

# A Comparative Linguistic Study on Ambai, Ansus, Menawi and Biak Languages in Papua

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**Abstract**—This study is historical-comparative linguistic research of the languages of indigenous peoples in Saireri Bay, Papua province, namely the Ambai, Ansus, Menawi, and Biak languages. These languages are classified as non-Austronesian languages (SIL, 2000) and are hypothesized to be closely related. This study aims to find accurate evidence to reveal the genetic relationship level between these four languages. The study's data consisted of the Swadesh list's 200 basic words. The method applied in this study is a comparative method, supported by observation, interview, and documentation techniques. Based on the lexicostatistics technique, it was found that the quantitative evidence indicated that the highest related cognates reach 47% and the lower-level reach 38%, based on the lexicostatistics from the Swedish's 200 basic vocabularies. The percentage of the related vocabulary is higher than in the other languages in the regency. The qualitative evidence found is the exclusive shared phonological and lexical innovation, strengthening the quantitative evidence. The innovation that phoneme PAAMB \*j turns into/z/and/d/, \*h turns into/O/on Biak. Besides that, metathesis, omission, and phoneme addition. In addition, after the reconstruction, the phoneme system of Proto-language Ansus-Ambai-Menawi and Biak (PAAMB) with segmental phonemes is five vowels and 15 consonant phonemes. The vowels of PAAMB are \*i, \*e, \*a, \*o, and \*u, which have complete distribution, and the consonants that are (1) consonants that have complete distribution \*p, \*m, \*h, (2) consonants that have distribution in the initial and middle of words \*b, \*w, \*f, \*t, \*d, \*n, \*s, \*r, \*j, \*k, \*g, \*y, dan \*h.

**Index Terms**—genetic relationship, reconstruction, sub-group

## I. INTRODUCTION

This study focuses on the regional and local languages spoken in the Saireri Bay area of Papua Province, Indonesia. The Saireri customary territory is the customary territory of the tribes living in the northern region of Papua Province, especially in coastal areas. Geographically, the northern part of the area is bordered by the Biak regency while the southern part is bordered by the Waropen regency. Numerous research on regional and local languages in Papua province has been carried out, covering all linguistic components such as morphology, syntax, and semantics. However, studies that examine language kinship relations are still rarely carried out.

This research is a scientific study of language from a comparative point of view. It discusses the genetic relationships of non-Austronesian (Papuan) languages of the Ambai, Ansus, Menawi, and Biak language groups to reconstruct the proto-language of these languages by way of the comparative method (historical-comparative linguistic studies). Previous studies on the grammar of these languages revealed many similarities between the languages, especially in terms of phonology or lexicon (Capell, 1938; Heeschen, 1982; Dunn et al., 2002; Ross, 2005; De Vries, 2005). However, this similarity of the lexicon and sound raises the big question: does the similarity of sound and similarity of the lexicon of these languages prove that these languages are related, thus causing the blurring of the language grouping? To answer this question, empirical evidence is needed through accurate research. For the reasons stated above, researchers are encouraged to take part in a comprehensive research effort on these languages that has implications for our understanding of linguistic facts and of genetic or ancestral connections between these languages to prove the relationship between these languages based on inherited elements of the language of origin or proto-languages that are thought to have inherited the languages that exist today.

## II. THEORETICAL BASIS

This research generally discusses the genetic relationship of a group of languages within language families and seeks to find a common origin for groups of languages that derive from these languages by identifying the phonological and morphological similarities of related languages and determining the direction of the spread of languages (Schmidt, 1992). Proto-language reconstruction as part of quantitative and qualitative analysis was conducted by applying the theory of genetic classification (Sidwell, 2002) to formulate the proto-language of Ambai-Ansus-Menawi-Biak languages spoken in the Saireri Bay area. The formulation of the proto-form can give us an overview of the phoneme characteristics and inventory of the proto-language in the past (Ruhlen, 2002; Gonzales, 2019). The phonology and

lexical levels of each modern language are compared to figure out which group they belong to based on the percentage of cognate devices, certain patterns in language change, and their relationship to one another (Dyen et al., 1992). This leads to the conclusion that these languages are closely related lexicostatistically.

The connectedness and order of languages are obtained by finding the common authenticity that is inherited from the same ancestor (Bynon, 1979, p. 47; Mbakop, 2021). The common characteristic of this connotation hypothesis is the similarity of the linguistic form. One of the most reliable features is the similarity in form and meaning of words. Words that have similar or identical forms and meanings are called cognate sets (not as loans, coincidences, or tendencies of the universe), but hypothesized as the inheritance of the same origin. The regularity hypothesis consists of the systematic and disordered changes in sound in derived languages (Jannah, 2018). A part of the sounds of the original language that are passed down through the vocabulary as it changes often in a derived language.

### III. RESEARCH METHODOLOGY

This study was conducted using the comparative method (Durie & Ross, 1996); that is, by performing a feature-by-feature comparison of two or more languages for studying the relations between the Ambai, Ansus, Menawi, and Biak languages in Saireri Bay, Papua Province, based on the 200 basic words of the Swadesh list. Based on the data of the languages that are still alive and used by the people who speak them, it can be seen that they all come from the same ancestor or parental language.

#### A. Research Location

This study was conducted in the Saireri Bay area, Papua Province, covering the areas of the Ambai, Ansus, Menawi, and Biak languages.

#### B. Data Source

The primary data of this research is in the form of the spoken form taken directly from several native speakers of the Ambai, Ansus, Menawi and Biak languages.

#### C. Research Instrument

A research instrument is a tool used to obtain, measure, and analyzed data related to the topic. This study questionnaire is the instrument of this research. The format of a research instrument may consist of questionnaires, surveys, interviews, checklists or simple tests. Other tools are needed in the form of stationery that is useful for helping record.

#### D. Informants

An informant is a person who has special knowledge or mastered certain languages. The key informants in this research are the speakers of the language concerned and the samples are Ambai, Ansus, Menawi and Biak languages.

#### E. Data Collection Method

The data collection method is a methodical process of collecting, measuring, and analyzing accurate data. In this research, the researcher uses some techniques in collecting the data. Those are observation, interview, and documentation methods. In the application, the recording technique is applied face-to-face, based on the informant's information, which has been selected based on the predetermined criteria.

#### F. Data Analysis Method

This study was conducted by applying a comparative method to compare the features of the languages diachronically. This method is employed by using the Swadesh 200-word list. Qualitative analysis in the search for genetic relationships between languages involves certain techniques to obtain accurate language facts of the common ancestor (proto-language) of a related language group by observing words (lexicon) statistically, to attempt to establish the grouping based on the percentage of similarities and differences of a language with other languages, and also to be able to classify kinship between two or more languages by comparing the vocabulary and the similarities that exist. Following the determination of the 200 basic vocabularies, the lexicostatistics technique was used.

#### G. Reconstruction Method

The reconstruction method is a study on the prediction of old-form of modern languages in the search for the genetic relationship of languages by way of quantitative analysis. These old forms are hypothesized to occur in the past before modern languages existed. The method is applied by formulating the proto-form etymon of Ambai, Ansus, Menawi, and Biak, based on the 200 basic words of the Swadesh list.

#### H. Lexical Construction

Lexical reconstruction is one of the language or dialect groupings techniques that emphasize statistical calculations of words to know the number of similarity of comparable relative's words. In this study, lexical construction is used to find the proto-word sets that have a certain or the same (similar) meaning in the Ambai, Ansus, Menawi, and Biak languages. The data obtained in the field are collected, and then identified by the lexicostatistical method through the procedures of

grouping the basic vocabulary of the related languages; choosing basic vocabulary that is identical, similar, and different; counting which pairs are related words, connecting the results of the calculation in the form of percentage; making genealogical lines or language kinship tree.

#### IV. RESULTS AND DISCUSSION

##### *Swadesh 200 Word List and Description of the Collected Data*

No	English	Ambai language	Ansus language	Menawi language	Biak language
1	Ash	Kangganang	Wawu		Fafem
2	Water	Meroha	Maria	Merah	War
3	Root	Yau	Uwa		Rars
4	I	Newasa	Yaw	Yaune	Aya
5	flow	Deda	Dira, Year	Dedah	Iki/ daf
6	Child	Arikan	Kumai	Arikang	Mkun/Romana
7	Dog	Fiavwera	Wona	Viawera	Naf,make,rofan
8	Wind	Wanang	Wanan	Wanan	Wam
9	What	Fiani	Pitoti	Viani	Rosa
10	Fire	Adia	Adia	Adia	For
11	float	Dewohi	Dewoi	Wanagfoi	Ipisen
12	Smoke	Riraing	Wiyaw	Resaniso	Pawe
13	Cloud	Kawari	Mandipi	Sirs	Mandep
14	How	Todoni	Topino	Tofino	Raiso
15	Well	Dentang	Wyento	Beng	Pyum
16	Come back	Fobera	Toweri	Barabera	Kaber
17	Lots	Bitoiya	Piyawu	Fiau	Nabor
18	Father	Dai	Yayai	Dai	Kamam
19	lay down	Watai	Wata	Bena	Denf
20	New	Weworu	Waworu	Waworu	Babo
21	Wet	Wewasa	Wawa	Wewasa	Idok
22	Stone	Kamiai	Kami	Kaniai	Karui
23	Some	Beiru	Bototi	Beiru	Vis
24	Split	Bauri	Tebau	Bauni	Bolah
25	Right	Tarai	Tarai	Antu	Kaku
26	Seed	Aibong		Eai	Maf mor
27	Swollen	Bebara	Bebara	Bebara	Ibyar
28	Swimming	Deriai	Worowoi	Deriai	Das
29	Walk	Tora	Boaruau	Tora	Imbrau,mbrau
30	Heavy	Miraba	Membabati	Miraba	Mmarbak,mirabak
31	give	Boni	Bonima	Bohonai	Bei
32	Big	Fiabai	Bebamantaw	Fiabai	Iba
33	When	Kidoniwo	Bontopino	Radiafani	Rassana
34	Animal	Fiaung	Pyau	Andoa	Aiwan
35	Star	Awaha	Pyori	Ampar	Mak
36	Fruit	Aibong	Aibon	Aio webong	Bon
37	Hair	Wawaru	Neituin	Nuwawuru	Bur
38	Flower	Renau	Aibopu	Ainarifo	Pampen
39	kill	Muni	Muni	Muni	Mun
40	Hurry	Dewi	Dewe	Kya eingwera mitona nomiorong	Siki dem
41	Bad	Kairara	Myoyawa	Kaira	Isnai fawa wiwa
42	Bird	Romu	Ayah	Romu	Mau
43	Rotten	Piro	Kenkon	Misuhiai	Ibyewa
44	Meat	Tarai	Tarai	Ruru	Ker
45	Lake	Ruru	Tururu	Arirau	Urs
46	And	Kontai	Interi	Tuti	Ma
47	Blood	Rika	Ria	Rika	Rik
48	Come	Roma	Rwama	Dana	Rwama
49	Leaf	Aireraung	Weraun	Arirau	Wundam
50	Dust	Kanggarang	Wawu	Nukahaifo	Pau
51	Close	Kefang	Kikewu	Kefan	Fanau
52	With	Tuti	Konta	Donria	Aya farpu,yafarpu sko
53	Hear	Terahuoa	Tarawowa	Taramuifa	Wower
54	In the	Narorong	Nararompui	Robuhantani	Ryo wandum
55	on,on	Nao	Nawana,yawe	Rabnang bo	Ryo
56	Cold	Kararutu	Yenwana	Deunana	Syufe,Isyuf
57	Where	Nadoni	Natotoi	Nadoni	Ryoiso
58	Self (standing)	Boa	Yawuyoa	Boa	Wors
59	Here	Nanina	Nanina	Minaifa	Dine
60	There	Nawana	Nawana	Nanaifa	Diya
61	Sew	Daua	Bewaware	Esairi	Sapsip

62	Street	Tora	Rwanto	Bran	Iyan,Sampak
63	Heart	Kambaina	Anewraron	Kambaina	Ken
64	Fall	Tawai	Twawa	Sawai	Isapi
65	Far	Waroi	Woroi	Waroi	Fanamba,byingkwana
66	rapids	Foa		Afui	
67	Push	Tawampare	Twantetari	Ewarami tuba	Pampun
68	Two	Boru	Kodu	Boru	Suru
69	Sit down	Minohi	Moyoi	Monoliu	Kon,kain,wakain
70	Tail	Aman daung	Amakapun	Sumiri	Purai
71	Four	Boa	Manua	Boa	Fyak
72	You	Wau	Au	Wawa	Auw
73	Dig	Sirai	Esirai	Sesa kamirei	Bai
74	Salt	Ai	Emasuasi	Garam	Masa
75	scratch				
76	Bubble	Airing	Budebudear	Mireha wiwu	Pirai
77	Fat	Feabai	Pyun	Netarai fiabai	Iba,baku beba,mafem
78	Tooth	Deremu	Deremu	Dereng	Nakor
79	Bite	Karifi	Keripi	Kirifi	Dark,darki
80	rub	Pisoi	Kyari	Piso	Pyos
81	Mountain	Uwai	Wi	Uai	Bon
82	hit	Boi	Wyorai	Boi	Muni
83	Liver	Enerorong	Anewraron	Eneronong	Barpisu
84	Green	Kehe	Mekae	Wowongho	
85	Nose	Ubomu	Wompemu	Ubong	Snonipo
86	Life	Barang	Wey	Nua ninu	Ibye,kenem
87	Suck	Wufi	Wupi	Suh	Pam,ipam
88	Black	Nyumetang	Myetam	Numetan	Paisem
89	Count	Boto	Detori	Botok	Kor,wakor
90	Rain	Mamang	Maman	Metang	Imyun
91	Forest	Airorong	Bon	Uwairorong	Irmor
92	She	Tarai	Yo	Wau	Imbo
93	Mother	AI	Inani	Ai	Awin
94	Fish	Diang	Ayemu	Diang	In, ine
95	Tie	Bawiti	Koyeyi	Tabohir	Wayawk
96	Wife	Binemu	Wawini	Dinemo	Swa
97	That	I	Anato	Wanoi	Iya
98	Fog	Kawari	Beroran	Ayewi	Pampan
99	Foot	Awemu	Ayemu	Avenue	Wemin
100	If	Ambori	Interi	Mano	Rarirya
101	We us	Ameo,Auro	Tata,Wira	Atoru amena	Inngo
102	You, all of you	Amea kiyai	Tatakwira,tampandura	Muntorukai	Mgo,mgokame
103	Right	Domoya	Dowatan	Domoya	Dasar
104	because	Weo	Bontopino	Ampefe	Kukro,befnai
105	To say	Kaiwo			Wakofen
106	Fight	Tumuntata	Emamusa		Mamun-mun
107	Head	Nungkamiai	Dungkami	Mamakaia	Wokor
108	Dry	Sirahiyai	Yenaya	Sirahi	Pnase
109	Small	Ketui	Meiya	Ketuai	Kasun
110	Left	Dowiri	Dowiri	Dowei	Daku
111	Dirty	Kerira	Keraria	Kotorira	Ibyewa
112	Skin	Rerawa	Kerawa	Rerawa	Kif
113	Tree skin	Airerawa	Airerawa	Ainore rawa	Kif ai
114	Yellow	Bemining	Kerawi	Mirehara	Nar,nya nyar
115	lice	Utu	Utu	Utu	Wuk,uk
116	Other	Siai	Wyeya	Siai	Wese
117	Sky	Rora	Mandipi	Sora	Mandep
118	sea	Airau	Rawana	Revana	Swau
119	Wide	Nemu torai feabai	Beba	Tirara	Iba
120	Neck	Rahanang	Rawkanan	Rahang fo	Sasukor
121	Man	Mang	Amyoman	Man	Snon
122	Throw	Wo	Eyo	Woi	So
123	Tongue	Taperemu	Worepan	Tibohanawai	Ramar
124	Look	Botioi	Erewoi	Boti	Mam,mame
125	Five	Ring	Borin	Ring	Rim
126	Slippery	Sirarebat	Kya	Sorarei batanai	Dakukyew
127	Spit	Kandai	Kanyu	Ehandi	Anif,danife
128	Straight	Mimoya	Yerivan	Mimoya	Dafbiober
129	Play	Mei	Eyanyui	Mei	Fnak
130	Eat	Bampi	Yampi	Bampi	Wan.wanan
131	Evening	Diru	Diru	Diru	Mandira
132	Eye	Uremu	Renkami	Uremi	Kmamor
133	Sun	Wo	Woyo	Wofoi	Or

134	Die, Die	Wireha	Kedato	Mireha	Imar
135	Red	Berika	Merai	Beika	Ijik
136	They	Amea	Ama	Mea	Sko
137	Drink	Bunung	Yanu	Bunung	Wim,wirem
138	Mouth	Boromu	Woremu	Boromu	Swadon
139	Throw up	Memuta	Momuta	Mumotafi	Bayorem,Byayorem
140	Breath	Wongse	Asen	Angsefi	Kenem
141	Name	Wonomu	Anomu	Wonomu	Snou-snou
142	on	Dong	Dea	Dengaroru	Isak
143	Sing	Rohi	Ryoi	Rohu	Disen,dow
144	People	Nyungtarai	Nyuntarai	Nuntarai	Snonggaku
145	Hot	Maninggapoi	Menkakopi		Isam
146	Long	Dewaroi	Tembani	Dewaroi	Ikwan
147	Sand	Nyumbuaing	Ruwuan	Niruwai	Karyem
148	Hold	Ruti	Ruti	Rutawanai	Fufe
149	Short	Tinang	Tenam	Tinang	Iknampu
150	squeeze	Kuwari	Kuari	Webea	Warams,warames
151	Woman	Wiwing	Wawin	Wiwini	Bin
152	Stomach	Enemu	Anemu	Enemu	Snewart
153	Think	Yeite	Wepikir	Piker	Kara
154	Tree	Ai	Ai	Ai	AI
155	Cut	Ferang	Perang kutuai	Verang	Kwaruk
156	Back	Warabia	Wanandei	Kurumufi	Dokor
157	White	Biyua	Byua	Bna	Pyoper
158	Hair	Numu	Duan daun	Menumiran daungwai	Pik
159	Grass	Afui	Nanimpun	Nineo	Abris
160	Wing	Warapemang	Warapema	Warapena	Prer
161	One	Boiri	Koiri	Baiyuri	Eser
162	A little	Kuteai	Katea	Kufenan	Kerkmun,nabarwa
163	Afternoon	Rahida	Raida	Rahida	Meser
164	Ready	Mantei	Matei	Maitei	Mamse
165	Narrow	Kepang	Kyota	Dadira	Ibawa
166	All	Sentenang	Kwirakai		Nakame
167	Husband	Wamuai	Awamui		Swari,snon ya buk riri
168	River	Waya	Maria	Waiya	Wurs
169	Sharp	Reisa		Reisa	Isar
170	Know	Boitawan	Weatawato	Dewatanai	Fafi,wawafi
171	Year	Fuira	Tahun	Defuna	Saun
172	Afraid	Mitai	Metai	Mutai	Makak
173	Rope	Wai	Wai	Wai	Kabrai
174	Land	Kaofa	Kakopa	Kohofa	Saprop
175	Hand	Waramu	Warawu	Wasamu	Bramin
176	scorching	Wofiah	Wekeramamu	Rabiti	Idares
177	Ear	Taramu		Taran	Kheraum
178	Egg	Aibong	Telur	Aibong	Pnor
179	Fly	Sifo	Yepo	Sifo	Irau
180	Laugh	Miri	Mori	Miri	Mararif
181	No	Nanafani	Wereria	Nanafani	Oroba
182	Sleep	Dena	Wena	Dea	Enf
183	Three	Botoru	Botoru	Botoru	Kyor
184	stab	Bisang	Biani	Tisan	Iwan
185	Thin	Timba	Meni	Newafo	Isrepek
186	Blow	Rurui	Bui	Suu	Wuf,wawuf
187	Worm	Kauboi		Kauboi	Arsyawek
188	Smell	Nanahi			Nyas
189	Old	Wiwing katu	Meitui	Nunahi	Mansar
190	Wash	Ruai	Roiwi	Mamo	Pap
191	Bone	Neina	Neina	Ina	Kor
192	Thick	Mamboni	Tepei	Rehabu	Ikpor
193	Blunt	Rahabu	Kebung	Rehabu ampa	Ipup,istraba
194	Stick	Aisiang	Aisoi	Aitatohi	Anggion
195	Snake	Tawai	Pyara	Tawai	Ikak
196	Wipe	Umamu	Kyari	Runamahikai	Sfu,wasfu
197	Intestines	Enemu	Anemui	Enerorong	Snewart
198	Flood	Merehadautai	Marya baki	Foafidaurai	Farbrub
199	Dry season	Wonifia	Merin	Embai we wopia muru	Paik ine idarese
200	Rainy season	Wametang	Myuna-panpan	Embai we metang muru	Paik ine imnyun ker

*Reconstruction*

*Lexical Innovation of Sub-Groups A1 A2*

PA1	A2	A1	A2	M
*adia	adia	adia	adia	for
*tarai	tarai	tarai	antu	kaku
*bebara	bebara	bebara	bebara	Ibyar
*muni	muni	muni	muni	mun
*tarai	tarai	tarai	ruru	ker
*nanina	nanina	nanina	minaifa	dine
*nawana	nawana	newana	nanaifa	diya
*deremu	deremu	deremu	deremu	nakor
*dowiri	dowiri	dowiri	dowai	aku
*airerawa	airerawa	airerawa	ainorerawa	kif ai
*utu	utu	utu	utu	wuk uk
*diri	diru	diru	diru	mandira
*ruti	ruti	ruti	rutawanai	wufe
*ai	ai	ai	ai	ai
*wai	wai	wai	wai	kabrai
*botoru	botoru	botoru	botoru	kyor
*neina	neina	neina	ina	kor

*Lexical Innovation of Sub-Groups A1 M*

PA	1M	A1	M	A2
*adia	adia	adia	adia	for
*dai	dai	dai	yayai	kamam
*wewasa	wewasa	wewasa	wawa	idok
*beiru	beiru	beiru	bototi	fis
*bebara	bebara	bebara	bebara	ibyar
*derai	derai	derai	worowi	das
*tora	tora	tora	boarua	imbrau
*miraba	miraba	miraba	membabati	mmabrak
*fiabiai	fiabiai	fiabiai	bebamantaw	Iba
*muni	muni	muni	muni	mun
*romu	romu	romu	ayah	man
*rika	rika	rika	ria	rik
*nadoni	nadoni	nadoni	natoti	ryoyo
*boa	boa	boa	yawuyoa	wors
*kambaina	kambaina	kambaina	anewraron	ken
*waroi	waroi	waroi	worowi	byingkwon
*boru	boru	boru	kodu	suru
*boa	boa	boa	manua	fyak
*boi	boi	boi	wyorai	muni
*ai	ai	ai	inani	awin
*diang	diang	diang	ayemu	in,ine,ika
*domoya	domoya	domoya	dowatan	dasar
*rerawa	rerawa	rerawa	kerawa	kif
*utu	utu	utu	utu	wuk
*siai	siai	siai	wyeyawa	wese
*ring	ring	ring	boring	rim
*mimoya	mimoya	mimoya	yeriwan	dafbiober
*mei	mei	mei	eyannyui	fnak
*bampi	bampi	bampi	yampi	wan
*diru	diru	diru	diru	mandira
*bunung	bunung	bunung	yanu	wim
*boromu	boromu	boromu	woremu	swadon
*wonomu	wonomu	wonomu	anomu	snon-snon
*dewaroi	dewaroi	dewaroi	tembani	ikwan
*tinang	tinang	tinang	tenam	iknampu
*enemu	enemu	enemu	anemu	snewar
*ai	ai	ai	ai	ai
*rahida	rahida	rahida	raida	meser
*reisa	reisa	reisa		isar

*wai	wai	wai	wai	kabrai
*aibong	aibong	aibong	telur	pnor
*sifo	sifo	sifo	yepo	irauw
*miri	miri	miri	mori	mararif
*nafani	nafani	nafani	wereria	oroba
*botoru	botoru	botoru	botoru	kyor
*kauboi	kauboi	kauboi		arsywek
*tawai	tawai	tawai	pyar	ikak

*Lexical innovation of sub group A 2-M*

PA	2M	A2	M	A1
Wanan	wanan	wanan	wanan	wam
Adia	adia	adia	adia	for
Waworu	waworu	waworu	waworu	babo
Bebara	bebara	bebara	bebara	ibyar
Muni	muni	muni	muni	mun
Diru	diru	diru	diru	mandira
Ai	ai	ai	ai	ai
Wai	wai	wai	wai	kabrai
Botoru	botoru	botoru	botoru	kyor

*Lexical Innovation of Sub-Groups A1B*

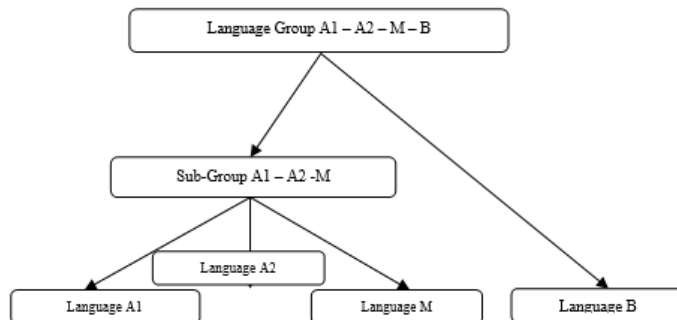
PA	1B	A1	B	A2
Ai	ai	ai	ai	ai

*Lexical Innovation of Sub-Groups A2B*

PA	2B	A2	B	A1
Rwama	rwama	rwama	roma	rwama
Ai	ai	ai	ai	ai

*Diagram 1 Family Tree*

*Language Family of A A1 – A2 – M – B Language Groups Based on Qualitative Evidences*



Having reviewed the presented results above, it is found that Ambai, Ansus, and Menawi languages are a group of related languages consisting of Ambai, Ansus, and Menawi languages. Moreover, the A1, A2, M language group is a separated group consisted of Ambai, Ansus, Menawi and Biak languages. Next, the Ambai – Ansus, Menawi language sub-group consists of Ambai, Ansus and Menawi languages.

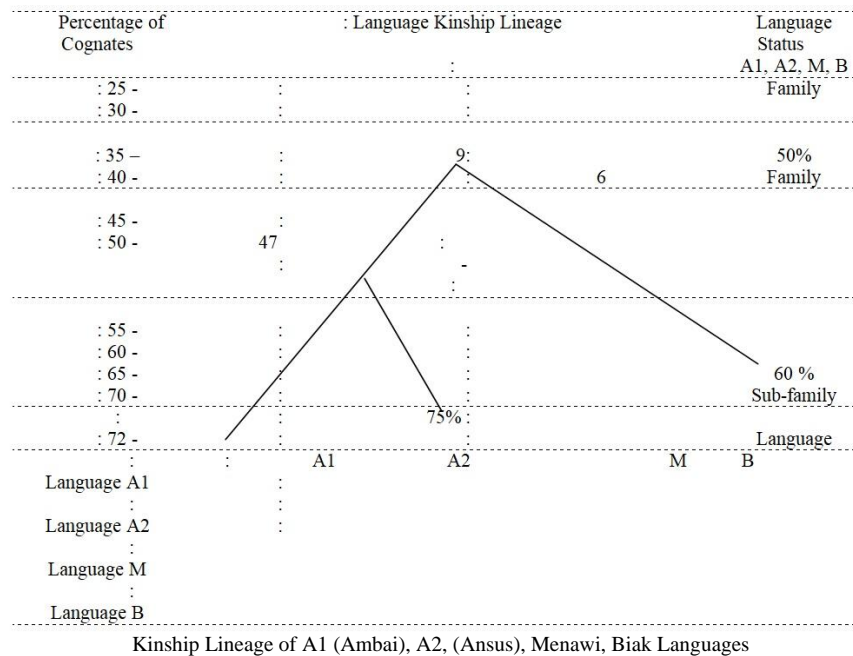
*Diagram 2 Percentage of Similarity*

*Quantitative Data of Ambai, Ansus, Menawi and Biak Languages*

Ambai	-			
Ansus	17	-		
Menawi	47	9	-	
Biak	1	2	0	-
	Ambai	Ansus	Menawi	Biak

Based on the diagram above, it is concluded that Ansus with Ambai has 17 related vocabularies, Menawi with Ambai language has 47 related vocabularies. Biak with Ambai language has 1 related vocabulary. Menawi language with Ansus language has 9 related vocabularies. Biak language and Ansus language have 2 related vocabularies. There are no related vocabularies between Biak with Menawi language (0). It means that there is no kinship relationship.

*Diagram 3 Lineage*



The genealogy of the languages A1 (Ambai), A2 (Ansus), Menawi, and Biak is stated as follows. Firstly, the Ambai, Ansus, Menawi language from the genealogy of these three languages (Ambai, Ansus, Menawi) is a separate group, while the Biak language is far from these three language groups. Secondly, of these three language groups (Ambai, Ansus, Menawi) the sub-groups of the three languages are derived as a separate member. Thirdly, lexically, the Ambai, Ansus, Menawi language groups have an average percentage of 49% of their native vocabulary belonging to the sub-family language.

#### *Etimon List*

\*adia 'fire'

S adia	PAIM	*adia	A1 adia	M adia
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\*ai 'mother'

S ai	PAIM	*ai	A1 ai	M ai
------	------	-----	-------	------

\*ai 'tree'

S ai	PA1M	*ai	A1 ai	M ai
------	------	-----	-------	------

\*aibong 'egg'

S aibong	PA1M	*aibong	A1 aibong	M aibong
----------	------	---------	-----------	----------

\*beiru 'few'

S beiru	PA1M	*beiru	A1 beiru	M beiru
---------	------	--------	----------	---------

\*bebara 'swollen'

S bebara	PA1M	*bebara	A1 bebara	M bebara
----------	------	---------	-----------	----------

\*Boa 'Self (standing)'

S boa	PA1M	*boa	A1 boa	M boa
-------	------	------	--------	-------

\*Boru 'two'

S boru	PA1M	*boru	A1 boru	M boru
--------	------	-------	---------	--------

\*Boa 'four'

S boa	PA1M	*boa	A1 boa	M boa
-------	------	------	--------	-------

\*bampi 'eat'

S bampi	PA1M	*bampi	A1 bampi	M bampi
---------	------	--------	----------	---------



*bunung ‘drink’				
S bunung	PA1M*bunung	A1 bunung	M bunung	
*boromu ‘mouth’				
S boromu	PA1M* boromu	A1 boromu	M boromu	
*botoru‘three’				
S botoru	PA1M *botoru	A1 botoru	M botoru	
* dai‘ Father’				
S dai	PA1M *dai	A1 dai	M dai	
*derai ‘swim’				
S derai	PA1M *derai	A1 derai	M derai	
*diang ‘fish’				
S diang	PA1M *diang	A1 diang	M diang	
*domoya ‘right’				
S domoya	PA1M *domoya	A1 domoya	M domoya	
*diru‘night’				
S diru	PA1M *diru	1A diru	M diru	
*dewaroi ‘long’				
S dewaroi	PA1M *dewaroi	A1 dewaroi	M dewaroi	
*enemu‘stomach’				
S enemu	PA1M*enemu	A1 enemu	M enemu	
*fiabai ‘big’				
S fiabai	PA1M*fiabai	A1 fiabai	M fiabai	
*kambaina ‘heart’				
S kambaina	PA1M*kambaina	A1 kambaina	M kambaina	
*kauboi ‘ worm ‘				
S kauboi	PA1M *kauboi	A1 kauboi	M kauboi	
*miraba ‘heavy’				
S miraba	PA1M *miraba	A1 miraba	M miraba	
*muni‘kill				
S muni	PA1M *muni	A1 muni	M muni	
*mimoya ‘straight ‘				
S mimoya	PA1M*mimoya	A1 mimoya	M mimoya	
*mei ‘play’				
S mei	PA1M*mei	A1 mei	M mei	
*miri ‘laugh’				
S miri	PA1M*miri	A1 miri	M miri	
*nadoni’where’				
S nadoni	PA1M*nadoni	A1 nadoni	M nadoni	
*nafani’not’				
S nafani	PA1M* nafani	A1 nafani	M nafani	

*romu 'bird'			
S romu	PA1M romu	A1 romu	M romu
*rika 'blood'			
S rika	PA1M rika	A1 rika	M rika
*rerawa 'skin'			
S rerawa	PA1M rerawa	A1 rerawa	M rerawa
*rahida 'afternoon'			
S rahida	PA1M *rahida	A1 rahida	M rahida
*siai 'other'			
S siai	PA1M * siai	A1 siai	M siai
*reisa 'sharp'			
S reisa	PA1M* reisa	A1 reisa	M reisa
*sifo 'fly'			
S sifo	PA1M* sifo	A1 sifo	M sifo
*tora 'walk'			
S tora	PA1M * tora	A1 tora	M tora
*tinang 'short'			
S tinang	PA1M * tinang	A1 tinang	M tinang
*tawai 'snaker'			
S tawai	PA1M * tawai	A1 tawai	M tawai
*utu 'lice'			
S utu	PA1M *utu	A1 utu	M utu
*wewasa 'wet'			
S wewasa	PA1M *wewasa	A1 wewasa	M wewasa
*waroi 'jauh'			
S waroi	PA1M waroi	A1 waroi	M waroi
*wonomu 'name'			
S wonomu	PA1M wonomu	A1 wonomu	M wonomu
*wai 'rope'			
S wai	PA1M wai	A1 wai	M wai

## V. CONCLUSION

Based on the description above, it is concluded that (1) the kinship of Ambai, Ansus, and Menawi languages is revealed, and their frequency is high, in which the percentage of word relatives (vocabulary) of Ambai and Menawi languages is 47; Ansus and Ambai languages have 17 related vocabulary; Menawi and Ansus have 9 related vocabulary; while Menawi and Biak have no related vocabulary (0). The Ambai, Ansus, and Menawi languages are then classified as belonging to the same proto or family based on quantitative evidence, lexical innovation, and lexical reconstruction, while the Biak language is classified as being geographically separated from the group. (3) The kinship Ambai, Ansus, Menawi, and Biak in Saireri Bay, Papua Province, are classified as non-Austronesian proto-languages based on phonemic correspondence, phonetic similarity, and word systems.

From the above conclusions, the comparative historical linguistic research on Ambai, Ansus, Menawi, and Biak languages in Papua Province in Saireri Bay is limited to quantitative and qualitative aspects, which needs further research on phonology, morphology, and syntax aspects. Therefore, the researcher strongly recommends that future researchers conduct more in-depth and more specifically similar studies using a historical-comparative linguistic

analysis to prove the relationship of the languages to the other languages in the surrounding area, which is useful for the development of non-Austronesian language studies.

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