

Response to Adriani & Kruyt (1914) About South Halmahera-West New Guinea Feature

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Abstract— This article intends to respond to the views of Dutch Scholars Adriani and Kruyt (1914) on the two phonological characteristics of South Halmahera-West New Guinea (SHWG). Methodologically the interview method was used to collect 200 basic vocabulary and 500 cultural vocabulary in six South Halmahera languages (Buli, Maba, Sawai, Gane, Taba, and Gebe), Amber, Maya (in Raja Ampat), and Biak languages. Data were analyzed using a *top-down approach* by looking at the realization of Proto-Austronesia (PAN) in these languages. The results of identification studies show that the final vocal removal in the SHWG languages occurs regularly but that change does not occur in all its members. For example, in the etymon *pija ‘how many’ and *pica ‘when’ in the Amber and Maya languages the vocal *a is still retained. In certain etymons, which are limited in number, there are final vowels that do not disappear but experience retention and innovation in the majority of SHWG members. For example, in etymon *ini, *gusi, *au, *kaSu, *siwa, *NiSawa, and *isa. The changes referred to are found in etymons which have the final vocals *i, *u, and *a. Second, it is different from the second feature regarding the removal of the middle position in the initial pressured word. From the data collected, this change is limited in number so that it cannot be used as a dominant feature of SHWG. Therefore, further studies need to be done on this matter.

Keywords— *phonological feature; basic vocabulary; culture vocabulary; top-down approach.*

I. INTRODUCTION

South Halmahera-West New Guinea (SHWG) is one of the four Austronesian sub-groups, in addition to Western Malayo-Polynesia, Central Malayo-Polynesia, and Oceania (Blust, 1978; 1983-84; 1993; and 2013). Western Malayo-Polynesia includes languages in western Indonesia (including Madagascar and the Philippines) to the eastern part of Sulawesi (excluding languages on Taliabo, Sula, and Buru Islands) in the north and in the south of Sumbawa. Central Polynesia includes the languages of Taliabo, Sula, and Buru in the northwest, then to the east of languages in the Seram Islands and in the southeast of all languages in the Aru Islands, to the southwest of the languages of Flores, Sumba, and Bima. Oceania includes languages on the northern coast of New Guinea, Solomon Islands, Micronesia, and Polynesia to the eastern Hawaiian Islands and New Zealand in the south. Meanwhile, South Halmahera-West New Guinea covers the western part of all AN languages in South Halmahera (SH), North Maluku Province, then east of the Raja Ampat Islands, following the northern coast of the bird's head to the south in Wandamen-Bomberai Bay, most on Yapen Island, Biak/Numfor in Cenderawasih Bay continues to the east following the coast of the mainland of Papua, some in Waropen, Mamberano to Sarmi, Papua Province.

According to Lewis et al (2015), the number of languages classified as SHWG is 41 languages; Blust (2013) around 30-40 languages; and Badan Bahasa (2008), ranging from 26-28 languages. The search results of various literature indicate that there is no understanding of AN historical linguists regarding the characteristics of SHWG. Adriani and Kruyt (1914 in Kamholz, 2014) are the people who first introduced the group. Using 101 basic vocabulary in several languages in South Halmahera, they recorded four characteristics of SHWG. That is, (1) the loss of the final vowel; (2) many words indicate the removal of the middle position on the silabe which begins with pressure; (3) plural third person pronoun si is used as plural noun markers; and (4) using reverse

genetif (owner-owned order). For the characteristics found, there has been no response from AN historical linguists who gave specific explanations, whether the concepts proposed by Adriani and Kruyt (1914) were adequate or not.

The first characteristic of the loss of vowel sounds at the final position, for example the sound *u* in PAN *qiSu in the languages of South Halmahera does not disappear, but changes to *ô* and *e*. Because, in the languages of Buli, Gane, Taba, and Gebe: *wôî*, while Maba and Sawai: *wei*. The form *wôî* and *ei*, allegedly from PAN *qiSu > *iSu > *iu > *ui > *oi* and *ei*. Likewise the sound of *a* in the PAN *siwa 'nine' does not disappear but changes to *e* in the languages Buli and Maba: *siwe*, while in Gebe it becomes: *ô* (*siwô*). The data shows that not all PAN vocal in the final position disappeared in the SHWG languages. Therefore, this paper intends to explain the hypothesis Adriani and Kruyt (1914) in particular about the two phonological characteristics of the SHWG Subgroup. Is it true that the vowel sounds of PAN disappear in the SHWG languages. If true, whether the disappearance occurs in all vowels is regular or not. Conversely, if it does not disappear, how will it change. Likewise with the characteristics of the second SHWG, it is unknown what PAN sounds are that disappear in the middle position.

II. LITERATURE REVIEW

Sound changes that occur every language can be different from each other (Bynon, 1979) due to a different course of history. Even every word in a language can have its own history (Lehmann, 1973). Besides sound changes (phonology), there are also lexical changes. According to Lehmann (1973) lexical change is the substitution of the form or meaning of the protex language lexicon in derivative languages. The old form is replaced by a new form, but still inherits the old meaning, or the old form remains inherited, but inherits a new meaning. According to Bynon (1979) a sound change does not affect the words in the lexicon at once, but one by one, so that when the change occurs there are certain other words that have not changed.

Sound changes from ancient languages into more modern languages are regular and irregular (Bynon, 1979: 29-30). These changes can occur in both consonant and vowel sounds. Regular sound changes occur because of the requirements of a particular linguistic environment, while irregular changes occur not affected by linguistic environments. Because of the requirements of a particular linguistic environment, the data on regular rules is not limited in number, while the rules which are irregular in nature are limited to just one or two examples. So, if a phoneme * *x* > *y* / # -, then it can be interpreted and explained that the environment or initial position is the condition of the cause of change during a certain period of historical development of language. This means that in other environments, the same sound does not change at all or does not experience the same change. Thus, differences in environmental conditions cause protophonemes to inherit with or not change. The formulation of sound changes, by Neogramarians is called the law of sound (Hock, 1986).

Both regular and irregular changes can take the form of (a) lenition; (b) deletion: aferesis, apocope, and syncope; (c) additions: prothesis, epentesis, and paragog; (d) split; (e) mergers; (f) compression, (g) assimilation, (h) dissimilation, (i) metathesis, (j) contraction (Crowley, 1987; Lehmann, 1973; Keraf, 1991; Campbell, 1999; and Crowley & Bown, 2010) However, sound changes are categorized as irregularly occurring sound changes, sometimes in certain languages appear as regular changes (Hock, 1986).

In connection with this study, there are several relevant literature, namely Adriani and Kruyt (1914), Kamholz (2014), Jamulia (2016), Burhanuddin (2017a and 2017b), and Burhanuddin et al (2017). Adriani and Kruyt (1914) first hypothesized the characteristics of SHWG; Kamholz (2014) explains proto phonemes and classifies SHWG languages. Jamulia (2016) explains the relationship between language and culture of the people of South Halmahera, but not based on the framework of actual historical linguistic studies. Burhanuddin (2017a) explains the historical relationship of the languages of South Halmahera; Burhanuddin (2017b) describes the internal innovation of the Taba language in historical linguistics that distinguishes it from other South Halmahera languages; and Burhanuddin et al (2017) explain the urgency of the languages of South Halmahera need to be studied in historical linguistics.

III. METHOD

To explain the problems in this paper, data was collected on all the languages of South Halmahera (Buli, Maba, Sawai, Gane, Taba / Makian Timur, and Gebe), Maya and Amber languages (in Raja Ampat), and Biak languages. Data collection is done by interviewing speakers of these languages directly in the field. The interview uses 200 basic vocabulary and 500 cultural vocabulary. The collected data was then analyzed using a *top-down approach*, which saw the realization of Proto-Austronesia (PAN) into the languages sampled in this study. The results of the analysis in the form of PAN reflexes to the sample languages, then compared with the hypothesis of Adriani and Kruyt (1914) about the characteristics of SHWG, use a comparative method in accordance with the principles in historical linguistic studies.

IV. RESULT AND DISCUSSION

According to Adriani and Kruyt (1914), phonologically SHWG has two characteristics, namely (1) final vowel removal; and (2) eliminating the middle position on the silabe which begins with pressure. The intended disappearance is the disappearance of PAN vowels in the SHWG languages. To facilitate the presentation, the languages of South Halmahera (which includes Buli, Maba, Sawai, Gane, Taba, and Gebe) are abbreviated as SH.

(a) Final Vocal Deletion

Identification results found that in general (especially the Halmahera languages) experienced vocal disappearance at the final position.

	PAN	SH	Maya	Amber	Biak
(1)	*paRi 'stingray' *paniki 'bat'	fa(q) (ka)f(a)ni(q,k)	manapaq afniq	fa kahaniq	mnapaq -
(2)	*telu 'three' *kutu 'fleas' *kuta(n,ñ)a 'ask' *aku 'me' *walu 'eight'	(p(i,e))t(ô,e)l (k)(u,i)t (k,f)utan ñutun ya(k,q) p(u,i,o)w(a,ay)(l)	tul ut atun - kwal	tul ut - - wal	- uk - - war
(3)	*pija 'how many' *qasiRa 'salt' *lima 'five' *pica 'when'	((f,p)(i,e))(f,p)is (g,y)asi(q) p(i,e)lim (i,o)ffis	fisaw gasiq lim afisa	fi(t,l)a tasiq lim -	fis mas-masên rim rasrisa

It seems that the Adriani and Kruyt (1914)'s hypothesis regarding the loss of the final vowel in SHWG can be justified. In data (1) showing PAN *i in the final position is lost regularly in the languages of South Halmahera, also Maya, Amber, and Biak languages. PAN removal *i is generally followed by the addition of *q* or *k* to the final position. This is found in forms that express the meaning of 'stingray' and 'bat'.

Data (2) shows the vowel removal *u at the final position is regularly. Vocal removal is generally not followed by other sounds in the final position, except in a form that expresses the meaning of 'me'. For the meaning of 'three', in Buli, Maba, Sawai, and Gebe occur instead of the initial syllables: *p(i,e)* (Buli: *pitôl*, Maba: *pitel*, and Sawai: *petel*, and Gebe: *pitôl*). The addition of syllables apparently only occurs in the South Halmahera languages. Something similar happened to the form that stated the meaning of 'eight'. It's just that, in that form the consonant changes *l to: *r* (in Biak language). In addition, there is a vocal change: *e* in the penultimate syllable to: *i* in the form which states the meaning of 'three'. In the Buli language, after the final vowel loss is followed by the removal of consonants: *l* and vowel changes: *a* (to be diphthong: *ay*, PAN *walu > *wal > *piwal > *piwa > Buli: *piway*). In the form that states the meaning of 'me', after experiencing vowel removal: *u*, followed by a change of *k to: *q* specifically in Buli (PAN *aku > *ak > *yak > Buli: *yaq*).

In data (3), deletion *a in final position also occurs regularly in the SHWG languages, found in forms that express the meaning of 'how', 'salt', 'five', and 'when'. Vowel deletion: *a* in the languages of South Halmahera followed by changes in *j* or *c* to: *s*, in a form that states the meaning of 'what' and 'when' (PAN *pija 'how many' > *pij > *pis > *fis > Buli, Maba: *fifis*, and PAN *pica 'when' > *pic > *pis > *fis > *fifis > Maba: *iffis*). It is noteworthy, PAN *a in the final position does not always disappear, but changes, for example to state the meaning of 'how much', changes to: *ô* (PAN *pija 'how many', *pica 'when' > Taba: *fisô*, *paisô*). In certain forms, PAN *a in Gane is still retained (not lost), whereas in Maya it becomes diphthongs: *aw*, i.e. PAN *pija 'how many' > Gane: *hapisak*, Maya: *fi(t,l)a*. Likewise in the Maya and Biak languages *a still maintained, PAN *pica 'when' > Maya: *afisa* and Biak: *rasrisa*.

On data which are relatively limited in number, the vocals in the SHWG languages do not disappear, but change or are still maintained.

	PAN	SH	Maya	Amber	Biak
(4)	*i-ni 'this' *gusi 'gum'	(ta)in(ê,i) ñisi	- -	wane -	inê -
(5)	*au 'right, correct' *kaSu 'you'	f(a,e)tu(o) au	- -	- -	- au

(6)	*siwa 'nine'	siw(e,u,ô)	siq	siu	siu
	*NiSawa 'breath'	t(a,ô)w(a,ô)q	-	-	-
	*(i,e,a)sa 'one'	p(u,i)sô	-	-	ôsêr

Data (4) tries to prove PAN *i in some languages SHWG does not disappear, but improves retention and innovation. PAN *i-ni 'this' in the language of Gane (: *ajini*) improves retention, while Taba (: *inê*), Gebe (: *inê*), Amber (: *wane*), and Biak (: *inê*) try to change to: *ê*. While in etimon *gusi 'gum', PAN *i still speak in SHWG languages (in Sawai, Gane, and Taba languages, while in other languages appear as lexicons).

Data (5) shows that *u is still maintained (not disappearing) in the SHWG languages, although it is irregular. The sound is still maintained in the languages of Buli, Maba, and Sawai, whereas in other languages it appears as a lexicon difference (see etymon *au 'right, true'). As for etimon *kaSu, *u is still maintained in the languages Buli, Sawai, Gane, Taba, and Biak, whereas in other languages there is a difference in lexicon.

Data (6) shows that PAN *a does not disappear in the SHWG language but changes to: e and ô, and experiences retention. PAN *siwa 'nine' in the languages of Buli and Maba: *siwe* (to: *e*), Gane: *siwô* (to be: *ô*); Gebe and Amber: (*i*)*siyu* (becomes: *u*) – except in the Maya language disappears (: *siq*). Etimon *Nisawa, vocal *a also doesn't disappear but experiences retention and innovation. In the Gebe and Biak languages, the sound is still preserved, while in the Taba language it becomes: *ô* (: *manôwô*) and Gane: *u* (: *manôu*), whereas in other languages South Halmahera languages the different is the lexicon. As for the etymon PAN *(i,e,a)sa 'one', the vowel *a does not disappear but changes to: *o*. whereas in Gebe, Amber, and Maya languages appear as lexicons different.

(b) Deletion of the Middle in Syllables beginning with Stress

To explain this hypothesis, not enough data is found. This is illustrated in data (7).

	PAN	SH	Maya	Amber	Biak
(7)	*paniki 'bat'	f(a)ni(k,q)	afuiq	kahaniq	
	*maCa 'eye'	mt(a,ô)(r)	-	-	-
(8)	*baReq 'swollen'	(m)b(o,ô,ê)s	-	-	-
	*Zalan 'street, walk'	fan	-	can	ñan
	*babuy 'pig'	bôu	booq	kayou	-
	*dakít 'raft'	(y)êt	-	-	-
	*wakaR 'root'	wôwô(s)	-	aikawak	-
	*daRaQ 'blood'	l(o,ô)q	lomoq	lomooh	-

It is true that in the languages of South Halmahera the middle vowel *a in data (7) experiences disappearance but in Maya and Amber it does not disappear. PAN *paniki in the languages of Maba, Sawai, and Gane: *fni(q,k)*, allegedly through the process of change *paniki > *panic > *fanik > *fnik (Gane) > *fniq* (Maba and Sawai). As for Taba: *nhik* < *hnik < *fnik < *panik < *panik < *paniki whereas in the Gebe and Amber languages. So, in the language of Gebe and Amber did not experience vocal disappearance as assumed by Adriani and Kruyt (1914). The vocal *a in etimon *maCa 'eye' disappears in all SHWG languages.

In data (8) consonant removal occurs in the middle position in the SHWG languages. PAN *baReq 'swollen' occurs removal: *R through the process *baReq > *baeq > *baq > *bass > *boss (Buli) > *mbos > mb(o,e)s (Maba, Sawai, and Taba). Disappearance: *l in the middle position for PAN *Zalan 'street, walk' > *Zaan > *Zan > (*f,c,ñ*)an. Disappearances: *b in PAN *babuy 'pig', allegedly through the process of *babuy > *bauy > *bouy > *bou* (in South Halmahera languages), Amber: *kayou*, and Maya: *booq*. In PAN *dakít 'raft' and *wakaR 'root' there is a disappearance: *k in the middle position. The disappearances are alleged *dakít > *dait > *det > *et* (Buli and Maba), *yet* (Sawai), and *dat* (Taba), while *wakaR > *waaR > *WaR > *waq* (Buli), *wou > *wowou* (Sawai), *wowos* (Maba), *wo > *wowo* (Gane), and *kawawo* (Taba). As for *daRaQ > *daaq (deletion: *R) > *daq > *laq (Taba) > *laf, *loq (Gane) > *laf* (Buli), *lelo* (Sawai). As for Amber: *lomoq* and Maya: *lomooh*, there is the addition of the final tribe -*moh*.

When examined, data (8) is not what Adriani and Kruyt (1914) mean because it has different types of data (7). Therefore, the vocal changes in the penultima syllabus (initial syllable) occur due to the removal of the middle consonant, which is followed by encoding or shortening. In addition, this pattern of change is also found in the languages of other subgroups, for example West Malayo-Polynesia (WMP) and Central Malayo-Polynesia (CMP). Thus, data type (8) cannot be used as a feature of SHWG because these characteristics belong to other subgroups and that type is not what Adriani and Kruyt (1914) mean.

PAN

Sasak, Sumbawa

(9)	*Caqu 'know'	t(o,ao)(q)
	*CawiN 'year'	t(o,an,e,i,au)n

In Sasak and Sumbawa languages (including West Malayo-Polynesia Subgroup), for example the loss of *q and *w (such as data (9)) in the middle position is followed by the shortening / encoding of * au > o (PAN * Caqu > * Cau > * Co > Sumbawa: *to*), and * ai > o (PAN *CawiN > *CaiN > *CoN > *toN > Sumbawa: *ton*).

V. CONCLUSION

In connection with Adriani and Kruyt's hypothesis (1914) two of the phonological characteristics of SHWG can be stated as follows. First, regular vocal disappearances in the SHWG languages occur regularly but these changes do not occur in all its members. For example, in the etymon *pija 'how many' and *pica 'when' in the Amber and Maya languages vocal *a is still retained. In certain etymones, which are limited in number, there are final vowels that do not disappear but experience retention and innovation in most SHWG members. For example, in etymon *ini, *gusi, *au, *kaSu, *siwa, *NiSawa, and *isa. The changes referred to are found in etymons which have the final vocals *i, *u, and *a. Second, it is different from the second feature regarding the removal of the middle position in the initial pressured word. From the data collected, this change is limited in number so that it cannot be used as a dominant feature of SHWG. In connection with this matter, an adequate study is needed on this matter.

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