question is loaned and/or borrowed; b) that the reconstructed proto-forms are incorrect or incomplete insofar as they fail to indicate phonological variants of the proto-form; and c) that there are yet further developments with the language as to sound and other features.

3.3 The Diphthongs in Contemporary Binukid

The study was able to identify at least five (5) diphthongs, namely: the mid-front /ɔi/, the low central /au/, the low central back /əi/, the mid-center /au/ and the low center /ou/. These contemporary Binukid diphthongs are captured in Figure 3.

Figure 3. The diphthongs in contemporary Binukid



In the spoken Binukid language, these five diphthongs are present, although not very often found in their daily conversation. Sample of these diphthongs could be observed in (3a-3e).

(3a) /ɔi/

key	/key/	‘you’
nukey	/nu.key/	‘then’
paneytey	/pa.ney.tey	‘After’

(3b) /ou/

etew	/etew/	‘man’
anew	/anew/	‘you’ (Pron 2p)
tetew	/te.tew/	‘three’

(3c) /əi/

aglay	/aglay/	‘a kind of sorghum’
agutay	/agutay/	‘wild banana’
hinimatay	/hi.ni.ma.tay/	‘have been killed’

(3d) /ou/

dow	/dow/	‘and’
kow	/kow/	‘gesture of uncertainty’
makatirow	/makatirow/	‘arrival’

(3e) /au/

bawbata	/bawbata/	‘gentleman’
kawkaboen	/kawkaboën/	‘disheveled’

It was further observed that the occurrence of the diphthongs in *Binukid* vary from one-syllable, such as *dow*, to four or more-syllable words, such as *kawkaboën*. Although these diphthongs are not very widely used, what is significant is that this group of ethnolinguistic people exhibits the use of these diphthongs, which were not identified by the previous studies on *Binukid*. It is significant to note however, that this study was able to identify at least five diphthongs from the transcribed data from the various literary masterpieces of the *Binukid*. The identification of the five diphthongs is a significant contribution of this study to the existing data on *Binukid* Language. Not all studies on PLs have identified diphthongs, though. The work of Ruffolo (2004) did not include the description of diphthongs in her study. However, Dita (2007), in her study of *Ibanag* identified six diphthongs, namely: /iy/, /ey/, /aw/, /ay/, /oy/ and /uw/.

4. Conclusions

Binukid phonology manifests unique features, such as: the identification of the *pepet* /e/; the identification of the five diphthongs, namely /əi/, /ou/, /ai/, /au/, and /ai/; the addition of the one consonant phoneme, the alveo-palatal affricate /j/, and the interchangeability of some vowels and consonants particularly the /o/ and /u/; and the /y/ and /j/, especially among old informants.

Binukid is rich with diphthongs particularly the mid-front /ɔi/, the low central /au/, the central-back /ai/, the mid-center /au/, and the low-central /ou/. This finding was never found in earlier studies of *Binukid* language.

Another significant feature of contemporary *Binukid* phonemes is the presence of the alveo-palatal affricate /j/, where it follows a unique orthography of being written the way it is produced, as emphasized by the informants. In addition, the palatal consonant glide /y/ was only found at the medial or final syllables of *Binukid* lexicon but was never observed at the initial syllabus in the corpus. Lastly, *Binukid* language is distinctively marked by the preponderance of the vowels /a/ and the *pepet* /e/, as well as the consonant affricate /j/.

Finally, this study has discovered the following four significant features of *Binukid* phonemes, which were not captured in the earlier studies. These four significant findings are the following: first, there is the addition of the *pepet* /e/ sound, whereby, though written in almost the same character but the way these phonemes are produced significantly marked a variation among *Binukid* speakers; second, the identification of the consonant /j/ phoneme, which is only present among the *Binukid* speakers; third, the interchangeability of certain vowel phonemes, the /o/ and /u/ and consonant phonemes /y/ and /j/, especially among older village community members; fourth and most important of all is the identification and the description of the five *Binukid* diphthongs, namely: /ɔi/, /əi/, /ai/, /ou/, and /au/. These four distinctive features of *Binukid* phonemes have certainly added a mark in the rich Filipino cultural heritage, particularly among the descriptions of minority languages.

5. Recommendations

In light of the findings and conclusions made in this paper, it would be worthy to consider the following: 1) more in-depth study is generally encouraged to elaborate all phonological aspects of *Binukid* language across indigenous communities; 2) diachronic and inter-ethnic language variation studies may be embarked to consider for issues on the intricacies of language, including its

linguistic features, identity, variations, and effect on assimilation, migration and globalization; and 3) more sophisticated tool of analysis such as the use of Praat particularly on prosodic variation may be considered for future investigations.

References

- Atherton, W. (1953). *Binukid phonemes. Papers in Philippine Linguistics*. Folkloric Studies: Tokyo.
- Atherton, W. (1963). *Binukid morphology*. Manila, Summer Institute of Linguistics.
- Atherton, W. (n.d.). *Binukid personal pronouns*. Manila, Summer Institute of Linguistics.
- Atherton, W. (n.d.). *Som minimal grammatical pairs in Binukid*. Manila. Summer Institute of Linguistics.
- Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks. CA: Sage.
- Dita, S. (2007). *A reference grammar of Ibanag*. PhD Dissertation. De La Salle University: Manila.
- Gumperz, J. (Ed.). (1982). *Language and social identity*. New York: Cambridge University Press.
- Ladefoged, P. (2012). *Vowels and consonants* (3rd ed.). London: Wiley-Blackwell.
- Lewis, M. P., & Fenning, C. D. (Eds.) (2018). *Ethnologue: Languages of the world. Nineteenth edition*. Dallas, Texas: SIL International. Online version. <http://www.ethnologue.com>
- Lewis, M. P., Simons, G. F., & Fenning, C. D. (Eds.) (2016). *Ethnologue: Languages of the world. Nineteenth edition*. Dallas, Texas: SIL International. Online version. <http://www.ethnologue.com>
- Liao-H.C.(2004). *Transitivity and ergativity in Formosan and Philippine Languages*. PhD Dissertation, University of Hawaii at Manoa, Hawaii.
- Otanes, F. T. & Wrigglesworth, H. (1992). *Binukid dictionary*. Manila. Summer Institute of Linguistics.
- Post, U. (1965a). *The phonology of Binukid. Nasuli: Malaybalay, Bukidnon*. Summer Institute of Linguistics.
- Post, U. (1965b). *The phonology of Binukid. Nasuli: Malaybalay, Bukidnon*. Summer Institute of Linguistics.
- Post, U. (1967). *Binukid sentence structure. Nasuli, Malaybalay, Bukidnon*. Summer Institute of Linguistics.
- Post, U. (1968a). *Binukid clause structure. Nasuli, Malaybalay, Bukidnon*. Summer Institute of Linguistics.
- Post, U. (1968b). *Binukid phrase structure. Nasuli, Malaybalay, Bukidnon*. Summer Institute of Linguistics.
- Post, U. (1978). Binukid folktales. In E. Antworth, (Ed), *Studies in Philippine Linguistics* 2(62-68).
- Post, U. (1992). Binukid dictionary *Studies*. In *Philippine Linguistics*. 9 (2), Manila: The Linguistics Society of the Philippines and Summer Institute of Linguistics Publication.

- Post, U. & Gardner, M. J. (1972). *Picture dictionary*. Manila. Summer Institute of Linguistics.
- Ruffolo, R. (2004). *Topics in morpho-syntax of Ibaloy*. Northern Philippines. Dissertation. Australia National University.
- Santos, M. C. (2012). *A contemporary grammar of Hiligaynon*. Dissertation. De La Salle University. Manila: the Philippines.
- Shobhana, C. and De Reuse, W. (2011). *Handbook of descriptive linguistics fieldwork*. London: Springer.
- Tajolosa, T. D. (2012). *Predicting ethnolinguistic vitality in endangered Philippine language: The case of three Batak communities in Palawan*, (Unpublished dissertation). De La Salle University, the Philippines.
- Vegafria, J. (2014). *Square pegs in a round hole: Lived pedagogical experiences of teachers in out-of-field teaching*. (Unpublished doctoral dissertation). Central Mindanao University. Musuan, Bukidnon.

About the Author

Teresita Hermocilla-Borres is an Associate Professor at Central Mindanao University in University Town, Musuan, Bukidnon, Philippines. She has been teaching graduate courses and have mentored graduate students' theses and dissertations. Her recent interest in conducting research is in the field of language education and language documentation. Recently, she has written articles in leading indexed journals and published books in the teaching and learning of English language.

Email: borres_tess@cmu.edu.ph

