

Reflexes of Proto-Austronesia into Buru Language: Preliminary Step of Testing Collins Hypothesis (1981)

Sumarlam

Postgraduate Doctoral Program of Linguistics
Universitas Sebelas Maret (UNS)
Surakarta, Indonesia
sumarlamwd@gmail.com

Djarmika

Postgraduate Doctoral Program of Linguistics
Universitas Sebelas Maret (UNS)
Surakarta, Indonesia
djarmika@staff.uns.ac.id

Dwi Purnanto

Postgraduate Doctoral Program of Linguistics
Universitas Sebelas Maret (UNS)
Surakarta, Indonesia
dwi.purnanto@yahoo.com

Burhanuddin

Postgraduate Doctoral Program of Linguistics and
Departement of Language and Art
Universitas Sebelas Maret (UNS) and Universitas Mataram
(Unram)
Surakarta and Mataram, Indonesia
burhanuddinali.fkipunram@yahoo.co.id

Abstract—This paper intends to explain two issues, the Proto-Austronesian reflex (PAN) into Buru language (Br) and its correspondence with Collins's (1981) view. A PAN top-down approach reconstructed by Blust and Trussel (2015) is employed to see the realization in Buru. The data that have been collected using direct interview are 200 basic vocabulary revised by Blust (1980) and approximately 800 cultural vocabularies. The results identify that (1) Buru speech sounds that tend to innovate from PAN, ie * k, * b, * q, * h, * S, * C, * d, * z, * ay, and * uy; (2) Buru speech sounds that tend to retain, ie * p, * t, * g, * η, * m, * w, * s, * r, * l, * a, * u, * i, * ə; (3) not found PAN * t that change to / f / in Buru as proof of unity with Sula and Taliabo as well as proof of separation with Ambelau language. PAN * t in the initial and middle position only changes to / t /, / n /, and / ø /.

Keywords—*reflex, Proto-Austronesian, Buru language, Collins hypothesis (1981)*

I. INTRODUCTION

In 1981, James Collins conducted a preliminary study of the language group he called the West Central Maluku. This group consists of Ambelau (Ab), Buru (Br), Sula (Sl), and Taliabo (Tb). in linguistic-historical view, these four languages have one origin, then split into two, Ambelau and Proto-Buru-Sula-Taliabo. Proto-Buru-Sula-Taliabo then split into two, namely Buru and Proto-Sula-Taliabo, and finally Sula and Taliabo. The Collins (1981) study was conducted using a top-down approach, a comprehensive innovation method examining the Proto-Austronesian (PAN) reflexes into the four languages as well as three isolates in the Middle East Moluccas. Since the study is preliminary, it needs to be verified and enriched with linguistic evidence.

Sumarlam et al (2017) has identified the pattern of PAN change into Ambelau language to observe the truth of the description Collins (1981) about the language. The same pattern is applied, not only in Ambelau but also in three other languages, Buru, Sula, and Taliabo. Therefore, this paper identifies the PAN reflex into Buru language and sees its compatibility with Collins's (1981) view.

Collins (1981) at least suggested five types of PAN reflexes into Buru language. Firstly, the PAN * t in the initial position (#-) and the vowel (# v-v #) change into / f / in Buru (also in Sula and Taliabo). Secondly, PAN: * k / # - and # v-v # in Buru have retention. Thirdly, PAN: * mb changes to / b / in Buru (also Sula and Taliabo). Fourth, there are merger of PAN: * η and * ηk into / g /. Moreover, the five merger of PAN: * k and * p at the end position changed to / t /. Whether the linguistic evidence proposed by Collins (1981) is sufficient, this paper intends to explain it. Therefore, this paper aims at explaining two things, the PAN reflex into Buru language and its compatibility with Collins's (1981) view.

II. METHOD

To explain these two aspects, data collection, data analysis, and presentation of data analysis results have been conducted. Field data, collected using interview technique, consist of 200 basic vocabularies and 800 cultural vocabularies in Buru language. The Proto-Austronesian data were collected using literature method in the form of an Austronesian Comparative Dictionary

compiled by Blust and Trussel (2015). The collected data were then analyzed using a top-down approach, an innovation method viewing the realization of PAN into Buru language. Furthermore, the analyzed data were conceptualized and presented using nonformal methods (using regular words) and formal methods (using images, symbols, graphs, tables, etc.).

III. FINDING AND DISCUSSION

In order to systematically describe the PAN reflex into Buru language, the number and type of PAN phonemes will be presented. According to Trussell and Blust (2015), PAN phoneme consists of 32 phonemes including 24 consonants, (/p, t, C, c, k, ʔ, b, d, z, j, g, m, n, ɲ, s, S, h, l, r, R, y, and w /), four vowels (/ i, u, ə, and a /), and four diphthongs (-aw, -ay, -uy, and -iy). Sumarlam et al (2017) identifies that Buru language has 19 consonant phonemes, i.e. / p, t, c, k, ʔ, b, d, j, g, m, n, ɲ, s, h, l, r, y, and w / and eight vowels (/ i, u, e, ə, ε, o, ɔ, and a /).

A. PAN *p

PAN * p at initial and intervocalic positions in Buru language are retained and regular

Gloss	PAN	Buru	Rule
navel	*pujək	pusen	*p > p/#-
para-para	*paRa	paha	
pare, paria	*pariaʔ	papare	
stingray	*paRi	pahi	
how (many)	*pija	pilaʔ	
ten	*puluʔ	pələʔ	
tipis	*tipis	nipiʔ	*p > p/#-#
centipede	*Siɲan	liɲan	
four	*Səpat	paʔ	
what	*apa	sapan	

B. PAN *t

PAN * t retains regularly only in inter-vocal positions, whereas in other positions are irregular, both retention and innovation

Gloss	PAN	Buru	Rule
three	*təlu	tələ	*t > t /#-:
afraid	*takut	əmtakəʔ	
thin	*tipis	nipiʔ	*t > n /#-
blow	*tiup	əpih	*t > ø /#-
stone	*batu	fatu	*t > t/#-#:
we	*(k)ita	kita	
lice	*kutu	kətəʔ	
moss	*lumut	ləmət	*t > t/#-
four	*Səpat	paʔ	*t > ʔ/#-
afraid	*takut	əmtakəʔ	
heavy	*beReqat	beha	*t > ø /#-

C. PAN *C

PAN *C changes to /t/ at the initial and middle position occur regularly, whereas at end position becomes irregular. Besides /t/, PAN *C also changes to /ø/ irregularly at the beginning position.

Gloss	PAN	Buru	Rule
know	*Caqu	tewa	*C > t/#-
cry	*Caɲis	taɲi	
feces	*Caʔi	stei	
ear	*Caliɲa	liɲan	*C > ø/#-

egg	*qiCəluR	telun	*C > t/#-#
die	*maCay	mataʔ	
octopus	*kuRiCa	kitaʔ	
vein	*huRaC	uhat	*C > t/#-
sky	*laŋiC	laŋit	

D. PAN *k

At the initial and middle position, PAN *k retains regularly, while at the end, changes to /t/ and /n/ irregularly.

Gloss	PAN	Buru	Rule
octopus	*kuRiCa	kitaʔ	*k > k/#-:
dig	*kali	kali	
we	*(k)ita	kita	
lice	*kutu	kətəʔ	
eat	*kaən	kaʔ	
open	*hukaʔ	fukah	*k > k/#-#
afraid	*takut	əmtakəʔ	
fish	*Sikan	ikan	
child	*aNak	anat	*k > t/#-:
navel	*pujək	pusən	*k > n/#-:

E. PAN *ʔ

PAN *ʔ at the initial changes to /ø/ regularly, while /l, m, k/ are irregularly. At the middle, PAN *ʔ becomes /w/ irregularly. At the end position, retention and innovation are irregularly (become /h, n, k, dan ø/).

Gloss	PAN	Buru	Rule
salt	*ʔasiRa	sasi	*ʔ > ø/#-
egg	*ʔiCəluR	telun	
sand	*ʔənay	ənaʔ	
pillow	*ʔalunan	kanluŋa	*ʔ > k/#-
ash	*ʔabu	lafu	*ʔ > l/#-
salty	*ʔasin	masin	*ʔ > m/#-
know	*Caʔu	tewa	*ʔ > w/#-#
open	*hukaʔ	fukah	*ʔ > h/#-
red	*məRaʔ	merah	
ten	*sa-puluʔ	pələʔ	*ʔ > ʔ/#-
fast	*zuluʔ	ləuk	*ʔ > k/#-
blood	*daRaʔ	rahan	*ʔ > n/#-
pare	*pariaʔ	papare	*ʔ > ø/#-

F. PAN *b

PAN *b retains only at the initial position in irregular behavior. In Buru, PAN *b tends to innovate into /f/ regular at initial whereas at the middle could be regular if the data are broaden.

Gloss	PAN	Ambelau	Rule
new	*baʔəRuh	fəhu	*b > f/#-
split	*bəlaʔ	fola	
stone	*batu	fatu	
moon	*bulaN	fulan	
fur	*bulu	fələn	
pig	*babuy	fafu	

weight	*bəRəʔat	beha	*b > b/#-
ash	*ʔabu	lafu	*b > f/#-#
pig	*babuy	fafu	

G. PAN *d

PAN *d tends into /r/ at the initial or middle position but irregularly.

Gloss	PAN	Buru	Rule
blood	*daRaʔ	rahan	*d > r/#-
two	*duSa	rua	
they	*siida	ira	*d > r/#-#:

H. PAN *z, *j, and *c

At initial position PAN *z changes to /l/ and /ø/ irregularly. PAN *j, which innovates into /s, l, ø/ or retains /j/ is irregularly. PAN *g, found in one datum, retains irregularly at the middle position.

Gloss	PAN	Ambelau	Rule
walk	*zalan	təlɔn	*z > t/#-
past	*zuluʔ	leuk	*z > ø/#-
keep	*jagah	jaga	*j > j/#-
name	*ŋajan	ŋan	*j > ø/#-#
navel	*pujək	pusen	*j > s/#-#
some	*pija	pilaʔ	*j > l/#-#
keep	*jagah	jaga	*g > g/#-#

I. PAN *m, *n, *ŋ, *ɲ, and *N

PAN *m has retention in Buru, irregular at initial position but irregular at the end. At the end, however changes to /ʔ/ irregularly.

Gloss	PAN	Buru	Rule
die	*ma-aCay	mataʔ	*m > m/#-
father	*ama	amaʔ	*m > m/#-#
home	*Rumah	humah/ʔ	
moss	*lumut	lɔmɔt	
five	*lima	lima	
drink	*inum	inɔʔ	*m > q/#-#
six	*ənəm	nɛʔ	

PAN *n in the middle and end still retains regularly Buru. But, PAN *n has innovation at the middle (/ŋ/ and /d/) and at end position (/ø/ dan /ʔ/). All are irregular.

Gloss	PAN	Buru	Rule
mother	*ina	inan	*n > n/#-#
right	*wanaN, *waNan	wannaʔ	
drink	*inum	inɔʔ	
sand	*ʔenay	enaʔ	
six	*ənəm	nɛʔ	
pillow	*ʔalunan	kanluŋa	*n > ŋ/#-#
where	*inu	fidɔ	*n > d/#-#
fish	*Sikan	ikan	*n > n/-#
name	*ŋajan	ŋan	
centipede	*Sipan	lipan	
salty	*ʔasin	masin	

pillow	*ʔalunan	kanluŋa	*n > ø/-#
right	*wanaN, *waNan	wannaʔ	*n > q/-#
eat	*kaen	kaʔ	

PAN *n innovates into /n/ at the initial. PAN *ŋ has irregular retention at middle and end. There is also changes of PAN *ŋ to /n/ at the middle position irregularly.

Gloss	PAN	Buru	Rule
coconut	*ŋiuR	niwɛʔ	*ŋ > n/#-
name	*ŋajan	ŋan	*ŋ > ŋ/#-:
sky	*laŋiC	laŋit	*ŋ > ŋ/#-#:
ear	*Caliŋa	liŋan	
wind	*haŋin	anin	
cry	*Caŋis	taŋi	
wind	*haŋin	anin	*ŋ > n/#-#:

PAN *N, at the middle or end position has irregular innovation.

Gloss	PAN	Buru	Rule
child	*aNak	anat	*N > n/#-#
right	*wanaN, *waNan	wannaʔ	
white	*ma-puNi	boti	*N > t/#-#
moon	*bulaN	fulan	*N > n/-#
right	*waNan, wanaN	wannaʔ	*N > ʔ/-#

J. PAN *S, *s, dan *h

Phonem *S is omitted at initial and middle position, regular and irregularly. Moreover, PAN *S changes irregularly to /l/ at the middle position.

Gloss	PAN	Buru	Rule
meat	*Səsi	isit	*S > ø/#-:
four	*Səpat	paʔ	
fish	*Sikan	ikan	
centipede	*Sipan	lipan	*S > l/#-
water	*waSiR	wæ	*S > ø/#-#
two	*duSa	rua	

Reflex of PAN *s retains both at initial and middle position, but regular at initial and irregular at the middle. At initial and end position, PAN *s innovates (/ø/ dan /ʔ/) and both are irregular.

Gloss	PAN	Buru	Rule
dog	*asu	asu	*s > s/#-
milk	*susu	səson	
ten	*puluʔ	pələʔ	*s > ø/#-
meat	*səsi	isit	*s > s/#-#
milk	*susu	səson	
salty	*ʔasin	masin	
cry	*Caŋis	taŋi	*s > ø/-#
thin	*tipis	nipiʔ	*s > ʔ/-#

PAN * h is kept irregularly in final position in Buru language. Likewise, the innovations (/ ø / and / ? /) in the starting and ending positions are irregular

Gloss	PAN	Buru	Rule
wind	*haŋin	anin	*h > ø/#-
open	*huka?	fukah	
vein	*huRaC	uhat	
house	*Rumah	huma(h,?)	*h > h/-#
new	*ba?əRuh	fehu	*h > ø/-#
keep	*jagah	jaga	
house	*Rumah	huma(h,?)	*h > q/-#

K. PAN *l, *R, dan *r

PAN * l retains regularly in the initial and middle position in Buru. In addition, in the middle position PAN * l undergoes an irregular innovation into / r /.

Gloss	PAN	Buru	Rule
Sky	*laŋiC	laŋit	*l > l/#-
Moss	*lumut	lòmöt	
five	*lima	lima	
split	*ma-bəla?	foła	*l > l/#-#
stone	*batu	fatu	
three	*təlu	təb	
moon	*bulaN	fulan	
walk	*zalan	təlön	
egg	*?iCəlur	telun, etc	
eight	*walu	trua?	*l > r/#-#

PAN * R in the middle position changes to / h / regularly, while in the initial position is possible to occur regularly if the data are expanded. Besides / h /, PAN * R changes to / n / and / ? / in the final position and becomes / ø / (in the middle and end position) and / s / (in the middle position) each of which is irregular.

Gloss	PAN	Buru	Rule
big	*Raya	hat	*R > h/#-
house	*Rumah	huma(h,?)	
new	*ba?əRuh	fehu	*R > h/#-#
weight	*beRəqat	beha	
blood	*daRa?	rahan	
vein	*huRaC	uhat	
para-para	*paRa	paha	
stingray	*paRi	pahi, etc	
octopus	*kuRiCa	kita?	*R > ø/#-#
salt	*?asiRa	sasi	*R > s/#-#
water	*waSiR	wæ	*R > ø/-#
tail	*ikuR	ikun	*R > n/-#
coconut	*niuR	niwə?	*R > ?/-#

PAN * r has retention in the middle position and innovation (/ n /) at the end position, each of which is irregular.

Gloss	PAN	Buru	Rule
pare	*paria?	papare	*r > r/#-#:
egg	*?iCəlur	telun	*r > n/-#

L. PAN *w

PAN * w retains irregular in the initial position, while in the middle position becomes / y / irregularly.

Gloss	PAN	Buru	Rule
water	*waSiR	wæ	*w > w/#-
right	*wanaN, *waNan	wanna?	
nine	*siwa	siya?	*w > y/#-#

M. PAN *i

PAN * i has regular retention at the initial position, penultimate syllable, and ultimate syllable, while at the end position is irregular. In addition, PAN * i undergoes irregular innovations at the penultimate syllable (/ e / and / ø /) and the ultimate syllable (/ ε /).

Gloss	PAN	Buru	Rule
mother	*ina	inan	*i>i/#-
we	*(k)ita	kita	
drink	*inum	inɔ?	
thin	*tipis	nipi?	*i>i/#K-
how (many)	*pija	pila?	
ear	*Caliŋa	liŋan	
coconut	*niuR	niwɛ?, etc	
pare	*paria?	papare	*i> e/#K-
egg	*qiCəlur	telun	*i> ø/#K-:
wind	*haŋin	anin	*i>i/-K#
sky	*laŋiC	laŋit	
thin	*tipis	nipi?, etc	
water	*waSiR	wæ	*i> ε/-K#
stingray	*paRi	pahi	*i>i/-#

N. PAN *u

PAN * u in penultimate syllable, ultimate syllable, and end positions are retained regularly in Buru. In addition, in the penultimate syllable, PAN * u innovates to / o, ɔ, ø / irregularly. In the ultimate syllable, PAN * u also innovates to / ɔ, e / irregularly. In the final position, PAN * u innovates to / ɔ, a / irregularly.

Gloss	PAN	Buru	Rule
moon	*bulaN	fulan	*u > u/#K-
house	*Rumah	huma(h,?)	
open	*huka?	fukah	
navel	*pujək	pusen	
two	*duSa	rua, etc	
fur	*bulu	fɔlɔn	*u > ɔ/#K-
milk	*susu	sɔsɔn	
ten	*pulu?	pɔlɔ?	
moss	*lumut	lɔmɔt, etc	
octopus	*kuRiCa	kita?	*u > ø/#K-
past	*zuluq	leuk	
white	*puNi	boti	*u > o/#K-
new	*baʔeRuh	fehu	*u > u/-K#
egg	*ʔiCəlur	telun	
past	*zulu?	leuk	
drink	*inum	inɔ?	*u > ɔ/-K#

afraid	*takut	əmtakɔʔ	
moss	*lumut	lɔmɔt	
ten	*puluʔ	pɔlɔʔ, etc	
coconut	*ɲiuR	niwɛʔ	*u > e/-K#:
ash	*ʔabu	lafu	*u > u/-#
stone	*batu	fatu	
dog	*asu	asu	
three	*təlu	tɛlɔ	*u > ɔ/-#
know	*Caʔu	tewa	*u > a/-#

O. PAN *ə

PAN *ə regularly innovate to /e/ at penultimate syllable. Besides /e/, PAN *ə also changes to /o, i, ɛ/ at penultimate syllable, and /ɛ/ at ultimate syllable, both are irregular.

Gloss	PAN	Buru	Rule
new	*baʔəRuh	fehu	*ə > e/#K-
weight	*bəRəʔat	beha	
egg	*ʔiCəlur	telun, etc	
split	*ma-bəlaʔ	fofa	*ə > o/#K-
meat	*səsi	isit	*ə > i/#K-
sand	*ʔənay	enaʔ	*ə > ɛ/#K-
three	*təlu	tɛlɔ	
navel	*pujək	pusen	*ə > ɛ/-K#
six	*ənəm	nɛʔ	

P. PAN *a

PAN *a has regular retention at initial position, penultimate syllable, ultimate syllable, and at end position. At penultimate syllable PAN *a also irregularly innovate to /e, ɔ, ø/; at ultimate syllable irregularly innovate to /ɔ/ and /ø/. Likewise at the end position, PAN *a has irregular innovation to /ɛ/ and /ø/.

Gloss	PAN	Buru	Rule
child	*aNak	anat	*a > a/#-
dog	*asu	asu	
father	*ama	amaʔ, etc	
ash	*ʔabu	lafu	*a > a/#K-
water	*waSiR	wæ	
wind	*haɲjin	anin	
stone	*batu	fatu	
stingray	*paRi	pahi, etc	
ear	*Caliɲa	liɲan	*a > ø/#K-:
know	*Caqu	tewa	*a > e/#K-
walk	*zalan	tɔlɔn	*a > ɔ/#K-
urat	*huRaC	uhat	*a > a/-K#
how (many)	*pija	pilaʔ	
mother	*ina	inan	
moon	*bulaN	fulan, etc	
lice	*kutu	kɔtɔʔ	*a > ɔ/-K#
walk	*zalan	tɔlɔn	

name	*ŋajan	ŋan	*a > ø/-K#
pare	*pariaq	papare	
father	*ama	ama?	*a > a/-#
we	*(k)ita	kita	
ear	*Caliŋa	liŋan	
five	*lima	lima	
nine	*siwa	siya?, etc	
navel	*puja	pusen	*a > ε/-#
salt	*qasiRa	sasi	*a > ø/-#

*Q. PAN *ay*

PAN *ay at the end position innovates irregularly, but could be regular if the data are extended into /a/.

Gloss	PAN	Buru	Rule
die	*ma-aCay	mata?	*ay > a/-#
sand	*qenay	ena?	

IV. SOME NOTES ON COLLINS (1981) VIEWS

Historically, Buru language in the first phase split from the Ambelau language and merged with the Sula and Taliabo languages. According to Collins (1981), Buru languages along with Sula and Taliabo, PAN * t in the initial position (#-) and the vowel (# v-v #) change to /f/. This study shows that PAN * t at initial and intervocal positions are retained as /t/ regularly. In addition, PAN * t in the initial position becomes /n/ and /ø/. The result identifies that there is no PAN *t change into /f/ in Buru language. Therefore, the linguistic evidence of the historical relation which separates Buru from Ambelau, and its unity with Sula and Taliabo, which Collins (1981) proposes, needs to be reviewed.

Secondly, PAN: *k /#- and #v-v# in Buru with Sula and Taliabo are retained, while in Ambelau is innovated. The evidence that Collins (1981) proposes, can be justified, since both the initial and inter-vocal positions of PAN * k have retention in Buru. There is a PAN *k in the initial position of being innovated (being /n/) but irregular. Likewise in the final position, although innovated to be /t/ but irregular. It means that the linguistic evidence from Collins (1981) can still be used to view of the historical relations of the West Central Maluku languages .

Third, the merger of PAN *k and *p at the end position into /t/ in Buru, Sula and Taliabo. This study shows that no PAN *p at the final position changes to /t/ in Buru, whereas PAN *k becomes /t/ irregularly, for example in the meaning of ‘child’, PAN *aNak > Br: *anat*. Therefore, no merger of PAN *p and *k in Buru. Thus, such linguistic evidence cannot be used as the basis for viewing the historical relation of West Central Maluku languages which Collins hypothesized (1981).

For PAN *mb changes to /b/ in Buru (also Sula and Taliabo) and merger PAN *ŋ and *ŋk become /g/, further study is needed. The data obtained have not shown the realization of these sounds in Buru language.

V. CONCLUSION

The PAN phonemic reflex into Buru language shows the existence of retention and innovation sounds, regular and irregular. There is one evidence that can be used, ie PAN *k in the initial and middle position. However, PAN *t in the initial and intervocal positions become /f/ and also the PAN merger: *k and *p at the end position to /t/ in Buru, Sula, and Taliabo languages cannot be used to explain the historical relation of languages which belongs to the West Central Maluku Group referred by Collins (1981). For proofs showing that PAN *mb changes to /b/ and the merger of PAN *ŋ and *ŋk to /g/ in Buru, and Sula and Taliabo need further study.

To explain adequately and comprehensively the Collins hypothesis (1981) on the historical relation of West Central Maluku languages, a study of PAN reflex into the Sula and Taliabo languages needs to be carried out after Ambelau and Buru languages have been formulated. In turn, it will appear to be a common form of innovation that occurs in the fourth language. That is, it is necessary to study PAN reflexes into Sula and Taliabo and the historical relations of west Maluku languages thoroughly.

References

- Blust, Robert A. (1980). Early Austronesian Social Organization the Evidence of Language. *Current Anthropology*, 21(2), 205-266.
- Blust, Robert A. and S. Trussel. (2015). *Austronesian Comparative Dictionary*. Available online at www.trussel2.com/ACD .
- Collins, James T. (1981). Preliminary Notes on Proto-West Central Maluku: Buru, Sula, Taliabo, and Ambelau. *Historical Linguistics in Indonesia Part I Journal. Seri NUSA*. Jakarta: Universitas Atma Jaya.
- Sumarlam, dkk. (2017). *Menguji Hipotesis Collins (1981) tentang Keberadaan Kelompok Maluku Tengah Barat. Laporan Penelitian Hibah Pascasarjana 2017 Menristekdikti Tahun Pertama*. Surakarta: Universitas Sebelas Maret.