



Language Kinship of Wooi, Poom, Ansus, and Ambai in Yapen, Papua

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ABSTRACT

This study aims to determine the language kinship in Wooi, Poom, Ansus, and Ambai languages. Data were collected from an interview with the indigenous speakers of Wooi, Poom, Ansus, and Ambai languages. This research employed a historical-comparative linguistics approach, which is the lexicostatistics and glottochronology method. Data were in the form of 200 basic vocabularies and were calculated with lexicostatistics and glottochronology formula. These research findings indicate the 64% language kinship between Wooi and Ansus. That result is the highest percentage of language kinship between the four languages. 54% is between Wooi and Poom. 53% is between Ansus and Ambai. 49% is between Ansus and Poom. 45% is between Wooi and Ambai. And 35% is between Poom and Ambai, which is the lowest percentage of language kinship. Thus, this study proves that Wooi, Poom, and Ansus are the languages classified into a family. Wooi, Ansus, and Ambai are also the languages classified into a family. Meanwhile, Poom and Ambai are classified as stock.

Keywords: Yapen Island; language kinship; historicalcomparative linguistics

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INTRODUCTION

Papua is a very large province in Indonesia. The large geographical area affects the diversity of ecology, topography, language, and culture. Based on data from The Badan Pengembangan dan Pembinaan Bahasa the Ministry of Education and Culture (2022) reported that there are 326 local languages in Papua Province. Other data conducted by the Summer Linguistic Institute (SIL) reported 275 local languages. Those data concluded, that half the number of local languages in Indonesia is in Papua. In line with the number of local languages in Indonesia is in Papua.

The diversity of languages has great potential for linguistic aspects. Unfortunately, this is not in line with linguistic research that is not widely carried out in Papua. Some publications reveal the imbalance in the attention given to local languages. Papua and Maluku having a 1:1 ratio (i.e. one language with one publication) indicates that the language is given the least attention (Arka, 2013). It concluded that linguistic research conducted in Papua is still very limited in number. In line with this, this research was carried out on one of the Islands

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in Cendrawasih Bay, namely Yapen Island. The Yapen Island Yapen has a characteristic area consisting of several islands which makes the description of the situation and linguistic conditions important.

According to the Badan Pengembangan dan Pembinaan Bahasa, there were 13 languages on Yapen Island. Meanwhile, Kamholz (2014) stated there were 11 languages on Yapen Island comprising Ambai, Ansus, Busami, Kurudu, Marau, Munggui, Papuma, Poom, Serui-Laut, Wabo, and Wooi. The languages of Yapen are classified as Austronesian. Anceaux (1961) stated that Austronesian languages in Papua are located on the north coast and surrounding islands, starting from the coast of Jayapura, Sarmi, and Cendrawasih Bay, as well as the Raja Ampat islands. These languages belong to the Proto Eastern Malayo-Polynesian group which is further divided into two subgroups, namely Proto South Halmahera-West New Guinea and Proto Oceanic which are represented based on the following family tree diagram.





The languages of Yapen belong to Proto South Halmahera-West New Guinea. Several scholars have specific research on a new group of South Halmahera-West New Guinea (SHWNG). The research was conducted by (Anceaux, 1961), (Blust, 1978), (Elbert, 1965), (Silzer, 1983), and (Kamholz, 2014). Research by Kamholz (2014) performs differences with previous subgrouping. He found innovation subgrouping that defines it. There are several groups are not included. Thus, his research resulted from a new proposed subgrouping of SHWNG languages.



Figure 2. New Proposed Subgrouping of SHWNG Languages (Source: Kamholz, 2014, p.141)

The results of the new subgrouping are related to this research. The Proto-Western Yapen section has a new subgroup consisting of the Proto-Central Yapen and language groups identified with dots (Ambai, Ansus, Marau, Wandamen, and Wooi). Kamholz (2014) does not argue for the specific identification of the language groups identified with dots. Therefore, it is necessary to retrace the grouping of languages that are in the group with dots. So far the grouping of languages in the group identified with dots has not been known for sure the status of the five languages through in-depth research. The position of those languages is not explained in detail regarding the reason for being in groups identified with dots.

Therefore, languages in the dotted subgroup were used as objects of research. Those languages are Wooi, Ansus, and Ambai. To perform the kinship of three languages with the other subgroup, Poom language in Proto-Central Yapen be compared with those languages.

Geographically, the four languages perform nearby to each other. This reason can be assumed that those languages are in the same group, Proto-Central Yapen. Geographic evidence is shown in Figure 3.



Figure 3. Languages of Yapen Island (Source: Price & Donohue, 2009, p.4)

	Table 1. Phonological and lexical similarities							
No	Gloss	Wooi	Poom	Ansus	Ambai			
1	I	[yau]	[yau]	[yau]	[jau]			
2	wind	[wanaŋ]	[wanaŋ]	[wanaŋ]	[wanaŋ]			
3	dog	[wɔna]	[wɔna]	[wɔna]	[wɔna]			
4	to kill	[muni]	[muni]	[muni]	[muni]			
5	far	[wɔrɔi]	[wɔrɔi]	[wɔrɔi]	[wɔrɔi]			

In addition, the four languages also indicate phonological and lexical similarities, it is shown in Table 1.

This research indicates some assumptions The first assumption is that the languages in the dotted subgroup of Wooi, Ansus, and Ambai belong to the Proto-Central Yapen subgroup in which Poom is present. The second assumption is that Ambai forms its own proto, given that it is geographically distant and lexically similar, Ambai has a lower cognat score than Wooi, Ansus, and Poom. Thus, these assumptions need to be scientifically proven in this study.

This research aims to trace the language kinship between Wooi (Wi), Poom (Pm), Ansus (An), and Ambai (Am). To answer the research questions need studies from a historical comparative linguistics perspective. Language kinship be explained through a quantitave approach namely lexicostatistical and glottochronology. The quantitative approach uses lexicostatistical and glottochronological techniques applied to the percentage of kinship between languages and the depth of time of separation between languages. (Keraf, 1996)

Several scholars have specific research from a historical comparative linguistics perspective comprised of Muhammad & Hendrokumoro (2022) focuses on the percentage of kinship level, separation time, and phonemic correspondence among Acehnese, Devayan, Sigulai, and Jamee languages. An article by Aisyah & Widayati (2022) as it examines the language kinship among Pesisir Pasar, Pesisir Kampung, and Pesisir Sorkam languages. An article by Lailiyah & Wijayanti (2022) investigates the kinship relationship in Javanese, Balinese, and Bima languages. The research conducted by Andriani (2023) also examines the kinship of Malay languages in the Riau Archipelago.

Some resemblances between this research and some scholars above lies beneath the research attempt of using historical comparative linguistics and the aspect examined about lexicostatistical and glottochronology.

A body of research still related to this research and has similar also been done by (Sanjoko, 2020). This article examines the kinship relation of the Ambai, Ansus, and Serui-Laut. His finding indicated that based on lexicostatistic calculations that the three languages related as a family of languages with a percentage of cognition that is between Ambai and Ansus by 57%, Ambai by Serui Laut by 67%, and Ansus by Serui Laut by 65%. While the separation

time between Ambai and Ansus is estimated about 1,298 years ago, Ambai and Serui Laut were 963 years ago. Ansus and Serui-Laut were 994 years ago.

METHOD

This research is a diachronic study that uses a quantitative technique to reveal the language kinship between Wooi, Poom, Ansus, and Ambai. Historical comparative linguistics is a basic theory whose application is through lexicostatistical and glottochronology presented by (Anttila, 1989), (Crowley & Bowern, 2010), and (Keraf, 1996). The research data were collected through listening, documentation, and interview techniques (Mahsun, 2011). Data were collected from participants of the indigenous tribes of Yapen Island. The data was collected in the form of a 200 basic word list by Morris Swadesh in each language.

Data analysis in this research was done using some procedures (1) analysis of 200 basic words in each language that related to PAN by Dempwollf (in (Wurm & Wilson, 1975). (2) determine which pairs of languages are related. As for the concern in analyzing: a) empty words are not counted (*gloss*), that is, words that have no words either in one language or in both languages. Loanwords, whether from relative languages or non-relative languages; b) isolation of bound morphemes, that is, if the data has been collected comprised bound morphemes, before making comparisons to obtain the relative word or non-relative, all bound morphemes must be isolated; and 3) determine the cognate, must be eligible in this conditions: (a) a pair which phonemes are identical, (b) a pair that has a phoneme different phoneme. (Budasi, 2007). (3) calculate the percentage of kinship using lexicostatistics, and the result of the percentage is used to calculate the age or time separate from that language.

The following lexicostatistical formula:

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

Information:

a = number of relative words (cognate)

n = number of vocabulary words

The following glottochronology formula:

$$W = \frac{\log C}{2\log r}$$

Information:

w = length of split time

c = percentage of relative words/cognate (decimal)

r = constant retention

(4) The result percentage is used to determine a classification of those languages based on the language levels as shown in table 2. In addition, the result of the percentage to determine language kinship tree or genealogy chart. It is used as a hypothesis of this research.

Language levels	Time split into centuries	Percentage of cognate
Language	o – 5	100 - 81
Family	5 – 25	81-36
Stock	25-50	36 - 12
Microphyllum	50-75	12 – 4
Mesophyllum	75–100	4-1
Macrophyllum	100- and above	1-less than 1%

Source: Keraf, 1996Metode.

RESEARCH FINDINGS

This research found lexicostatistic data in the form of the percentage of language kinship in four languages, namely Wooi, Poom, Ansus, and Ambai. In addition, the result of the glottochronology and genealogy chart of the Wooi, Poom, Ansus, and Ambai.

The Percentage of Language Kinship of Wooi, Poom, Ansus, and Ambai

Based on table 3 shows the highest percentage of language kinship found in the comparison of Wooi and Ansus with 64% as the first rank. The second rank of kinship percentage is found in the comparison of Ansus and Ambai at 53%. The third rank of kinship percentage is Wooi and Poom with 54%. The fourth rank of kinship percentage is found in Ansus and Poom at 49%. The fifth rank of kinship percentage is found in Wooi and Ambai with 45%. The sixth rank, which is also the lowest percentage of kinship, is found in Poom and Ambai at 35%.

	Wooi	Ansus	Ambai	Poom
Wooi		64%	45%	54%
Ansus			53%	49%
Ambai				35%
Poom				

Table 3. The Percentage of Language Kinship

Genealogy chart of Wooi, Poom, Ansus, and Ambai

The results of the percentage of kinship indicate differences. Thus, the kinship status of the four languages can be seen in the genealogy chart below.



Chart 1. Genealogy chart of Wooi, Poom, Ansus, and Ambai

The genealogy of the Wooi, Poom, Ansus, and Ambai languages above shows several things related to the relationship between the four languages.

- 1. The four languages, Wooi, Poom, Ansus, and Ambai languages reveal one group, namely the Wooi-Poom-Ansus-Ambai group.
- 2. The Wooi-Poom-Ansus-Ambai group comprised the Wooi-Poom-Ansus subgroup and the Ambai language.
- 3. Lexicostatistically, Wooi, Poom, Ansus, and Ambai are one language family, while Poom and Ambai are stock.

Based on the results of the quantitative technique that is lexicostatistic as described above, the kinship relationship of the four languages can be proven.

Separation time of Wooi, Poom, Ansus, and Ambai

Through separation time between the languages compared and also closer the separation time to the protolanguage. The following separation time is in table 4.

Tab	ie 4. Separation time of woo	, Poom, Ansus, and Ambai
No	Language Comparison	Separation time
1	Wooi - Ansus	595 - 787 years ago
2	Wooi - Poom	1,122 -1,388 years ago
3	Wooi - Ambai	1,255 –1,851 years ago
4	Ansus - Ambai	1,015 – 1,261 years ago
5	Ansus - Poom	1,314 – 1,356 years ago
6	Poom - Ambai	2,212 – 2,628 years ago

Table 4. Separation time of Wooi, Poom, Ansus, and Ambai

Based on table 4, the separation time of the four languages comprised Wooi and Ansus the separation time is estimated to be 909 - 1,143 years ago. The separation time of Wooi and Poom is estimated to be 1,276 -1,564 years ago. The separation time of Wooi and Ambai is estimated to be 1,670-2010 years ago. The separation time of Ansus and Ambai is estimated to be 1,313-1,611 years ago. The separation time of Ansus and Poom is estimated to be 1484 – 1,802 years ago, lastly, the separation time of Poom and Ambai is estimated to be 2,212 – 2,628 years ago.

DISCUSSION

Based on the results of the analysis, phonemic correspondences are obtained that have recurrence or occurrence of more than one pair of word relatives. A description of the distribution and rules of each correspondence device is presented as follows.

Phoneme correspondence of Wooi, Poom, Ansus, and Ambai
Table F. Dhonomo correspondence between Weei and Ansus

No No Data	Gloss	Wooi	Angua	Phoneme	
INO	NO Dala	GIOSS	WOOI	Ansus	correspondence
1	76	teeth	[tɛrɛŋ]	[dɛrɛŋ]	/t/~/d/#_V
2	93	fish	[tiaŋ]	[dia]	/t/~/d/#_V
3	108	right	[cɔbataŋ]	[dowataŋ]	/c/~/d/#_V
4	115	left	[cɔwiri]	[dɔwiri]	/c/~/d/#_V
5	137	night	[curu]	[diru]	/c/~/d/#_V
6	38	moon	[hɛmbai]	[yɛmbai]	/h/~/y/#_V
7	186	fly	[hɛpɔ]	[yepo]	/h/~/y/#_V

Based on table 5, it was found that pairs of phoneme correspondence between Wooi and Ansus were 7 data pairs. Phoneme correspondence of all pairs comprised consonant correspondences consisting of 3 rules, namely /t/~/d/, /c/~/d/, and /h/~/y/.

Table 6. Phoneme correspondence between Wooi and Poom						
No	No No Data	Gloss	Wooi	Poom	Phoneme	
NO	No Data	01033	**001	1 00m	correspondence	
1	76	teeth	[tɛrɛŋ]	[diɛŋ]	/t/~/d/#_V	
2	93	fish	[tiaŋ]	[dian]	/t/~/d/#_V	
3	11	flow	[terapi]	[tarapi]	/e/~/a/K_V	
4	21	new	[wɛwɔru]	[wawɔru]	/ε/~/a/K_V	
5	116	dirty	[kɛrariha]	[karariha]	/ε/~/a/K_V	
6	28	swell	[bebara]	[babara]	/e/~/a/K_V	
7	22	wet	[hepapu]	[hipapu]	/e/~/i/K_V	
8	154	short	[tɛnaŋ]	[tanaŋ]	/ε/~/i/K_V	
9	124	large	[mɛrɛwaŋ]	[mirewaŋ]	/ε/~/i/K_V	
10	134	knee	[aɛbu]	[aibu]	/ε/~/i/K_V	
11	88	count	[atɔra]	[watɔra]	/ø/~/w/_V	
12	136	eat	[ampi]	[wampi]	/ø/~/w/_V	

No	No Data	Gloss	Wooi	Poom	Phoneme
INU	NO Dala	01033	W 001	FUUIII	correspondence
13	143	drink	[սոսդ]	[wսոսդ]	/ø/~/w/_V
14	145	to vomit	[mamuta]	[mumuta]	/a/~/u/K_V
15	178	to fear	[matai]	[mutai]	/a/~/u/K_V
16	50	and	[kɔŋ]	[kɔn]	/ŋ/~/n/V_#
17	156	woman	[wawiŋ]	[wawin]	/ŋ/~/n/V_#

Based on table 6 found that pairs of phoneme correspondence between Wooi and Poom were 17 data pairs. Phoneme correspondence of all pairs comprised vowel correspondences and consonant correspondences namely /t/~/d/, /e/~/a/, /e/~/i/, /ø/~/w/, /a/~/u/, and /ŋ/~/n/.

No No Data		Class	\\/oo!	Amphal	Phoneme
NO	No Data	Gloss	Wooi	Ambai	correspondence
1	10	fire	[atia]	[adia]	/t/~/d/V_V
2	76	teeth	[tɛrɛŋ]	[dɛrɛŋ]	/t/~/d/#_V
3	93	fish	[tiaŋ]	[dian]	/t/~/d/#_V
4	117	fingernail	[warati]	[waradi]	/t/~/d/V_V
5	151	long	[terɔi]	[dɛwaroi]	/t/~/d/#_V
6	14	how	[topino]	[tɔfino]	/p/~/f/V_V
7	77	to bite	[keripi]	[kirifi]	/p/~/f/V_V
8	180	earth (soil)	[kakɔpa]	[kahɔfa]	/p/~/f/V_V
9	186	fly	[hɛpɔ]	[sifɔ]	/p/~/f/V_V
10	188	breast	[apui]	[tafui]	/p/~/f/V_V
11	38	moon	[hɛmbai]	[ɛmbai]	/h/~/ø/#_V
12	197	bone	[nɛhina]	[neina]	/h/~/ø/V_V
13	71	уои	[au]	[wau]	/ø/~/w/#_V
14	104	leg	[aɛŋ]	[awɛn]	/ø/~/w/#_V
15	134	knee	[aɛbu]	[awɛbuka]	/ø/~/w/#_V
16	136	eat	[ampi]	[dampi]	/ø/~/d/#_V
17	143	drink	[սոսդ]	[dunun]	/ø/~/d/#_V
18	154	short	[tɛnaŋ]	[tinaŋ]	/ε/~/i/K_K
19	187	to laugh	[hɛmari]	[mirari]	/ε/~/i/K_K
20	167	wing	[warapema]	[waraɛman]	/ø/~/n/V_#

Based on table 7, 23 pairs were found phoneme correspondence between Wooi and Ambai as many as 8 data pairs. Phoneme correspondence of all pairs there was a vowel correspondence comprised of 2 rules, namely $|\epsilon| \sim /i|$ and $|a| \sim /i|$. While the consonant correspondence comprised 6 rules, namely $|t| \sim /d|$, $|p| \sim /f|$, $|h| \sim /\emptyset|$, $|\emptyset| \sim /w|$, $|\emptyset| \sim /d|$, and $|\emptyset| \sim /n|$.

No	No Data	Gloss	Ansus	Ambai	Phoneme
NU	NU Dala	GIUSS	Alisus	Ampai	correspondence
1	14	how	[topino]	[tɔfino]	/p/~/f/V_V
2	77	to bite	[keripi]	[kirifi]	/p/~/f/V_V
3	86	to suck	[yupi]	[sufi]	/p/~/f/V_V
4	180	earth (soil)	[kakɔpa]	[kahɔfa]	/p/~/f/V_V
5	188	breast	[tapuni]	[tafui]	/p/~/f/V_V
6	157	belly	[anɛŋ]	[ธทธท]	/ŋ/~/n/V_#
7	37	fruit	[aibɔŋ]	[aibɔn]	/ŋ/~/n/V_#
8	82	heart	[anɛrarɔŋ]	[ɛnɛrɔrɔn]	/ŋ/~/n/V_#
9	50	and	[kɔŋ]	[kɔntai]	/ŋ/~/n/V_
10	52	blood	[ria]	[rika]	/ø/~/k/V_V
11	116	dirty	[kɛraria]	[rarika]	/ø/~/k/V_V
12	71	уои	[au]	[wau]	/ø/~/w/#_V
13	104	leg	[aɛŋ]	[awɛn]	/ø/~/w/V_V
14	134	knee	[aɛbu]	[awɛbuka]	/ø/~/w/V_V
15	93	fish	[dia]	[dian]	/ø/~/n/V_
16	147	to breathe	[asɛŋ]	[ansɛn]	/ø/~/n/V_K
17	167	wing	[warapɛma]	[waraɛman]	/ø/~/n/V_#
18	170	who	[matɛi]	[mantei]	/ø/~/n/V_K
19	154	short	[tɛnaŋ]	[tinaŋ]	/ε/~/i/K_K
20	178	fear	[mɛtai]	[mitai]	/ε/~/i/K_K

Table 8. Phoneme correspondence between Ansus and Ambai

Based on table 8, the phoneme correspondence found 20 pairs of data between Ansus and Ambai, such as phoneme correspondence in total there are 6 pairs. Vowel correspondence comprised of 1 rule, namely $|\epsilon| \sim |i|$. Consonant correspondence comprised of 5 rules, namely $|p| \sim |f|$, $|\eta| \sim |n|$, $|\emptyset| \sim |k|$, $|\emptyset| \sim |w|$, and $|\emptyset| \sim |n|$.

	Tak	ie J. monen	ne correspondence i	etween Ansus and Po	Phoneme
No	No Data	Gloss	Ansus	Poom	
		-			correspondence
1	11	flow	[tɛrapi]	[tarapi]	/ε/~/a/K_K
2	21	new	[wɛwɔru]	[wawɔru]	/ε/~/a/K_K
3	28	swell	[bɛbara]	[babara]	/ε/~/a/K_K
4	154	short	[tɛnaŋ]	[tanaŋ]	/ε/~/a/K_K
5	45	rotten	[kɛnkɔŋ]	[kiŋkɔŋ], [nuhai]	/ε/~/i/K_K
6	75	fat	[bɛba]/[piuŋ]	[biba]	/ε/~/i/K_K
7	85	green	[mikaɛ]	[mikai]	/ε/~/i/V_#
8	134	knee	[aɛbu]	[aibu]	/ε/~/i/V_K
9	183	thick	[tepapei]	[tipapei]	/ε/~/i/K_K
10	50	and	[kɔŋ]	[kɔn]	/ŋ/~/n/V_#
11	156	woman	[wawiŋ]	[wawin]	/ŋ/~/n/V_#
12	84	to live	[wiɛŋ]	[wihiɛŋ]	/ø/~/h/V_V

Table 9. Phoneme correspondence between Ansus and Poom

No	No Data	Gloss	Ansus	Poom	Phoneme
INU	NO NODala		AIISUS	FUUIT	correspondence
13	147	to breathe	[asɛŋ]	[hasɛŋ]	/ø/~/h/V_V
14	197	bone	[nɛina]	[nɛhina]	/ø/~/h/V_V
15	98	to sew	[dawari]/[dawa]	[wawari]	/d/~/w/#_V
16	136	eat	[dampi]	[wampi]	/d/~/w/#_V
17	143	drink	[dunuŋ]	[พบทบŋ]	/d/~/w/#_V

Based on Table 9, the phoneme correspondence found 17 pairs of data between Ansus and Poom. Vowel correspondence comprised $|\epsilon| \sim |a|$ dan $|\epsilon| \sim |i|$. Meanwhile, consonant correspondence comprised $|\emptyset| \sim |h|$, $|d| \sim |w|$, and $|\eta| \sim |n|$.

Table 10. Phoneme correspondence between Poom and Ambai					
No	No Data	Gloss	Poom	Ambai	Phoneme
					correspondence
1	14	how	[tɔpeno]	[tɔfino]	/p/~/f/V_V
2	18	many	[pitau]	[fiyau]	/p/~/f/#_V
3	180	earth (soil)	[kakɔpa]	[kahɔfa]	/p/~/f/V_V
4	38	moon	[hɛmbai]	[ɛmbai]	/h/~/ø/#_V
5	163	white	[byuha]	[byua]	/h/~/ø/V_V
6	197	bone	[nɛhina]	[neina]	/h/~/ø/V_V
7	68	to sit	[muhɔi]	[munɔhi]	/ø/~/n/V_V
8	170	who	[matɛi]	[mantei]	/ø/~/n/V_K
9	98	to sew	[wawari]	[dawari]	/w/~/d/#_V
10	136	eat	[wampi]	[dampi]	/w/~/d/#_V
11	143	drink	[Խսոսդ]	[dunun]	/w/~/d/#_V
12	154	short	[tanaŋ]	[tinaŋ]	/a/~/i/K_K
13	14	how	[tɔpeno]	[tɔfino]	/p/~/f/V_V

Based on Table 10 found 13 data pairs of phoneme correspondence between Poom and Ambai. In phoneme correspondence of all pairs, there is 1 vowel correspondence which is $|a|\sim/i|$. Meanwhile, consonant correspondence consists of 4 rules, namely $|p|\sim/f|$, $|h|\sim/ø|$, $|ø|\sim/n|$, and $|w|\sim/d|$.

Language Kinship of Wooi, Poom, Ansus, and Ambai

As stated in this research, lexicostatistic and glottochronology to determine the percentage of relative words (cognate) and calculate the separation time of language, called quantitative technique. The quantitative result is a hypothesis to determine language kinship. Another piece of evidence to determine language kinship is need a qualitative technique that performs the separation of phonological evidence and unification of phonological evidence. This research just limited to quantitative techniques.

Wooi language has phonemes that a total of 34 segmental phonemes consisting of 5 vowel phonemes, 13 diphthongs, and 16 consonant phonemes. 5 vowels comprised /a/, /i/, /e/, /u/,

/o/. Meanwhile 16 consonat comprised /p/, /b/, /t/, /d/, /k/, /m/, /n/, /¥/, /ŋ/, /ß/, /s/, /h/, /c/, /r/, /w/, /j/. In addition, 13 diphtongs comprised /iu/, /io/, /ia/, /ie/, /ei/, /ai/, /ae/, /au/, /ou/, /oi/, /ua/, /ui/, and /uo/. (Sawaki, 2017). Poom language has 5 vowels, that is /a/, /i/, /u/, /e/, and /o/. The consonant phoneme of Poom consist of /p/, /b/, /t/, /d/, /k/, /m/,/h/, /y/, /w/, /s/, /r/, /ŋ/. Price & Donohue (2009) stated that Ansus language has phonemes comprised 5 vowels, that is /a/, /i/, /u/, /e/, and /o/. Ansus's consonant comprised /p/, /b/, /t/, /d/, /k/, /m/, /n/, /ß/, /s/, /r/, /w/, /j/. Ambai language also has 5 vowels, that is /a/, /i/, /u/, /e/, and /o/. The consonant phoneme of Ambai consist of /p/, /b/, /t/, /d/, /k/, /m/, /n/, /ß/, /s/, /r/. (Silzer, 1983)

During my fieldwork, on Yapen Island there were 7 indigenous tribes, namely, W3 (Wondei, Wondao, Wonawa) tribe, the Pombawo tribe, the Ampari tribe, the Yawaonat tribe, the Aruisai tribe, the Busami tribe, and Berbai tribe. According to the tribe chief, Although there are several tribes, communication can happen because it is on one island. So the familiarity of one tribe with another is because of marriage with other tribes. Also, when there is a traditional celebration, nearby tribes be invited to the traditional celebration. Therefore a high percentage of kinship is in line with this fact. Languages that have a high percentage are groups that are closer in membership, meanwhile, languages that have a low percentage of kinship are groups whose membership level or kinship is more distant.

CONCLUSIONS

After analyzing the percentage language kinship of Wooi, Poom, Ansus, and Ambai languages above, the following conclusions can be underlined. Between four languages that have the highest percentage of language kinship are Wooi and Ansus. The percentage is 64%. Ansus and Ambai is 53%. The language kinship percentage of Wooi and Poom is 54%. Ansus and Poom is 49%. Wooi and Ambai is 45%. The lowest percentage of language kinship in Poom and Ambai is 35%.

The result determined that Wooi, Poom, Ansus, and Ambai are in the same group. Wooi, Poom, and Ansus are the language classified as a family. Wooi, Ansus, and Ambai are also the language classified as a family. Meanwhile, Poom and Ambai classified are stock. Based on the qualitative evidence, the similarities and consistency of sound changes were found in the four languages. The evidence of phonemic correspondences is $/t/~/d/#_V$, $/p/~/f/V_V$, $/h/~/ø/V_V$, and $/ø/~/w/#_V$. The results of this research, it is hoped and is expected to contribute theoretically and practically to the field of historical comparative linguistics. For future research, I suggest determining more deeply the qualitative technique or reconstruction.

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