Cognatic portrait of the indigenous languages of Tabuk City, Kalinga, Philippines

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ABSTRACT

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Tabuk City in Kalinga, Philippines is a melting pot of diverse ethnolinguistic groups. Kalinga alone is known for its unique 46 ethnic groups, which include nine (9) in the locale of Tabuk City - Biga, Culminga, Dallak, Ga'dang, Guilayon, Malbong, Minanga, Nanong, and Tobog. Observations tell that these indigenous languages profess similarities that members of these groups do understand each other though they make use of their own indigenous language.

Received: June 07th, 2023 Revised: July 04th, 2023 Accepted: July 14th, 2023 Hence, the study aimed to portray the linguistic cognates among the indigenous languages in Tabuk City, Kalinga. Specifically, the study found that there are cognates among the indigenous languages in Tabuk City as to lexical, morphological, and syntactic features. As to lexical features, there are cognates in the categories of counting numbers, pronouns, body parts, living things, and non-living things. On morphological features, there are cognates as to word formation processes, while as to syntactic features, cognates are found in the resemblances in sentence structures among the identified indigenous languages. Significantly, the study provides reference material for Mother-tongue teachers in teaching indigenous languages.

Keywords:

cognate maps; indigenous languages; linguistic cognates; linguistic features; linguistic resemblances Finally, the study illustrates in a cognate map that Malbong, Nanong, Minanga, and Tobog indigenous languages denote higher resemblances as compared to the cognates among Biga, Culminga, Dallak, Guilayon, and Ga'dang.

1. Introduction

The linguistic diversity in the world proves the undeniable existence of varieties of languages, which may be minor or major and spoken by small or large groups. Moreover, the world is culturally diverse, as approximately 3,800 cultural groups, Foley and Lahr (2011) represent their language of identity.

The Philippines is one of the most culturally diverse countries in the world, proven by more than 100 ethnolinguistic groups, each having diverse cultures and distinct native tongues. Based on the data of the 2010 census by the International Work Group for Indigenous Affairs, 10% to 20% of the 102.9 million national population of the Philippines belong to Indigenous Groups (International Work Group for Indigenous Affairs, 2022). These ethnolinguistic groups in the Philippines are mainly concentrated in the Cordillera Administrative Region in Northern Luzon

with 33%, and in Mindanao with 61%, while the other groups are settling in the Visayas (United Nations Development Programme Philippines, 2013).

Kalinga is among the diverse ethnolinguistic groups in the Cordillera region. Its multilingual diversity led it to be often referred to as the "Babel of the Philippines" (Baggay, Melad, & Empedrad, 2016). Despite the number of indigenous languages spoken by its members in the region, speakers of these different ethnolinguistic groups can still understand one another. Consequently, linguistic resemblances and variations could be the significant reason. Studies show that geographical location is a factor in language variations (Omar & Alotaibi, 2017). Speakers of the same language who tend to separate by location would likely lose contact with regular conversations. Hence, each separated group tends to adopt a language variety of the area they have settled in, resulting in a variation of the original language.

Significantly, variations are natural phenomena, observed in the phonological and vocabulary use of the language (Hazen, 2001). However, phonological variations are evidently observed as people tend to speak the language more often than write it (Petyt, 1980). In addition, "those linguistic variations adopted by a local group will be different from the variations adopted by a group in another location" (Study, 2021).

Himes (1997) identified three Kalinga dialects, which include Masadiit (in Abra), Northern Kalinga, and South-Central Kalinga. Later on, Ethnologue reported eight Kalinga languages, to wit: (1) Butbut Kalinga; (2) Limos Kalinga; (3) Lubuagan Kalinga; (4) Mabaka Valley Kalinga; (5) Majukayang Kalinga; (6) Southern Kalinga; (7) Tanudan Kalinga; and (8) Banao Itneg. The same data is posted in the Summer Institute for Linguistics (SIL), the basis of several researchers interested in studying languages.

The rich illustration of the Kalinga culture motivated numerous foreign authors to write about its distinct culture regarding practices, natural resources, indigenous laws, and the people. However, only a few researchers attempted to document the linguistic structures of the Kalinga indigenous languages or trace the linguistic variations among the Kalinga indigenous languages. One of these few studies includes Reid (1971), which identified 220 basic vocabularies of the Kalinga indigenous languages that included only the varieties of Guinaang and Lubuagan. However, his study did not cite other language varieties like Tinglayan, Tanudan, Limos, and Salegseg. Another language study was conducted by Baggay et al. (2016), who investigated the lexical, phonological, and morphological differences and similarities in the Kalinga languages. However, the study only included the Tulgaw and Dananaw tribes in the Upper Kalinga and the Limos and Cal-Owan in the Lower Kalinga. Other related studies include Ferreirinho's (1993) titled, Selected Topics in the Grammar of Limos Kalinga, the Philippines, on the grammatical structure of the Limos Kalinga dialect and that of Gonzales (2017), Dialect Perception in Pasil, Kalinga, on the perceptions of the sub-tribe members on their dialect, Pinasil.

Moreover, the IKalingas, especially those staying in Tabuk City (the melting pot in the province), are observed to use the Ilocano language as their lingua franca. This observation proves that the Ilocano language is still the most widely used language and lingua franca in northern Luzon. According to the data, Ilocano is the third most widely used language in the Philippines, with 1,327,211 household users. At the same time, Tagalog is the most widely used, and Bisaya is the second most widely used (Philippine Statistics Authority, 2018).

Considering the ethnolinguistic diversity of Tabuk City - the presence of 09 indigenous languages: (1) Biga; (2) Culminga; (3) Dallak; (4) Guilayon; (5) Gaddang; (6) Malbong; (7)

Minanga; (8) Nanong; and (9) Tobog - it is still conundrum how interlocutors of the different indigenous languages tend to understand each other or which mother language those entrenched from - with the observations that there are linguistic cognates among the identified indigenous languages. Significantly, genetic relationships between and among languages rely on the structural components of language (Trask, 2000; Watkins, 2001). Thus, the study considered the lexical, morphological, and syntactic features of language.

Hence, these indigenous languages must be documented before they are forgotten. The key results of this study could help preserve the distinctiveness of the indigenous languages in Tabuk City through documentation and mapping.

Finally, since Mother-tongue teachers lack instructional materials (Bernardo, Aggabao, & Tarun, 2018), this study could also provide a basis or reference for Mother Tongue Based Multilingual Education (MTB-MLE) in Tabuk City.

2. Research method

This study employed exploratory sequential approach, which specifically utilized a comparative-lexicostatistical method.

The study was conducted in Tabuk City, Kalinga, a locale of the 42 barangays. These barangays are the cradles of the nine Kalinga ethnolinguistic groups, which include: (1) Biga; (2) Culminga; (3) Dallak; (4) Guilayon; (5) Gaddang; (6) Malbong; (7) Minanga; (8) Nanong; and (9) Tobog. It involved 180 participants or 20 members of each ethnolinguistic group, specifically those at ages 30 and above who have ample knowledge about their indigenous language.

Further, the researcher made use of a questionnaire as the primary tool in gathering data, supplemented by interviews. On the validity of the instrument, the researcher sought assistance from two language experts and one Mother-tongue teacher. Significantly, approval from the National Commission on Indigenous Peoples was also sought.

3. Research results

3.1. Linguistic cognates as to lexical, morphological, and syntactic features

3.1.1. Lexical cognates

Table 1Language variant equivalents of counting numbers

Counting Numbers	Biga	Culminga	Dallak	Ga'dang	Guilayon	Malbong	Minanga	Nanong	Tobog
one	osa	osa	osa	intet	osa	osa	osa	osa	Osa
two	duwa	duwa	duwa	tuwet	duwa	duwa	duwa	duwa	Duwa
three	tulo	tulo	tulo	tallo	tulo	tulo	tulo	tulo	Tulo
four	opat	opat	opat	appat	opat	opat	opat	opat	Opat
five	lima	lima	lima	lima	lima	lima	lima	lima	Lima
six	onom	onom	onom	annam	onom	onom	onom	onom	Onom
seven	pito	pito	pito	pito	pito	pito	pito	pito	Pito
eight	walo	walo	walo	walo	walo	walo	walo	walo	Walo
nine	siyam	siyam	siyam	sam	siyam	siyam	siyam	siyam	Siyam
ten	simpulo	pulo	pulo	fullem	simpulo	simpulo	simpulo	simpulo	Simpulo

Counting Numbers	Biga	Culminga	Dallak	Ga'dang	Guilayon	Malbong	Minanga	Nanong	Tobog
eleven	nasawalan a osa	simpulo ya osa	nasawalan a osa	cadwafulo si tata	simpulo ya osa	simpulo ya osa	nasawalan si osa	nasawalan si osa	nasawalan si osa
twelve	nasawalan a duwa	simpulo ya duwa	nasawalan a duwa	cadwafulo si adwa	simpulo ya duwa	simpulu ya duwa	nasawalan si duwa	nasawalan si duwa	nasawalan si duwa
thirteen	nasawalan a tulo	simpulo ya tulo	nasawalan a tulo	cadwafulo si tallo	simpulo ya tulo	simpulo ya tulu	nasawalan si tulo	nasawalan si tulo	nasawalan si tulo
fourteen	nasawalan opat	simpulo ya opat	nasawalan opat	cadwafulo si appat	simpulo ya opat	simpulo ya opat	nasawalan si opat	nasawalan si opat	nasawalan si opat
fifteen	nasawalan a lima	simpulo ya lima	nasawalan a lima	cadwafulo si lima	simpulo ya lima	simpulo ya lima	nasawalan si lima	nasawalan si lima	nasawalan si lima
sixteen	nasawalan a onom	simpulo ya onom	nasawalan a onom	cadwafulo si annam	simpulo ya onom	simpulo ya onom	nasawalan si onom	nasawalan si onom	nasawalan si onom
seventeen	nasawalan a pito	simpulo ya pito	nasawalan a pito	cadwafulo si pito	simpulo ya pito	simpulu ya pito	nasawalan si pito	nasawalan si pito	nasawalan si pito
eighteen	nasawalan a walo	simpulo ya walo	nasawalan a walo	cadwafulo si walo	simpulo ya walo	simpulo ya walo	nasawalan si walo	nasawalan si walo	nasawalan si walo
nineteen	nasawalan a siyam	simpulo ya siyam	nasawalan a siyam	cadwafulo si sam	simpulo ya siyam	simpulo ya siyam	nasawalan si siyam	nasawalan si siyam	nasawalan si siyam
twenty	duwampulo	duwanpulo	duwampulo	adwafulo	duwampulo	duwampulo	duwampulo	duwampulo	Duwampulo
twenty-one	duwanpulo ya osa	duwampulo osa	duwanpulo ya osa	adwafulo si adwa	duwanpulo ya osa	duwanpulo ya osa	duwanpulo ya osa	duwampulo osa	duwampulo osa
thirty	tulumpulo	tulumpulo	tulumpulo	tallofulo	tulumpulo	talumpulo	tulumpulo	tulumpulo	tulumpulo
forty	opatpulo	opatpulo	opat a pulo	appat a fulo	opat a pulo	opatpulo	opat a pulo	opat a pulo	opat a pulo
fifty	limampulo	limampulo	limampulo	limafulo	limampulo	limampulo	limampulo	limampulo	limampulo
sixty	Onompulo	onompulo	onom a pulo	annam a fulo	onom a pulo	onompulo	onom a pulo	onom a pulo	onom a pulo
seventy	pitumpulo	pitumpulo	pitumpulo	pitofulo	pitumpulo	pitumpulo	pitumpulo	pitumpulo	pitumpulo
eighty	walumpulo	walumpulo	walumpulo	walofulo	walumpulo	walumpulo	walumpulo	walumpulo	walumpulo
ninety	siyampulo	siyampulo	siyam a pulo	sam a fulo	siyam a pulo	siyam a pulo	siyam a pulo	siyam a pulo	siyam a pulo
one hundred	singgasot	singgasot	singgasot	taatut	singgasot	singgasot	singgasot	singgasot	singgasot
one thousand	sillibo	sinlibo	sillibo	tarifu	osan libo	sinlibo	sinlibo	sinlibo	sinlibo

Apparently in Table 1, cognates on counting numbers among the identified indigenous languages are observed on numbers two, four, six, ten, thirty, forty, fifty, sixty, seventy, eighty, and ninety. Results denote that **duwa** and **tuwet** display similarities specifically on letter resemblances of **u** and **w** and syllable resemblances of **du/tu** and **wa/wet**.

The disparity may still be noticed in word level (letter and syllable structures); however, their semantic resemblance substantiates the minor gap, as they both mean "two." It is underlying evidence that linguistic features such as lexical, morphological, syntactic, and semantic features are intertwined. As one feature studies, the other aspects will always be tackled, which serves as the basis for further explications. Thus, other linguistic features or structural components should not be neglected (Starostin, 2013; Trask, 2000; Watkins, 2001).

Both lexemes, **opat**, and **appat**, obviously signify resemblances in the usage of common letters **o**, **a**, **p**, and **t** and syllables **pat** and the ligated **ppat** (**two p's**). Also, the two syllabications "op/at" and "ap/pat" signify resemblance also when spoken. Hence, these terms are cognates.

Close resemblances on the counting number six (6) are also observed among the identified indigenous languages as implied by the usage of lexemes **annam** in Guilayon and **onom** in all the other indigenous languages. Also, similarities are observed in the use of letters o, n, and m and

syllables 'an,' 'on,' 'nnam,' and 'nom.' Resemblances are also considered on the division of two syllables an/nam (ligated) and o/nom. Annam or onom closely resembles the Ilocano term innem, which is six in English. However, these lexemes are still considered cognates.

Both lexemes *pulo* and *fullem* denote resemblances with letter and syllable formations - u l, and m; pu/fu and lo/lem, respectively. Additionally, these terms are both two-syllable words that carry the same semantic descriptions.

Simpulo, the term for "ten," carried among Biga, Guilayon, Malbong, Minanga, Nanong, and Tobog languages, is similar to *pulo* among the Culminga and Dallak languages because *pulo* is just the clipped form of *simpulo*. Hence, *pulo/simpulo* and *fullem* are cognates as they carry resemblances in terms of their lexical features and semantic features of word meaning.

Subsequently, Ga'dang reflects the dissimilarity when compared with the other identified indigenous languages in the use of **fulo** as for **tallofulo** for thirty, **appat a fullo** for forty, and so on, when forming its tenth counting number. It implies that **fullem** for ten in Ga'dang becomes fulo for counting its tenth.

The findings on the lexical resemblances signify that all the identified indigenous languages are genetically related. Conformably, some languages have lots in common because they are genetically related (Vakkilainen, n.d.) or when languages share at least one ancestor variety (McKenzie, n.d.).

Table 2
Language variant equivalents of pronouns

Pronouns	Biga	Culminga	Dallak	Ga'dang	Guilayon	Malbong	Minanga	Nanong	Tobog
i	sakon	Sakon	sakon	ikkanak	sakon	sa'on	sakon	sakon	sakon
you (singular)	sika	Sika	Sika	ikka	sika	si'a	sika	sika	sika
you (plural)	sikayo	Sikayo	sikayo	ikkayo	dikayo	sikayo	sikayo	sikayo	sikayo
he	siya	Siya	Siya	siya	siya	siya	siya	siya	siya
she	siya	siya	Siya	siya	siya	siya	siya	siya	siya
it	anna	yanna	Pay	iyaw	sato	yanna	yanna	yanna	yanna
they	dida	dida	Dida	ira	dida	dida	dida	dida	dida
we	ditako	ditako	ditako	ikkami	ditako	dita'u	datako	ditako	ditako
our	kuwatako	kuwatako	kuwatako	ekkami	kuwatako	ʻuwatao	kuwatako	kukwaan	kuwatako
their	kuwada	siadi	kuwada	setan	kuwada	ʻuwada	kuwada	kuwada	kuwada
them	dida	dida	dida	ira	dida	dida	dida	dida	dida
his	kuwana	kuwana	kuwana	akwana	kuwana	ʻuwana	kuwana	kuwana	kuwana
her	kuwana	kuwana	kuwana	akwana	kuwana	ʻuwana	kuwana	kuwana	kuwana
your	kuwam	kuwam	kuwam	akkwam	kuwam	ʻuwam	kuwam	kuwam	kuwam
my	kuwak	kuwak	kuwak	akwak	kuwak	ʻuwak	kuwak	kuwak	kuwak

Results in Table 2 indicate that both terms for the pronoun **you** (**plural**), between the Guilayon **ikkayo** and the Ga'dang **dikayo**, signify resemblances of cognates on a word level - letter and syllable resemblances. Likewise, it is observed that these two terms, *ikkayo* and *dikayo*, resemble the Ilocano term, "sikayo." The only difference is on their first syllable - *si*, *di*, and *ik*. Undeniably, this minor dissimilarity does not signify variations on their semantic resemblances as they all carry the same meaning and the same English word equivalent, *you*. Hence these terms are all cognates.

Moreover, **akwam** and **kuwam** denote word-level resemblances in terms of letter and syllable structures. These terms carry common letters **a**, **k**, **w**, and **m** and common syllables 'wam.' Semantically, these terms both refer to the English pronoun, "your" (singular), the possessive form of the pronoun **you**.

Consequently, findings on the translations of the pronoun **my** among the indigenous languages imply resemblances to letter and syllable structures. These indigenous languages carry common letters **a**, **k**, and **w** and the common syllable 'wak,' as observed in **akwak** in Ga'dang and **kuwak** in all the other identified indigenous languages. More so, these terms are both read in two syllables - **ak/wak** and **ku/wak**.

As for the translations of the pronouns **they** and **them**, the IKalingas use two cognate terms **dida** and **ira**. Specifically, it is translated as **ira** in Ga'dang and **dida** in all the other identified indigenous languages. Accordingly, the vowel resemblances may not be a strong point for these words to be referred to as cognates. However, their semantic resemblances signify that they both refer to pronouns **they** and **them**, carrying the same term for either the subjective or objective case of the pronouns **they** (**subject**) and **them** (**object**).

Furthermore, the letter resemblances of vowels *a* and *k* are not a strong point to conclude that these lexemes are cognates because the process of discovering cognates starts at the word level, vocabulary structure - letter and meaning (Ayeomoni, 2012; Beekes, 2011) but not limited to lexicon alone (Campbell, 1997; Peiros, 1998; Starostin, 2013; Trask, 2000; Watkins 2001). Hence, if the semantic resemblance is considered, both the identified dissimilar terms for the pronoun *I* are semantically cognates.

The findings further reveal that there are no gender pronouns on the identified nine indigenous languages in Tabuk City, Kalinga, like the pronouns *he* and *her*, including their objective and possessive cases.

Meanwhile, the identified nine indigenous languages in Tabuk City, Kalinga have corresponding pronouns used in substitute to nouns, and those cognates are observed in all the identified ethnolinguistic groups too (Biga, Culminga, Dallak, Guilayon, Malbong, Minanga, Nanong, and Tobog) except for the Ga'dang tribe, which has the most variations. Additionally, the above-mentioned pronouns carry numbers and cases but not gender forms.

Table 3Language variant equivalents of body parts

Body Parts	Biga	Culminga	Dallak	Ga'dang	Guilayon	Malbong	Minanga	Nanong	Tobog
head	ulo	ulo	ulo	ulo	ulo	ulo	ulo	ulo	ulo
eyes	ata	ata	ata	mata	ata	ata	ata	ata	ata
nose	ongol	ongol	ongol	iyyong	ongol	ongol	ongol	ongol	ongol
lips	subil	subil	subil	biffig	subil	subil	subil	subil	subil
ears	inga	inga	inga	layag	inga	inga	inga	inga	inga
shoulders	abala	abala	abala	affa	abala	abala	abala	abala	abala
legs	ulpo	ulpo	ulpo	uffo	ulpo	payak	ulpo	ulpo	ulpo
knees	puwog	puwog	puwog	atud	puwog	puwog	puwog	puwog	puwog
feet	iki	iki	suki	takki	iki	suki	suki	suki	suki
hands	ima	takkay	ima	kamat	ima	ima	ima	ima	ima

In Table 3, lexical resemblances are very evident among the indigenous languages in Tabuk City, Kalinga as to lexemes for body parts. Specifically, the same term is observed in the translation for the head, "ulo," among all the indigenous languages.

This finding also provides further evidence to the theory of genetic relationship (McKenzie, n.d.; Rowe & Levine, 2014; Vakkilainen, n.d.) which is observed among the Ilocano, Tagalog, Kankanaey, and now with the Kalinga indigenous languages. Accordingly, a genetic relationship exists between languages that are members of the same language family (Great Soviet Encyclopedia, 1979). This conforms with the study of Reid (1971) that Kalinga has originated from the Proto-Central Cordilleran languages along Itneg, (spoken in Abra), Bontok (spoken in Mt. Province), Kankanay (spoken in the west of Mt. Province and in Benguet), Balangaw (spoken in the east of Mt. Province), Ifugao (spoken in Ifugao), and Isinai which is spoken in Nueva Vizcaya.

Table 4Language variant equivalents of living things

		I	ı	- <u>-</u>				I	ı
Living Things	Biga	Culminga	Dallak	Ga'dang	Guilayon	Malbong	Minanga	Nanong	Tobog
baby	doyot	kutit	doyot	kalub'it	kutit	doyot	doyot	doyot	doyot
Bamboo (tree)	kawayan	kawayan	kawayan	kawayan	kawayan	kawayan	kawayan	kawayan	kawayan
banana	balat	balat	balat	abat	balat	balat	balat	balat	balat
bird	sissiwit	sissiwit	sissiwit	mammanok	sissiwit	sissiwit	sissiwit	sissiwit	sissiwit
cat	kusa	kusa	kusa	kusa	kusa	kusa	kusa	kusa	kusa
carabao	luwang	luwang	luwang	daffug	luwang	luwang	luwang	luwang	luwang
chicken	manok	manok	manok	manok	manok	manok	manok	manok	manok
chieftain	pangat	pangat	pangat	anganga fuwan	pangat	pangat	pangat	pangat	pangat
child	abeng	abeng	abeng	a'bing	abeng	abeng	abeng	abeng	abeng
cow	baka	baka	baka	baka	baka	baka	baka	baka	baka
corn	bakaw	bakaw	bakaw	bakaw	bakaw	bakaw	bakaw	bakaw	bakaw
dog	aso	aso	aso	ato	aso	aso	aso	aso	aso
duck	pato	pato	pato	gogawa	pato	pato	pato	pato	pato
frog	tukak	tukak	tukak	tukak	tukak	tukak	tukak	tukak	tukak
fish	ugadiw	lamos	ugadiw	busilad	upadim	lamos	lamos	ugadiw	ugadiw
goat	kalding	kalding	kalding	kassing	kalding	kalding	kalding	kalding	kalding
horse	kabalyu	kabayu	kabayu	kaba'yu	kabayu	kabayu	kabayu	kabayu	kabayu
man	lalaki	lalaki	lalaki	lalaki	lalaki	lalaki	lalaki	lalaki	lalaki
woman	babai	babai	bobai	bafay	bobai	babai	babai	bobai	bobai
person	tagu	tagu	tagu	tolay	tagu	tagu	tagu	tagu	tagu
pig	bolok	bolok	bolok	bafoy	bolok	bolok	bolok	bolok	bolok
snail	billuluko	bulbulid	billuluko	orong	billuluko	balleleko	balleleko	balleleko	balleleko
snake	ulog	ulog	ulog	olag	tabbad	ulog	ulog	ulog	ulog
tree	kayu	kayu	kayu	kayu	kayu	kayu	kayu	kayo	kayu
turtle	dagga	dagga	dagga	dagga	dagga	dagga	dagga	dagga	dagga

Apparently, in Table 4, resemblances of the identified living things are observed among the nine (9) identified indigenous languages in Tabuk City, Kalinga, on the terms for bamboo, cat, cow, corn, frog, man, and turtle- *kawayan*, *kusa*, *baka*, *bakaw*, *tukak*, *lalaki*, and *dagga*, respectively.

As for *kawayan*, *baka*, *and lalaki*, these terms are presumed to have been borrowed from Ilocano and Tagalog languages, as these are the same terms used in the said languages. On the other hand, *kusa* closely resembles the Ilocano or Tagalog term for cat, *pusa*, while *tukak* is borrowed from the Ilocano term for frog. In addition, *dagga* resembles the Ilocano term "daga," meaning soil, while *bakaw* resembles the Ilocano or Tagalog for cow, *baka*.

Further, dissimilarities of the term for **baby** among the identified indigenous languages are apparent. In terms of letter resemblance, only the letter **t** is common among the three terms, while there is a resemblance between the two terms, **kalub-it** and **kutit**, in their ending syllables /**it** and /**tit**. However, these two differ on the syllable parts as the former is composed of three syllables, while the latter is composed of two syllables.

Table 5Language variant equivalents of non-living things

Non-living Things	Biga	Culminga	Dallak	Ga'dang	Guilayon	Malbong	Minanga	Nanong	Tobog
birthmark	tebak	sinyal	awadon	unawa	unawa	unawa	sinyal	unawa	unawa
chair	tukduwan	tugaw	tukduwan	tuttud	tugaw	tugaw	tugaw	tukduwan	tugaw
cup	tasa	tasa	tasa	sartin	tasa	tasa	tasa	tasa	tasa
door	onob	sawang	onob	ruwangan	onob	lewangan	lewangan	onob	onob
food	makan	makan	makan	maakkan	makan	makan	makan	makan	makan
gong	gangsa	gangsa	gangsa	gangsa	gangsa	gangsa	gangsa	gangsa	gangsa
house	boloy	boloy	boloy	balay	buloy	boloy	boloy	boloy	boloy
moon	bulan	bulan	bulan	dakkag	bulan	bulan	bulan	bulan	bulan
mountain	beleg	bateled	bateled	kutog	bateled	bateled	bateled	bateled	bateled
plate	palato	palato	saluppiyat	palato	palato	pinggan	pinggan	palato	palato
rice(cooked)	isna	isna	isna	tu'da	isna	isna	isna	isna	isna
rice field	payaw	payaw	payaw	payaw	payaw	payaw	payaw	payaw	payaw
river	dawwang	wangwang	kawangagan	wawwang	wangwang	dawwang	dawwang	kawangagan	wangwang
sky	libuo	langit	langit	langit	langit	langit	langit	libuo	libuo
stair	aldan	aldan	aldan	addan	edan	aldan	aldan	aldan	aldan
star	bituwon	bituwon	bituwon	bitun	bituwon	bituwon	bituwon	bituwon	bituwon
stone	bato	bato	bato	bato	bato	bato	bato	bato	bato
table	tebol	tebol	tebol	lamesa	tebol	tebol	tebol	tebol	tebol
water	danum	danum	danum	danum	danum	danum	danum	danum	danum
window	tawa	tawa	kipas	sawang	sawang	tagibang	tawa	kipas	kipas

Apparently, all the identified indigenous languages have the same lexemes for *rice field*, *stone*, and *water*, which are translated as *payaw*, *bato*, and *danum*, respectively. Danum and bato are the same terms used in Ilocano for *water* and *stone*. However, *payaw* is not known among the Ikalingas today, and where their ancestors derived its name is unknown.

Moreover, common usage of terms with the Ilocanos is observed. These terms include *bulan (moon)*, *pinggan (plate)*, and *langit (sky)*. These findings indicate the genetic relationships between the identified indigenous languages with the Ilocano, providing linguistic evidence that these languages belong to the same language family - the Austronesian family of languages.

3.1.2. Morphological cognates

Table 6Word formation processes among the indigenous languages of Tabuk City, Kalinga

Word Formation Processes	Counting Numbers	Pronouns	Body Parts	Living Things	Non-living Things	Kinship	Time
Assimilation				kusa (cat)			
Borrowing	duwa (two) tallo (three) opat (four) lima (five) pito (seven) walo (eight) siyam (nine)	sika (you) sikayo (you, plural) siya (he/she)	ima (hand) mata(eye) ulo (head) subil(lips) takkay (hand) takki (foot)	kawayan (bamboo) Manok (chicken) lalaki(man) babai(woman) pato (duck) baka (cow) kayu (tree) kabayo(horse) aso (dog)	Balay (house) bato (stone) bulan (moon) Danum (water) Langit (sky) makan (food) pinggan (plate) tugaw (chair) tasa(cup) ruwangan (door)	ama (father) apo (grandparent) bayaw (brother-in-law) ina (mother) ipag (sister-in-law) katugangan (mother/ father-in-law	bigbigat (morning)
Clipping	pulo (ten)				bitun (star)		
Coinage				bolok (pig)	bateled (mountain) beleg (mountain) onawa (birthmark) payaw (rice field)	amaon (uncle) inaon (aunt) malong-ag (parent) sunod (sister/ brother)	madama (afternoon) mamatuk (noon)
Compounding	simpulo ya osa (eleven) duwanpulo (twenty) tullunpulo (thirty) osan libo (one thousand)					amonako na lalaki (nephew) katugangan babai (mother-in- law)	
Contraction		sa'on (I) si'a (you)		a'bing (child) kaba'yu (horse) kalub'it (baby)		i'pa (sister-in-law)	ga'fi (night) gi'gibat (morning)
Derivation	simpulo (ten) singgasot (one hundred) sinlibo (one thousand)	ditako (we) kwatako (our)		bakaw (corn) dagga (turtle) pangat (chieftain)	sawang (window/door) wangwang/ dawwang (river)		wikwikis (dawn) wiswisngit (dawn)
Onomatopoeia				sissiwit (bird)	wangwang/ dawwang (river)		
Rephrasing			lewangan (door) tebol (table)		. ,		

Table 6 presents the word formation processes similar among the indigenous languages, to wit: assimilation, borrowing, clipping, coinage, compounding, contraction, derivation, onomatopoeia, and rephrasing.

Accordingly, the cat is referred to as *kusa* by the participants because cats have the characteristics of a "*kumando*," which is *commando* in English, that sees clearly at night like a soldier; hence coining the term "kusa." It is the combination of *kumando* and *pusa* - taking the first syllable of the first word, *kumando*, and combining it with the last syllable of the second word, *kusa*.

In the word-formation process of borrowing, there are many loan terms on counting numbers, pronouns, body parts, living and non-living things, kinship, and terminologies of time discovered in the identified indigenous languages.

Moreover, the findings imply that Ilocano is the main source of loan terms among the indigenous languages in Tabuk City, with some loan words from Tagalog, Kankanaey, and Itawes languages. Hence, these indigenous languages carry cognates as they expanded from the Austronesian, formerly Malayo-Polynesian family of languages, with Cebuano, Hiligaynon, Bicol, Waray-Waray, Kapampangan, and Pangasinan of the Philippines (Blust, 2019).

Consequently, the notion of loan words in the field of lexicostatistics is that these are non-cognates (Guy, 2007) because these are borrowed words and did not evolve originally from the languages compared.

As to coinage, there are words on living things, non-living things, kinship, and time identified among the nine indigenous languages. Coined words on living things include *bolok* (*pig*). "Bolok" means voracious eater and work-nothing. Hence, it also suggests that someone is lazy. The participants also added that it is someone who does not work at all but eats voraciously. On the other hand, others believed that the meaning came from the sound of the pig when it drinks water. Meanwhile, the coined words on non-living things include *bateled or beleg (mountain)*, *onawa (birthmark)*, and *payaw (rice field)*. According to the participants, *bateled* or *beleg* were coined by their ancestors because mountains are literally looked up to because of their heights. Hence, they carried the term as they thought it suited the *mountains*. Another coined word is "*onawa*," or birthmark, which refers to a stain, as explained by the participants. Like that of a papaya stain, a birthmark is seen in newborn babies. More so, "payaw," according to the participants, was already a long-established term among the I-Kalingas.

As to compounding, it is observed among the indigenous languages in Tabuk City, Kalinga, on counting numbers and kinship. Compounded words on counting numbers include *simpulo ya osa, duwanpulo, tallunpulo*, and *osan libo*. "Simpulo ya osa" is translated as "eleven." In English, it is comprised only of one word. On the other hand, it has a three-word open compound word in its original language. Structurally, the words that comprise the compound word are "simpulo" meaning *ten*, "ya" meaning *and*, and "osa" meaning *one*. Hence, it is literally translated as "ten and one." Another open compound word on counting numbers is "osan libo," a combination of "osa" meaning one and "pulo" meaning *ten*. In addition, duwanpulo and tullunpulo are closed compounds used among the indigenous languages of Kalinga. "Duwanpulo" is a combination of the words "duwa" meaning *two* and "pulo" meaning *ten*. Meanwhile, "tullunpulo" is a combination of the words "tullu", meaning *three*, and "pulo" meaning *ten*. Other identified compound words on kinship terms include *amonako na lalaki (nephew), katugangan babai (mother-in-law)*, and their corresponding opposite genders. These identified terms are

specifically classified as open compounds because they do not have hyphens, nor are they joined together as one word. "Amonako na lalaki" comes from the words (1) amonako, meaning son or daughter of one's sibling; (2) na, referring to or could be attributed to na in Filipino; and (3) lalaki, referring to the gender of the one being referred to. Here, it refers to a male person. It has the same explanation for niece, which is "amonako na babai" and for mother-in-law, which is "katugangan babai." The latter is composed of the words "katugangan," meaning parent of one's wife or husband, and "babai," referring to one's gender.

The word-formation process of contraction includes terms on pronouns, living things, kinship, and time. In terms of pronouns, the contracted words include sa'on, and "si'a." The pronoun "sa-on" is a contracted form of "sakon," meaning I (subject form) or me (object form). Meanwhile, the pronoun "si-a" is a contracted form of "sika," meaning you (singular form). Contracted words on living things include a'bing, kaba'yu, and kalub'it. These terms are equivalent terminologies of the Ga'dang tribe for child, horse, and baby, respectively. A'bing is a contracted form of "abbing," meaning child, kaba'yu is a contracted form of "kabalyu," meaning horse, and kalub'it is a contracted form of "kalubbit," meaning baby. Moreover, on kinship, the contracted word includes "i'pa," which means sister-in-law. In addition, contracted forms on the terminologies for time among the indigenous languages of Kalinga include ga'fi (night) and gi'gibat (morning). Ga'fi is a contracted form of "gaffi" meaning night, and gi'gibat is a contracted form of "gibgibat," meaning morning.

As to derivation, it includes terminology for counting numbers, pronouns, living things, and non-living things. The derived words for counting numbers include *simpulo* (*ten*), *singgasot* (*one hundred*), and *sinlibo* (*one thousand*). *Simpulo* comes from the words "sim," which means *total* and "pulo," meaning *ten*; hence, it forms a new word *simpulo*. Similar with the derivations on *singgasot* and *sinlibo*, "sin" also refers to *a total of something*, while "*gasot*" means *hundred* and "*libo*" refers to a thousand. Hence, it coins new words, "*singgasot*" and "sinlibo."

derived words include ditako on pronouns (we) and kwatako (our). Subsequently, "ditako" was taken from "di," pointing towards the speaker/s and "tako" meaning all; hence, this coins the word "dida." More so, "kwatako" was derived from the words "kwa," meaning owned or possessed, and "tako," meaning all; hence, it forms the word "kwatako" (our). The derived words on living things include bakaw (corn), dagga (turtle), kusa (pusa), and pangat (chieftain). "Bakaw" or corn, according to the I-Kalinga's, was derived from the word baka, because corn leaves are being fed to cows. On the other hand, "Dagga" was derived from the color of the turtle which looks like the soil when it is sometimes not visible and stays still along with the rocks. Finally, "pangat" was derived from "ap-apu" and "nangato," since the **pangat** is the head or leader of the tribe. Moreover, the derived terms on non-living things include sawang (window, door) and wangwang or dawwang (river). The word "sawang" is a term for **door** to some tribes, while it is **window** for others. According to the participants, the word was derived from "nalawa," which signifies the wide opening of the door or the window of a house. On the other hand, "wangwang" or "dawwang" could have be derived from sawang because of the wide space of running water. Others say "wangwang" was derived from the sound of the rushing river, which is heard by some as "wash-wash." However, later, it became "wang-wang" because they did not know how to produce the sound for "wash-wash." The extracted terms on time from the identified indigenous languages include wikwikis and wiswisngit (dawn). Both these terms mean "dawn." Wikwikis and wiswisngit carry the same repeated syllables, "wik" and "wis." According to the participants, these terms could be attributed to "singising" in Ilocano, which refers to the rising of the sun.

As to onomatopoeia, the terms *sissiwit* (*bird*) and *wangwang* or *dawwang* (*river*) are included. Accordingly, sissiwit can be associated with the sound of "isiw," the whistle. Hence, the bird derived its name **sissiwit** because it makes a sound like a whistle. Meanwhile, the participants claimed that "wangwang" was derived from the sound of the rushing river, heard by some as "wash-wash." Later, it became "wang-wang" because they did not know how to produce the sound for "wash-wash."

Finally, as to the word formation process of rephrasing, it includes *lewangan* (*door*) and *tebol* (*table*). Rephrasing is often done when people do not have an equivalent word of terms in their language. They borrow it and syllabicate it to their pronunciations. It explains what the I-Kalingas did with the words "lewangan", which was originally *ruwangan* and "*tebol*," which was taken from the English word, *table*.

3.3.3. Syntactic cognates

Table 7Syntactic cognates as to sentence structures

Biga	Ga'dang	Minanga
1. Tigammuna mansala.	1. Inammuna manalip.	1. Tigammuna mansala.
2. Man-alalado si amak ud payaw.	2. Mararado e ama si payaw.	2. Mandalnok si amak ud payaw.
3. Nanpaltida bolok.	3. Namartira si bafoy.	3. Nanpaltida bolok.
4. Adika tumupba na.	4. Ammeka maluppa sitaw.	4. Adika mantuppa sina.
5. Ankokosdol da IKalinga un tagu.	5. Madandantak yo Kalingaira.	5. Natuturod da IKalinga un tagu.
6. Palpaka uminom a danum.	6. Kanayun ka uminom si danum.	6. Siggo ka uminom si danum.
7. Nauwaw ka?	7. Nauwaw ka?	7. Nauwaw ka?
Culminga	Guilayon	Nanong
1. Tigammona mansala.	1. Tigammuna din mansala.	1. Tigammuna mansala.
2. Mangalalado si amak din payaw.	2. Man-alalado si amak din payaw.	2. Man-alaladon amak si payaw.
3. Nanpalti da bolok.	3. Nanpaltida din bolok.	3. Nanpaltida bolok.
4. Adikayo manlugpa sito.	4. Adika manlubpa sito.	4. Adika tumuppa sina.
5. Mengol da Ikalinga un tagu.	5. Natutulid da IKalinga un tagu.	5. Mamoswal da IKalinga un tagu.
6. Kanayunom nat uminom si danum.	6. Kanayunom uminom si danum.	6. Siggo ka umimom si danum.
7. Nauwaw ka kadi?	7. Mauwaw ka?	7. Nauwaw ka?
Dallak	Malbong	Tobog
1. Tigammuna e mansala.	1. Tigammuna mansala.	1. Tigammuna mansala.
2. Mangal-aladun amak din payaw.	2. Man-alalado si amak ud payaw.	2. Man-alalado si amak din payaw.
3. Nantogtogda bolok.	3. Nanpaltida bolok.	3. Nanpaltida bolok.
4. Adika tumuppa naoy.	4. Naid tumuppa na.	4. Adika tumuppa na.
5. Nautokan da IKalinga un tagu.	5. Natutulid da IKalinga un tagu.	5. Natutulid da IKalinga un tagu.
6. Manganayun ka uminum ad danum.	6. Siggo 'a uminom si danum.	6. Kanayun ka uminom si danum.
7. Nauwaw ka?	7. Nauwaw ka?	7. Nauwaw ka?

Apparently, all translations show that no sentence starts with a subject. Instead, sentences either start with a verb, an adjective, or an adverb such as: *tigammu*, *v.*; *man-alaldao*, *v*; *nanpalti*, *v*; *Do not*, *neg. v*; *mengol*, *adj*; *kanayunom*, *adv*; and *nauwaw*; *adj*.

In finding 1, there were syntactic cognates among the Biga, Culminga, Ga'dang, Malbong, Minanga, Nanong, and Tobog indigenous languages observed in the use of a similar sentence structure: **Verb-Subject-Verb** (V-S-V). In the sentence, *Tigammuna mansala*, the subject is the

pronoun *na* connected with the verb *tigammu*. Also, the auxiliary verb comes before the subject, and the main verb comes after the subject.

Findings in sentence 2 imply the use of the common structure **Verb-Subject-Object** (**V-S-O**). The use of the determiners *si*, *ud*, *din*, and *e* always placed before the nouns, is also observed. Similar sentence structures are noticed in the sentences: *Mandalnok si amak ud payaw*, *Mararado e ama si payaw*, *and Man-alaladon amak si payaw*.

Sentence 3 signifies syntactic cognates among Biga, Culminga, Dallak, Malbong, Minanga, Nanong, and Tobog and between Ga'dang and Guilayong indigenous language. It can be observed that syntactic cognates 1 carry a structure *Verb-Subject-Object (V-S-O)*. The pronoun *da* is connected with the verb *nanparti*, and the direct object *bolok* is placed after the verb-subject connection. On the other hand, the only point of difference in the syntactic cognates 2 between the Ga'dang-Guilayon is on the use of determiner *din* or *si* before the noun-object *bolok*.

In sentence 4, the negated form of the sentence **Do not spit here** signifies resemblances among all the indigenous languages of Kalingas, emphasized by the same sentence structure **Negation-Subject-Verb-Adverb** (**Neg-S-V-Adv**). Similar observations are noted throughout the translated sentences in the other identified indigenous languages. The only point of difference is the lexemes used. Other identified indigenous languages **ditto**, **naoy**, **sitaw**, **sito**, and **sina** for the adverb **here**, while **manluppa**, **manluppa**, and **tumupba** for the verb **spit**.

As to sentence 5, syntactic cognates are observed among all the identified indigenous languages except for Ga'dang, while in sentence 6, cognates are observed among all the indigenous languages except for Culminga and Guilayon.

Results also indicate that all the indigenous languages carry the same pattern *Adjective-Subject (Adj-S)*, except for Culminga in sentence 7.

3.2. Linguistic cognate profiles as to the percentage of resemblances

Table 8Summary of linguistic cognate profiles among the indigenous languages in Tabuk City, Kalinga as to lexical, morphological, and syntactic features

3 .7	Cognate		Cognate Profiles		T. 4.1	DI
No.	Sub-groupings	Lexical	Morphological	Syntactic	Total	DI
1	Biga-Culminga	83.71	59.06	100	80.05	HR
2	Biga-Dallak	96.43	68.28	100	76.90	HR
3	Biga-Ga'dang	61.14	60.83	100	69.75	HR
4	Biga-Guilayon	89.71	74.22	85.71	75.54	HR
5	Biga-Malbong	88.71	70.39	85.71	83.13	VHR
6	Biga-Minanga	95.57	65.39	100	85.46	VHR
7	Biga-Nanong	93	75.22	100	87.83	VHR
8	Biga-Tobog	94.71	75.61	100	88.68	VHR
9	Culminga-Dallak	84	63.22	85.71	81.12	VHR
10	Culminga-Ga'dang	69.86	48.39	85.71	63.32	HR
11	Culminga-Guilayon	91.14	65.11	100	73.32	HR

N T	Cognate		Cognate Profiles		W 4 1	DI
No.	Sub-groupings	Lexical	Morphological	Syntactic	Total	DI
12	Culminga-Malbong	88.43	70.28	71.42	86.04	VHR
13	Culminga-Minanga	86.71	75.44	85.71	86.62	VHR
14	Culminga-Nanong	84.57	64.39	85.71	82.22	VHR
15	Culminga-Tobog	92.43	65.11	85.71	80.94	HR
16	Dallak-Ga'dang	59.57	51.11	100	60.03	MoR
17	Dallak-Guilayon	85.29	60.72	85.71	76.23	HR
18	Dallak-Malbong	87.71	67.33	85.71	85.06	VHR
19	Dallak-Minanga	89.14	64.06	100	85.4	VHR
20	Dallak-Nanong	91.29	73.94	100	89.98	VHR
21	Dallak-Tobog	87.86	74	100	86.05	VHR
22	Ga'dang-Guilayon	66.43	64.94	85.71	61.26	HR
23	Ga'dang-Malbong	63.14	49.17	85.71	61.2	HR
24	Ga'dang-Minanga	63.14	48.78	100	60.83	MoR
25	Ga'dang-Nanong	62.43	54.17	100	60.96	MoR
26	Ga'dang-Tobog	61.57	54.17	100	65.48	HR
27	Guilayon-Malbong	88	66.56	71.42	71.99	HR
28	Guilayon-Minanga	84.43	71	85.71	73.23	HR
29	Guilayon-Nanong	83.86	70.67	85.71	73.6	HR
30	Guilayon-Tobog	88.71	71.39	85.71	75.46	HR
31	Malbong-Minanga	92.86	80.28	85.71	92.95	VHR
32	Malbong-Nanong	88	76.5	85.71	90.69	VHR
33	Malbong-Tobog	88	76.17	85.71	89.96	VHR
34	Minanga-Nanong	93.86	72.22	100	88.35	VHR
35	Minanga-Tobog	96.57	72.06	100	88.35	VHR
36	Nanong-Tobog	95.57	82.06	100	93.07	VHR
	Sub-means	83.82	66.73	92.07	(()1	7770
				TAWM	66.31	HR

<u>Limits</u>	<u>Description</u>	<u>Symbol</u>
81 - 100%	Very High Resemblance	VHR
61 - 80%	High Resemblance	HR
41 - 60%	Moderate Resemblance	MoR
21 - 40%	Low Resemblance	LR
1 - 20%	Very Low Resemblance	VLR

Table 8 shows high linguistic resemblances among all the identified indigenous languages in Tabuk City, Kalinga, with a total average weighted mean of 66.31% of resemblances. Moreover, results reveal very high lexical and syntactic resemblances, while there is high morphological resemblance with total percentages of 92.07, 83.82, and 66.73, respectively.

Significantly, the study notes consistently high resemblances among Nanong-Tobog, Malbong-Minanga, and Malbong-Nanong with total cognate percentages of 93.07, 92.95, and 90.69, respectively. Hence, these collateral relationships of linguistic features among the previously identified indigenous languages in Tabuk City, Kalinga suggest genetic relationships among them, which may have evolved from the same root. As posited by linguists (Trask, 2000; Watkins, 2001), genetic relationships between and among languages rely on the structural components of language.

Further, the groups with the lowest linguistic resemblances are the Dallak-Ga'dang, Ga'dang-Malbong, and Ga'dang-Minanga groups with total averages of 60.03%, 60.83%, and 60.96% resemblances, respectively.

Geographical location implies that Ga'dang, compared with Malbong, Minanga, and Dallak are located on opposite sides, as the Ga'dang speakers occupy the barangays Cudal and Callacad on the north-eastern side while Malbong, Minanga, and Tobog speakers reside on the southern end part of Tabuk City, Dupag, and Suyang. For the speakers to communicate with each other every day, they need to pass through several barangays like barangays Malin-awa, Balawag, Bado-dangwa, Bantay, Lucog, and Naneng, before reaching each locality.

Studies show that geographical location is a factor in language variations (Omar & Alotaibi, 2017). Consequently, speakers of the same language who tend to separate by location would likely lose contact with regular conversations. Hence, each separated group tends to adopt a language variety of the area they have settled in, resulting in a variation of the original language.

Variations are natural phenomena, observed in the phonological and vocabulary use of the language (Hazen, 2001). However, phonological variations are evidently observed as people tend to speak the language more often than write it (Petyt, 1980). In addition, "those linguistic variations adopted by a local group will be different from the variations adopted by a group in another location" (Study, 2021). Thus, variations among the indigenous languages are apparent when one group is distantly or closely located by barangay.

3.3. Linguistic cognate map of the indigenous languages of Tabuk City, Kalinga

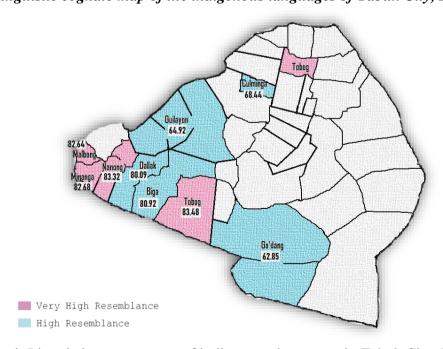


Figure 1. Linguistic cognate map of indigenous languages in Tabuk City, Kalinga

Figure 1 reflects how the five indigenous languages show high linguistic resemblances and four indigenous languages denote higher resemblances with their respective cognate percentages.

Findings imply that geographical location could present underlying evidence of cognates, as language contacts could exist between or among groups that are neighbors. It is also important to note that Tobog, being two barangays away and manifesting a high resemblance when compared with Malbong, Minanga, and Nanong, could be attributed to the intermarriages among and migration of the participants.

According to the elders, Dupag, where Minanga and Malbong ethnolinguistic groups have settled, is too far from the center (where the market is) since it is at the end of the southern part of Tabuk City. Hence, others chose to transfer to places closer to the center, like barangays Laya and Balawag, where others are now settling. Another significant reason is intermarriage, where an IKalinga marries someone from another ethnolinguistic group. As a result, there is a tendency for the speakers to adopt and mix languages, simultaneously using their mother and the new language. Dixon (2001) postulated that when language splits into two, 50% of the vocabulary is shared between the new languages, and the same 50% of lexemes is shared when two languages come into geographical contact. Hence, the study notes an approximate 50% shared vocabulary with the Malbong, Minanga, and Tobog indigenous languages resulting from migration and intermarriages, having closer geographical locations between and among the ethnolinguistic members.

Results suggest that Ga'dang having the lowest average of comparisons of cognates with the other indigenous languages as indicated by 62.85% is justified by its historical derivation.

According to the Indigenous Peoples Mandatory Representatives (IPMR's), the Ga'dang group was believed to have come from the lowlands of the Cagayan Valley to the highlands of Eastern Cordillera during the Malayan Invasion. There were settlements in Paracelis, Mountain Province, Ifugao, and barangays Cudal and Calaccad in Tabuk City, Kalinga. They carried a unique linguistic identity, bearing most of the lexical variations when compared with the other indigenous languages in Tabuk City, whose speakers were already settled before the coming of the Ga'dang group.

This finding is supported by *The Effects of Region & Geography on Language's* (Study, 2021) report on the concept of language adoption, which states that there will be a disparity in the adopted variation of the mother language with the new language and that approximately 50% of lexemes is retained or shared between two languages which lose contact or come into geographical contact (Dixon, 2001).

4. Conclusion

Based on the findings of the study, it is concluded that cognates are present among the nine indigenous languages in Tabuk City, Kalinga - Biga, Culminga, Dallak, Ga'dang, Guilayon, Malbong, Minanga, Nanong, and Tobog - in terms of lexical, morphological, and syntactic features. Findings imply that Ga'dang indigenous language shows more language variations when compared with the other indigenous languages in Tabuk City, as the other indigenous languages show resemblances with the other Kalinga indigenous languages, especially in the Upper Kalinga, such as Dananao, Lubuagan, Tulgao, Tongrayan, Guina-ang, Pangol, and Salegseg, among others. This further implies the fact that the Ga'dang ethnolinguistic group could be traced to have originally occupied the Cagayan and Isabela provinces based on the Philippine National Statistics Office (1990), and Kalinga and Apayao became their expansion areas. Consequently, Ga'dang group still managed to retain the authenticity of their language as they still use their terminology

as to counting numbers, pronouns, living things, and non-living things, compared with the other indigenous languages in Tabuk City.

Moreover, diatopic variation is a factor in the cognates and variations. Findings imply that the geographical location could present underlying evidence of cognates, as language contacts could exist between or among groups that are neighbors, while language variations denote lesser contact between or among indigenous groups that are geographically far from each other. Factors such as intermarriages and migrations are also identified as attributes of a higher percentage of cognates.

Finally, it is then further concluded that the identified nine (9) indigenous languages in Tabuk City postulate a possible linear language where they may have originated. Hence, further study on the origin language of the identified indigenous languages in Tabuk City is suggested.

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