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The Kinship of Karo, Pakpak and Gayo Language

ABSTRACT

Aims: To investigate and to know the kinship of Karo, Pakpak and Gayo language.

Study design: This research used quantitative research

Place and Duration of Study: Medan, North Sumatera, March 2022-June 2022

Methodology: In this case, the writers used a lexicostatistic approach to determine the level of kinship in Karo, Pakpak, and Gayo languages by comparing the vocabulary contained in these languages and then seeing and determining the similarity of the vocabulary of the three languages. In this case, the basic swadesh vocabulary of 200 words was used to determine the percentage of cognates.

Results: The result of the research shown that the kindship of Karo and Pakpak is at family level. The number of cognate words of Karo and Pakpak 140 word and non-cognate 60 words. Furthermore, the kinship of Pakpak and Gayo is at family level with the number of kindship of Pakpak and Gayo 82 words and non-cognate 118 words and the kinship of Pakpak and Gayo is at family level with the number of kindship of Pakpak and Gayo 76 words and non-cognate 124 words

Conclusion: Based on the findings, it was found that the level of kinship between Karo and Pakpak languages was 70% with a separation period about 500-2500 years ago. From this percentage, it can be stated that Karo and Pakpak languages have a close relationship. While the level of kinship between Pakpak and Gayo languages is 41% whereas Karo Gayo 38%, it means that the kinship relationship between Pakpak and Gayo languages and also Karo and Gayo Language are not close even though the relationship between the two languages belongs to the family. However, if it is seen from the percentage, both of them is not close. And the separation period of Pakpak and Gayo languages was around 500-2500 years ago. This means that the two languages have been separated for a long time.

Keywords: Kinship, Karo Language, Pakpak Language, Gayo Language

1. INTRODUCTION

Language is an equipment than can be used for all people in the world to do communication. One of the language that human used to communicate is local language. Every tribe certainly has different language and different culture. And it will differentiate one each other.

In Indonesia, there are so many local language, they are Mandailiing language, Jawa language, Batak Toba language, Karo language, Pakpak language, Gayo language and etc. And it is used to interact both oral or written. Local language and its culture as food, religious system and etc. also refers to the identity. In other hand, Local language is used as the supporting for national language, namely Indonesia Language. Thus, regional languages need to be fostered and continuously developed in order to strengthen the resilience of national culture.

Local language development can be conducted through a research. In this case, research on language kinship is very interesting to be investigated. The science that studies language kinship is called comparative historical linguistics. In this case, the language will be

compared and classified^{1,2}. Comparative historical linguistics was started by William Jones in 1792 on his speech to the Royal Asiatic Society. In addition, comparative historical linguistics also discusses language development ^{3–5}. This means that through LHK, researchers can compare languages in the world, especially in Indonesia. Not only it, it also can classify language. In this case, it provides a very large contribution in tracing the nature of language development from time to time. So, this study is very important to be conducted.

In this study the writers will discuss the kinship of language. The kinship is affected by language, culture, conceptualization and also the function of the cultural where they will develop on and on⁶. Beside that geographical location also affect to the language kinships⁷. In this research, the writers will discuss language kinship of Karo, Pakpak and Gayo languages. This language belongs to the Austronesian language family. And these languages have a kinship. The kinship relationship of the three languages can be seen from their geographical location. Geographically, the Karo, Pakpak and Gayo tribes lived nearly, namely North Sumatra and Aceh.

Karo Language

Karo language is the language used by Karo's Society and they use it to communicate to the other. Batak Karo consists of two, namely Karo Gugung and Karo Ginger. Karo Gugung are domiciled in Karo Regency and they are the original population of Batak Karo . Meanwhile, Karo Jahe is domiciled in the districts of Deli Serdang, Langkat, Dairi, Samosir, Simalungun and Nangroe Aceh Darrusalam districts. It can be concluded that The society of Batak Karo spreads in Karo, Deli Serdang, Langkat Dairi, Simalungun, Samosir dan Aceh Darrusalam District.

Pakpak language

Pakpak language is the language used by the Pakpakk tribe. The Pakpak people originated from South India, namely Indika Tondal to Muara Tapus nearly Dairi, after that they developed in Tanah Pakpak and became the Pakpak Tribe⁸. Some Pakpak people live in Tanah Dairi and some are diaspora, leaving their country and settling in new areas.

Some of them live in Tanah Pakpak and become the Pakpak Tribe "Situkak Rube:,"Sipungkah Kuta" and "Ni Talun Tribe" in Tanah Pakpak. Others go to other places and form or create new communities. S/he knows that s/he is from Tanah Pakpak and admits that Pakpak is her/his tribe but changes the clan to another tribe. On the other hand, there are those who go abroad and change their identity by changing their name and surname.

According to the dialect and area of distribution, Pakpak is grouped into five parts, namely: Pakpak Simsim, Pakpak Keppas, Pakpak Pegagan, Pakpak Boang and Pakpak Kelasen. Each division is distinguished according to the ulayat rights of the clans which are administratively not only domiciled in the Dairi Regency area (before it was divided), but there are those in Aceh Singkil, Humbang Hasundutan (before the expansion from North Tapanuli) and Central Tapanuli.

Pakpak Simsim, Pakpak Keppas and Pegagan are administratively located in Dairi and Pakpak Bharat, while Pakpak Kelasen are located in Humbang Hasundutan district, Central Tapanuli district, especially in Parlilitan and Manduamas districts. It is different again with Pakpak Boang who is domiciled in Singkil district, especially in Simpang Kiri and Kanan sub-districts.

Gayo language

Gayo language is the language used by the Gayo tribe. The Gayo tribe is one of the tribes who live in the Gayo highlands, precisely in Aceh in the central part of Aceh province. Administratively, the Gayo tribe is domiciled in the districts of Central Aceh, Bener Meriah and Gayo Lues. The Gayo tribe has characteristics, namely being Muslim, having curly hair, black skin, wearing a surname, having a small body, and having Karo and Alas ethnicities.

Looking at the distribution of the Karo, Pakpak and Gayo tribes, they live close to each other, So it caused the spread of the mother languages. And it will affect to the

Beside from geographical location, the kinship relationship of Karo, Pakpak, and Gayo languages can be seen from the sound and the same phonemes. Language kinship can be investigated through the analysis of meaning components in determining the meaning relationship between a set of lexemes in a meaning field¹⁰. The kinship of Karo, Pakpak, and Gayo languages can be seen in the following data.

Glos	Karo	Pakpak	Gayo	87
Hati (heart)	ate	Ate	ate	88
Bagi (share)	bagi	Bagi	bagi	89
Lidah (tongue)	dilah	Dilah	dilah	90
Tiga (three)	telu	Telu	tulu	91
Tali (rope)	nali	Tali	tali	92
				93

The data above shows that the Karo, Pakpak, and Gayo languages have a kinship. This is indicated by the presence of several similar sounds and phonemes (see data 1 and 3). Different things occur in data 2, 4 and 5 of the Karo, Pakpak, and Gayo kinship languages, which can be seen from the change in sound and the same meaning. In this case there has been a retention in the speech. So, this is very interesting to be investigated because the changes of language are also depending to the history in the past. Besides that, research on the kinship of Karo, Pakpak and Gayo language do not discussed yet as far the writers know and read.

There have been many researches on kinship, including Hale. ¹¹ discussed 'Kinship Reflection in Syntax: Some Australian Language'. In this research, he stated that the kindship system was reflected in pronominal. Furthermore, research on language kinship is discussed by Ernawati. She discusses the kinship of Karo, Minang and Malay languages. In her research, she said that the kinship between Karo and Minang languages is a different language. This is indicated by the percentage of kinship of 31%. This means that the language kinship relationship is only a family relationship (stock). Furthermore, the relationship between Karo and Malay is 26% and is a clump relationship (stock). Meanwhile, the Malay and Minang languages have a family relationship with a percentage of 66% ¹².

The next previous researcher discussed 'Kinship of Batak Toba language and Batak Angkola language: a comparative historical linguistic study. The results showed that the Toba Batak language and the Angkola Batak language had a kinship relationship. This is indicated by finding of the cognate set 114 words, neither identic or not. Based on the results of the study, it was found that 95 words had kinship identically and 25 words had kinship but there were sound changes, both vowels and consonants ¹³. Then, the Kinship System in Karo Jahe Language in Bangun Purba Village. In her research, ¹⁴ said that the kinship system in Bangun Purba Village was based on heredity, marriage and generational order. In this case, Nurmala does not compare the Karo Jahe language with other languages ¹⁴.

Suparno also discussed the Kinship of Kitchen Furniture Vocabulary Forms in Sudanese and Syrian Arabic. The results of his research showed that the vocabulary in Arabic and Sudanese has a kinship which is indicated by the discovery of a number of words that have identical relationships, have phonemic correspondence, have phonetic similarities and have one phoneme difference ¹⁵.

Based on the explanation above, the kinship of Karo, Pakpak and Gayo language does not discuss yet. Therefore, the writer wants to investigate and know about the kinship of Karo, Pakpak, and Gayo languages. In this case, the writers will investigate the kinship between Karo and Pakpak language. Next, the kinship Pakpak and Gayo language.

2. METHODOLOGY

The writers used quantitative methods in this research. In this case, the writers used a lexicostatistic approach to determine the level of kinship in Karo, Pakpak, and Gayo

languages by comparing the vocabulary contained in these languages and then seeing and determining the similarity of the vocabulary of the three languages. In this case, the basic swadesh vocabulary of 200 words was used to determine the percentage of cognates. After that, the percentage of cognates of the compared words was calculated by using the following formula:

$$C = \frac{k}{n} x 100\%$$

Where:

K: number of cognates

N: number of words compared

The languages used to define kinship must be from the same proto^{1,2,4,5,16}. To determine that the language has a kinship relationship, here are the steps to be conducted:

- 1) Empty words or empty slots do not count. In this case empty words or empty slots such as loan words and invented words (not basic words)
- 2) Isolation of bound morphemes. In this case, the invented word consisting of free and bound morphemes must be separated first. So, only the basic words are compared.
- 3) Define the words of relatives. Relative words if they have identical pairs, have phonemic correspondence, have phonetic similarities, and there is only one different phoneme.

To determine the kinship of Karo, Pakpak and Gayo languages, a table classification of language kinship is used based on the percentage of language kinship.

Level of Language	Time of Separation (in	Percentage	
	century)		
Language	0-5	81-100%	
Family	5-25	36-81%	
Stock	25-50	12-36%	
Microphilium	50-75	4-12%	
Mesophilium	75-100	1-4%	
Macrophilium	100-ke atas	Kurang dari 1-1%	

3. RESULTS AND DISCUSSION

Based on the results of the analysis by using a lexicostatistical approach, it was found that the level of language kinship was found. In this case, the level of kinship was studied is the level of kinship of Karo and Pakpak languages. Next, examine the level of kindship between Pakpak and Gayo languages.

A. Level of Kinship of Karo and Pakpak Language

Based on the results of data analysis, it shows that the level of kinship in Karo and Pakpak languages is at the family level. In this case the languages have a close kinship. This is indicated by the number of cognate words as many as 140 words of 200 words from the swadesh list. Meanwhile, the number of non-cognates words are 60 words. The level of kinship of Karo and Pakpak language can be seen through the calculations below.

$$C = \frac{k}{n} x 100\%$$

$$C = \frac{140}{200} x 100\%$$

$$C = 70\%$$

From the calculation above, the percentage level of kinship of Karo and Pakpak languages is 70%. The kinship level at 70% indicates that the language has a family kinship level. This means that their level of kinship is close. And it can be seen that the time of separation of the Karo and Pakpak languages was around 500-2500 years ago. The cognate words of the two languages listed in the 200 swadesh words are listed in the following table.

Table 1 The List of Cognate Word of Karo and Pakpak Language

Glos	Karo	Pakpak
Air (water)	lau	lae
Akar (root)	urat	urat
Angin (wind)	aŋin	aŋin
Anjing (dog)	biaη	biaη
<i>Api</i> (fire)	api	api
Atap (roof)	tarum	tarup
Awan (cloud)	əmbun	- əmbun
Ayam (hen/cock)	manuk	manuk
Bagi (share)	bagi	bagi
<i>Bisu</i> l (ulcer)	barəh	baroh
Bapak (father)	bapa	bapa
Baru (new)	mbaru	rimbaru
Batang (stem)	batan	bataŋ
Batu (stone)	batu	batu
Benar (true)	tuhu	tuhu
Bengkak (swollen)	bəsar	bəsar
Berat (heavy)	mbərat	berat
Buru (hunt)	ərburu	buru
Berdiri (stand)	cindər	cendər
Renang (swim)	laŋi	lane
Jalan (walk)	dalan	dalan
Mimpi (dream)	nipik	
	•	nipi kasah
Napas (breath)	kəsah	kəsah
Bintang (star)	bintaŋ	bintaŋ
Buah (fruit)	buah	buah
Bulan (moon)	bulan	bul∧n
Bunga (flower)	buŋa	buŋa
Busuk (rotten)	macik	macik
Cacing (worm)	gaya	goya
Daging (meat)	jukut	jukut
Darah (blood)	darəh	daroh
Datang (come)	rəh	roh
Daun (leaf)	buluŋ	buluŋ
Debu (dust)	abu	abu
<i>Di</i> (in)	i	i
<i>Bawah</i> (under)	təruh	təruh
<i>Dia</i> (she/he)	ia	ia
Dingin (cold)	mbərgəh	mbərgɔh
Dua (two)	dua	dua
Duduk (sit)	kundul	kundul
Ekor (tail)	ikur	ekur
Empat (four)	əmpat	empat
Engkau (you)	əŋko	ko
Garam (salt)	sira	sira
Gigi (tooth)	ipən	epen
Guntur (thunder)	ləŋgur	renggur
Hari (day)	wari	ari
Hati (liver)	ate	ate
Hidung (nose)	iguŋ	iguŋ
Hidup (life)	ngeluh	ngeluh
Hijau (green)	məratah	meratah
Hitam (black)	mbirin	moratan

Hujan (rain) udan udan Ikan (fish) ikan ikan Ini (this) ənda ənda Jantung (heart) jantung jantong Jarum (needle) iarum iarum Jatuh (fall down) ndabuh ndabuh Jahit (sew) iait iait Jauh (far) ndauh ndaoh Kambing (goat) kambing kambing Kabut (fog) rəmaŋ rəman Kaki (leg) nahe nehe Kanan (right) kemuhən kamuhən Kayu (wood) kayu kayu Kelambu (mosquito net) kelambu kelambu Kepala (head) takah takal Kering (dry) kərah kərah Kilat (lightning) kilap kilap Kita (we) ita kita Kuning (yellow) məgərsin gərsin Kutu (lice) kutu kutu

Laba-laba (spider) lawah-lawah Langit (sky) lanit lawit Laut (sea) Lebar (wlarge) mbəlan Leher (neck) kərahun Lima (neck) lima Lidah (tongue) dilah Malam (night) berni Malu (shame) mela Mata (eye) mata Mati (dead) mate Lipat (fold) lipat Miring (crooked) mereng

Bakar (burn) tutun Beli (buy) tukur Bunuh (kill) mbunuh Pegang (hold) cikəp Peras (squeeze) pərəh Pilih (choose) pilih Potong (cut) kərət Pukul (hit) pəkpək Tanam (plant) tanəm Curi (steal) taŋko Dengar (listen) mbəgi Tembak (shoot) tembak Ketuk (knock) tuktuk Garuk (scratch) gərgo Gigit (bite) karat Ikat (tie) ikət Isap (sunction) сәрсәр Menguap (evaporate) payamən Kunyah (chew) natnat Tiup (blow) əmbus

labah-labah laŋit laut mbəlaŋ kərahoŋ lima dilah berŋin mela mata mate lipat mereng

tutun

tokor

bunuh cekep pəroh pilih kərət pakpak tanəm taŋko mbəge tembak toktok gorgor karut ekət сәрсәр pohamən natnat əmbus

Timur (east)	timur Kalak	timur kalak
Mereka (they) Minum (drink)	minəm	
		mənum
Mulut (mouth)	babah mutah	babah mutah
Muntah (vomit)	Na?kih	na?kih
Naik (go up)		
Nama (name)	gəlar	gərar
Orang (people)	jəlma	jəlma
Panjang (long)	gədaŋ	gədaŋ
Pasir (sand)	kərsik	kərsik
Perempuan (woman)	dibəru	dabəru
Perut (stomach)	bəltək 	bəltək
Tujuh (seven)	pitu	pitu
Putih (white)	məntar	bəntar
Rambut (hair)	buk	buk
Rumput (grass)	dukut	dukut
Satu (one)	sada	sada
Saya (I)	aku	aku
Sayap (wing)	kabən	kabəŋ
Sembunyi (hide)	cəbuni	ciboni
Semua (all)	kərina	karina
Siapa (who)	ise	ise
Tahu (know)	ətəh	itoh
Takut (afraid)	mbiar	mbiar
Tali (rope)	nali	tali
Tanah (soil)	tanəh	tanoh
Tebal (thick)	məkapal	kapal
Terbang (fly)	kabaŋ	kabaŋ
Janji (promise)	janji	janji
Tidur (sleep)	mədəm	mədəm
Tiga (three)	təlu	təlu
Tikus (mouse)	mənci	mənci
Tua (old)	mətua	tua
Tulang (bone)	tulan	tulan
Usus (intestines)	tuka	bituka
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Table 1 shows that the number of cognate words found in Karo and Pakpak languages was 140 words and 60 words are noncognate. The list of noncognate words can be seen in the following table.

Table 2 The List of Non-cognate Word of Karo and Pakpak Language

Glos	Karo	Pakpak
Abu (ash)	Abu	sirʌbun
<i>Anak</i> (child)	Anak	duka
Apa (what)	kai	kade
Asap (smoke)	gəbuk	asap
Bagaimana (how)	uga	bakunə
Basah (wet)	bəncah	taptap
Bekerja (work)	ərdahin	karejo
Belok (turn)	belok	tekong
Baring (lay down)	taya	pedəm
Kata (word)	ŋərana	kata
Pikir (think)	rukur	piker
Tumbuh (grow)	turah	tubuh
Besar (big)	galaŋ	mbelga

Bulu (fur) mbulu bukbuk Burung (bird) perik manukmanuk Dan, dengan (and, with) ras deket Danau (lake) danau/pea lau Atas (above) das babo Dalam (deep) bas bagas Dimana (in) idike I ja Hitung (count) kira etong Hutan (forest) kəraŋən rambah *Ibu* (mother) nande inaŋ Isteri (wife) ndəhara ndaberu Itu (that) ah Jahat (wicked) gutul jahat Kapan (when) ndigan dahari Kiri (left) kawəs kambirang Kotor (dirty) məlkət durun Kulit (skin) kulit koling Lain (other) sidəban laen Laki-laki (man) dilaki daholi Makan (eat) man mangan Lihat (see) nəhən təŋən edur Ludah (saliva) cidur Belah (split) bəlah naka Buka (open) nalaŋi buka Tangis (cry) ηanduη tangis Cium (kiss) nəma cium Alir (flow) malər jarir Gali (dig) ukal kurak Tikam (stab) nəbak tikam Merah (red) məgara mbara Nyamuk (mosquito) renit namuk Panas (hot) melas ngara Payudara (breast) tetek susu Pendek (short) gəndək joppok Rumah (house) rumah sapo Sakit (ill) cio sakit Sempit (narrow) picət sempit Suami (husband) perbulanan daholi Tahun (year) tahun tahun Tajam (sharp) ntəlap tajəm Tangan (hand) tan tangan Telinga (ear) cupin penggəl Telur (egg) təlor naruh Tertawa (laugh) tawa tertaba Tipis (thin) məlipes nipis Tumpul (blunt) mantul tompəl Ular (snake) ulok nipe

B. The level of kinship of Pakpak and Gayo Language

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180 181

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Based on the results of data analysis showed that the level of kinship of Pakpak and Gayo language is at the level of family kinship. The list of cognate words of the two languages is 81 words of 200 Swadesh words. While non cognate words are 119 words. In this case, these languages are still classified as very far for language kinship if it is seen

from the percentage even though they have a family relationship level. The level of kinship of the two languages can be seen through the following calculation.

$$C = \frac{k}{n} x100\%$$

$$C = \frac{82}{200} x100\%$$

$$C = 41\%$$

From calculation above, the percentage level of kinship of the two languages is 41%. Based on the concept stated by Crowley that the kinship level of 41% indicates that the language has a level of family kinship. In this case, the level of kinship between Pakpak and Gayo is still very far if it is seen from the percentage level. The cognate words found from the two languages when comparing the languages can be seen in the following table.

Table 3 The List of Cognate Words of Pakpak and Gayo Language

Glos	Pakpak	Gayo
Akar (root)	urat	uyət
Asap (smoke)	asap	asap
Awan (cloud)	əmbun	əmun
Bagaimana (how)	bakunə	kunə
Bagi (share)	bagi	bagi
Bisul (ulcer)	baroh	barah
Batang (stem)	bataŋ	bataŋ
Batu (stone)	batu	atu
Berat (heavy)	berat	bərət
Jalan (walk)	dalan	ralan
Mimpi (dream)	nipi	nipi
Napas (breath)	kəsah	kəsah
Pikir (think)	pikir	Piker
Bintang (star)	bintaη	bintaη
Buah (fruit)	buah	uah
Bulan (moon)	bulʌn	ulən
Bunga (flower)	buηa	buŋə
Burung (bird)	manukmanuk	manuk
Darah (blood)	daroh	rayoh
Daun (leaf)	buluŋ	uluŋ
Debu (dust)	abu	Awuh/dul
Di (in)	i	i
Bawah (under)	təruh	tuyoh
Duduk(sit)	kundul	kunul
Engkau (you)	ko	ko
Garam (salt)	sira	sira
Gigi (tooth)	epen	ipon
Guntur (thunder)	renggur	gəgur
Hati (liver)	ate	ate
Hidung (nose)	iguŋ	iyuŋ
Isteri (wife)	ndaberu	bəbəru
Jahat (wicked)	jahat	jahat
Jantung (heart)	jantung	jantu
Jarum (needle)	jarum	jantu jarum
Jahit (sew)	jait	jarum jit
Kambing (goat)	Kambing	յո Kambi
Kayu (wood)	kayu	Kayu
Kelambu (mosquito net)	kelambu	kelmu
Kilat (lightning)	kilap	Keimu Kilət
		rx u = u
Kita (we)	kita	Kitə

Kutu (lico)	January .	Kutu
Kutu (lice)	kutu	Len
Lain (other)	laen	_
Langit (sky)	laŋit	Laŋit
Laut (sea)	laut	Lut
Lidah (tongue)	dilah	delah
Makan (eat)	mangan	maŋan
Mata (eye)	mata	mata
Mati (dead)	mate	mate
Lipat (fold)	lipat	lipət
Miring (crooked)	mereng	Mere
Bakar (burn)	tutuŋ	Tutu
Belah (split)	bəlah	bəlah
Bunuh (kill)	bunuh	unuh
Pilih (choose)	pilih	pilih
Potong (cut)	kərət	kərat
Tanam (plant)	tanəm	tanom
Cium (kiss)	cium	cum
Alir (flow)	jarir	jaril
Ketuk (knock)	toktok	tətok
Gali (dig)	kurak	kuruk
Ikat (fold)	ekət	ikot
Timur (east)	timur	timur
Minum (drink)	mənum	minum
Nama (name)	gərar	gərəl
Nyamuk (mosquito)	namuk	namuk
Orang (people)	jəlma	jəlma
Payudara (chest)	susu	susu
Perempuan (woman)	dabəru	bəbəru
Tujuh (seven)	pitu	pitu
Rambut (hair)	buk	wok
Satu (one)	sada	sara
Saya (I)	aku	aku
Sayap (wing)	kabən	kəpek
Tajam (sharp)	tajəm	təjəm
Tali (rope)	tali	tali
Tanàh (soil)	tanoh	tanoh
Telur (egg)	naruh	tənaroh
Janji (promise)	janji	janji
Tiga (three)	təlu	tulu
Tipis (thin)	nipis	nipis
Tua (old)	tua	tuə
Tulang (bone)	tulan	tulən

Table 3 shown that the number of cognate words found in Pakpak and Gayo is 82 words and the non-cognate words 118 words. The list of non-cognate words can be shown in the following table.

Table 4 The List of Non-Cognate Words of Pakpak and Gayo Language

Table 4 The List of Non-Cognate Words of Lakpak and Cayo Language			
Glos	Pakpak	Gayo	
Abu (ash)	sir∧bun	wau	
Air (water)	lae	waəh	
<i>Anak</i> (child)	duka	anak	
Angin (wind)	Aŋin	kuyu	
<i>Anjing</i> (dog)	biaŋ	asu	
Apa (what)	kade	hana	

Api (fire) api rara Atap (roof) tarup supu Ayam (hen/cock) manuk kurek Bapak (father) bapa ama Baru (new) rimbaru ayu Basah (wet) taptap basah Bekerja (work) karejo buət Belok (turn) tekong kisər Benar (true) tuhu bətul Bengkak (swollen) kəmuŋ bəsar Baring (lay down) pedəm gulan Buru (hunt) buru munaro Berdiri (stand) cendər səsuk Renang (swim) lane nawe Kata (word) kata cərak Tumbuh (grow) tubuh murip Besar (big) mbelga kul Bulu (fur) bukbuk jaŋut Busuk (rotten) macik borok Cacing (worm) goya kətol Daging (meat) jukut dəngke Dan, dengan (and, with) deket rum Danau (lake) danau/pea dano Datang (come) roh geh Debu (dust) Awuh/dul abu Atas (above) babo atas Dalam (in) bagas was Dimana (where) idike l si Dia (she/he) we ia Dingin (cold) mbərgəh səjuk Dua (two) dua roa Ekor (tail) ekur uki Empat (four) empat opat Hari (day) ari lo Hidup (life) ngeluh murip Hijau (green) meratah iio Hitam (black) nberen itəm Hitung (count) etong kirə Huian (rain) udan urən Hutan (forest) rambah utən Ibu (mother) inaŋ inə Ikan (fish) ikan gulə Ini (this) Ənda/en ini Itu (that) oya Jatuh (fall down) ndabuh mətuh Jauh (far) ndaoh gip Kabut (fog) rəman kabut Kaki (leg) nehe kidinn Kanan (right) kuən kamuhən Kapan (when) dahari səlo Kepala (head) takal ulu Kering (dry) kərah kəriŋ Kiri (left) kambirang kiri

Kotor (dirty) durun kotek Kulit (skin) Koling kulit Kuning (yellow) gərsin kunin Laba-laba (spider) Labah-labah ləlawah Laki-laki (man) daholi rawan Lebar (large) mbəlan kolak Leher (neck) kərahon ronok Lima (five) lima limə Malam (night) bernin kələm Malu (shame) mela kəmel Lihat (see) təŋən eŋon Ludah (saliva) edur eleh Beli (buy) bəli tokor Buka (open) buka ukə Pegang (hold) cekep amat Peras (squeeze) pəroh muliə Pukul (hit) pakpak pəpok Tangis (cry) tangis monot Curi (steal) tanko osoh Dengar (listen) mbəge pəŋe Tembak (shut) bədil tembak Garuk (cratch) gorgor kəkor Gigit (bite) karut ket Isap (suction) сәрсәр isəp Menguap (evaporate) pohamən map Kunyah (chew) ηατηατ ηəηαΙ Tikam (stab) tikam tənik Tiup (blow) əmbus yup Merah (red) ilaŋ mbara Mereka (they) pakəa kalak Mulut (mouth) babah awah Muntah (vomit) mutah loah Naik (go up) na?kih nik Panas (hot) ngara porak Panjang (long) gədan naru Pasir (sand) kərsik one Pendek (short) joppok konot Perut (stomach) bəltək tukə Putih (white) bəntar putih Rumah (house) sapo umah Rumput (grass) dukut kərpe Sakit (ill) sakit cio Sembunyi (hide) təmuni ciboni Sempit (narrow) Sempit empət Semua (all) karina bewene Siapa (who) ise sa Suami (husband) daholi rawan Tahu (know) itoh bətih Tahun (year) tahun tun Takut (afraid) mbiar tərih Tangan (hand) tangan pumu Tebal (thick) kapal təbəl Telinga (ear) penggəl kəmirin

Terbang (fly)	kabaŋ	tərbaŋ
Tertawa (laugh)	tertaba	kədik
Tidur (sleep)	mədəm	nome
Tikus (mouse)	mənci	tikus
Tumpul (blunt)	tompəl	tumpul
<i>Ular</i> (snake)	ulok	lipe
Usus (intestines)	bituka	tetuke

C. The level of kinship of Karo and Gayo Language

Based on the results of data analysis showed that the level of kinship of Karo and Gayo language is at the level of family kinship. The list of cognate words of the two languages is 76 words of 200 Swadesh words. While non cognate words are 124 words. In this case, these languages are still classified as very far for language kinship if it is seen from the percentage even though they have a family relationship level. The level of kinship of the two languages can be seen through the following calculation.

$$C = \frac{k}{n} x 100\%$$

$$C = \frac{76}{200} x 100\%$$

$$C = 38\%$$

From calculation above, the percentage level of kinship of the two languages is 38%. Based on the concept stated by Crowley that the kinship level of 38% indicates that the language has a level of family kinship. In this case, the level of kinship between Pakpak and Gayo is still very far if it is seen from the percentage level. The cognate words found from the two languages when comparing the languages can be seen in the following table.

Table 5 The List of Cognate Words of Karo and Gayo Language

Table 5 The List of Cognate Words of Naro and Gayo Language			
Glos	Karo	Gayo	
Akar (root)	Urat	uyət	
<i>Anak</i> (child)	Anak	anak	
<i>Awan</i> (cloud)	əmbun	əmun	
Bagi (share)	bagi	bagi	
Bisul (ulcer)	barəh	barah	
Batang (stem)	bataŋ	bataŋ	
Batu (stone)	batu	atu	
Berat (heavy)	mbərat	bərət	
<i>Jalan</i> (walk)	dalan	ralan	
<i>Mimpi</i> (dream)	nipik	nipi	
Napas (breath)	kəsah	kəsah	
Bintang (star)	bintaŋ	bintaŋ	
<i>Buah</i> (fruit)	buah	uah	
Bulan (month)	bulan	ulən	
Darah (blood)	darəh	rayoh	
Datang (come)	rəh	geh	
Daun (leaf)	buluŋ	uluŋ	
<i>Di</i> (in)	i	i	
Atas (above)	das	atas	
Bawah (under)	təruh	tuyoh	
<i>Dalam</i> (in)	bas	was	
Duduk (sit)	kundul	kunul	
<i>Engkau</i> (you)	əŋko	ko	
Garam (salt)	sira	sira	
Gigi (tooth)	ipən	ipon	
Gunturl(thunder)	ləŋgur	gəgur	

Hati (liver)	ate	ate
Hidung (nose)	iguŋ	iyuŋ
Hitung (count)	kira	kirə
Hujan (rain)	udan	urən
Jantung (heart)	janto	jantu
Jarum (needle)	jarum	jarum
Jahit (sew)	jait	jit
Kambing (goat)	Kambi*	Kami*
Kayu (wood)	kayu	kayu
Kilat (lightning)	kilap	kilət
Kita (we)	ita	kitə
Kulit (skin)	kulit	kulit
Kutu (lice)	kutu	kutu
Laba-laba (spider)	Lawah-lawah	ləlawah
Langit (sky)	laŋit	laŋit
Lima (five)	lima	limə
Lidah (tongue)	dilah	delah
Mata (eye)	mata	mata
Mati (dead)	mate	mate
Lipat (fold)	lipat	lipət
Miring (crooked)	mereng	Mere*
Bakar (burn)	tutuŋ	Tutu*
Bunuh (kill)	mbunuh	unuh
Pilih (choose)	pilih	pilih
Potong (cut)	kərət	kərat
Tanam (plant)	tanəm	tanom
Ikat (tie)	ikət	ikot
Kunyah (chew)	ŋatŋat	ŋəŋal
Timur (east)	timur	timur
Minum (drink)	minəm	minum
Nama (name)	gəlar	gərəl
Orang (people)	jəlma	jəlma
Payudara (chest)	tetek	susu
Perempuan (woman)	dibəru	bəbəru
Tujuh (seven)	pitu	pitu
Rambut (hair)	buk	wok
Rumah (house)	rumah	umah
Sakit (sick)	sakit	sakit
Satu (one	sada	sara
Saya (I)	Aku	aku
Sayap (wing)	kabən	kəpek
Tali (rope)	nali	tali
Tanah (soil)	tanəh	tanoh
Janji (promise)	janji	janji
Tiga (tiga)	təlu	tulu
Tua (old)	mətua	tuə
Tulang (bone)	tulan	tulən
Ular (snake)	nipe	lipe
Usus (istestines)	tuka	tetuke

Table 5 shown that the number of cognate words found in Karo and Gayo language is 76 words and the non-cognate words 124 words. The list of non-cognate words can be shown in the following table.

Abu (ast) Air (water) Angin (wind) Anjing (dog)	Abu Lau Aŋin	wau waəh
Angin (wind)		waəh
• , ,	Aŋin	
<i>Anjing</i> (dog)		kuyu
	biaŋ	asu
Apa (what)	kai	hana
Api (fire)	api	rara
Asap (smoke)	gəbuk	asap
Atap (roof)	tarum	supu
Ayam (hen/ turn)cock)	manuk	kurek
Bagaimana (how)	uga	kunə
Bapak (father)	bapa	ama
<i>Baru</i> (new)	mbaru	ayu
Basah (wet)	bəncah	basah
<i>Bekerja</i> (work)	ərdahin	buət
Belok (turn)	belok	kisər
Benar (true)	tuhu	bətul
Bengkak (swollen)	bəsar	kəmuŋ
<i>Baring</i> (lay down)	taya	gulaŋ
<i>Buru</i> (hunt)	ərburu	muŋaro
<i>Berdiri</i> (stand)	cindər	səsuk
Renang (swim)	laŋi	nawe
Kata (word)	ŋərana	cərak
Pikir (think)	rukur	Piker
Tumbuh (think)	turah	murip
Besar (big)	galaŋ	kul
<i>Bulu</i> (fur)	mbulu	jaŋut
Burung (bird)	perik	manuk
Busuk (rotten)	macik	borok
Cacing (worm)	gaya	kətol
Daging (meat)	jukut	dəngke
Dan, dengan (and, with)	ras	rum
Danau (lake)	lau	dano
Debu (dust)	abu	Awuh/dul
Dimana (where)	l ja	l si

Dia (she/he)	ia	we
Dingin (cold)	mbərgəh	səjuk
Dua (two)	dua	roa
Ekor (tail)	ikur	uki
Empat (four)	əmpat	opat
Hari (day)	wari	lo
Hidup (life)	ŋgeluh	murip
Hijau (green)	məratah	ijo
Hitam (black)	mbiriŋ	itəm
Hutan (forest)	kəraŋən	utən
Ibu (mother)	nande	inə
Ikan (fish)	ikan	gulə
Ini (this)	ənda	ini
Isteri (wife)	ndəhara	bəbəru
Itu (that)	ah	oya
Jahat (wicked)	gutul	jahat
Jatuh (fall down)	ndabuh	mətuh
Jauh (far)	ndauh	gip
Kabut (fog)	rəmaŋ	kabut
Kaki (leg)	nahe	kidinŋ
Kanan (right)	kemuhən	kuən
Kapan (when)	ndigan	səlo
Kelambu (mosquito net)	kelambu	kelmu
Kepala (head)	takah	ulu
Kering (dry)	kərah	kəriŋ
Kiri (left)	kawəs	kiri
Kotor (dirty)	məlkət	kotek
Kuning (yellow)	məgərsiŋ	kuniŋ
Lain (other)	sidəban	len
Laki-laki (man)	dilaki	rawan
Laut (sea)	lawit	lut
Lebar (wide)	mbəlaŋ	kolak
Leher (neck)	kərahuŋ	roŋok
Makan (eat)	man	maŋan
Malam (night)	berŋi	kələm

Malu (shamed)	mela	kəmel
Lihat (see)	nəhən	eŋon
Ludah (saliva)	cidur	eleh
Belah (split)	naka	bəlah
Beli (buy)	tukur	bəli
Buka (open)	nalaŋi	ukə
Pegang (hold)	cikəp	amat
Peras (squeeze)	pərəh	muliə
Pukul (hit)	pəkpək	pəpok
Tangis (cry)	ŋanduŋ	moŋot
Cium (kiss)	ŋəma	cum
Curi (stole)	taŋko	osoh
Dengar (listen)	mbəgi	рәŋе
Tembak (shoot)	tembak	bədil
Alir (flow)	malər	jaril
Ketuk (knock)	tuktuk	tətok
Gali (dig)	ukal	kuruk
Garuk (scratch)	gərgo	kəkor
Gigit (bite)	karat	ket
Isap (taste)	сәрсәр	isəp
Menguap (evavorate)	payamən	map
Tikam (stab)	nəbak	tənik
Tiup (blow)	əmbus	yup
Merah (red)	məgara	ilaŋ
Mereka (they)	Kalak	pakəa
Mulut (mouth)	babah	awah
Muntah (vomit)	mutah	loah
Naik (go up)	Na?kih	nik
Nyamuk (mosquito)	reŋit	namuk
Panas (hot)	melas	porak
Panjang (long)	gədaŋ	naru
Pasir (sand)	kərsik	one
Pendek (short)	gəndək	konot
Perut (stomach)	bəltək	tukə
Putih (white)	məntar	putih

Rumput (grass)	dukut	kərpe
Sembunyi (hide)	cəbuni	təmuni
Sempit (narrow)	picət	empət
Semua (all)	kərina	bewene
Siapa (who)	ise	sa
Suami (husband)	perbulaŋən	rawan
Tahu (know)	ətəh	bətih
Tahun (year)	tahun	tun
Tajam (sharp)	ntəlap	təjəm
Takut (afraid)	mbiar	tərih
Tangan (hand)	tan	pumu
Tebal (thick)	məkapal	təbəl
Telinga (ear)	cupin	kəmiriŋ
Telur (egg)	təlor	tənaroh
Terbang (fly)	kabaŋ	tərbaŋ
Tertawa (laught)	tawa	kədik
Tidur (sleep)	mədəm	nome
Tikus (mouse)	mənci	tikus
Tipis (thin)	məlipes	nipis
Tumpul (blunt)	mantul	tumpul

4. CONCLUSION

Based on the findings, it was found that the level of kinship between Karo and Pakpak languages was 70% with a separation period about 500-2500 years ago. From this percentage, it can be stated that Karo and Pakpak languages have a close relationship. While the level of kinship between Pakpak and Gayo languages is 41%, it means that the kinship between Pakpak and Gayo languages is not close even though the relationship between the two languages belongs to the family. Same with the kindship of Karo dan Gayo has family relationship but the percentage of the kindship at 38%. And the separation period of Pakpak and Gayo languages and also Karo and Gayo language were around 500-2500 years ago. This means that the two languages have been separated for a long time, both Pakpak languange and Gayo language or Karo language and gayo language.

COMPETING INTEREST

I am joining to the ELTA organization. It is a group of lecturers and teachers in Sumatera Utara. By joining in it, it can help me to find out new idea to be investigated.

AUTHOR'S CONTRIBUTION

The contribution includes (1) Conceptualization. In this case, the authors gave the idea, formulation the problem and the goal of the research. (2) Data curation, (3) Investigation. In this case, collecting the data. (4) Methodology, (5) Administration, (6)

Supervision, (7) Visualization, and (8) Writing. In this case writing draft until final writing and it was done by the first author.

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