The Inheritance of Vowel Phoneme of the Proto Austronesia Language in Tamiang Language

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Abstract

As a Malay variant which belongs to the Austronesian group (PAN), Tamiang Language (TL for short) should have inherited various elements of its proto including phonemes. This paper is aimed to analyze the inheritance of Proto vowels in TL and the types of their changes. The source of data of TL is from 200 words included in Swadesh list as the references while collecting data. Data were collected by one-on-one interview which was conducted structurally (Creswell, 2009). Data then were recorded and noted phonemically. Data from the proto language were found out from the gloss in the Proto Austronesian Dictionary. The data was then analyzed following qualitative method. The result showed that most vowels in PAN inherited linearly in TL. However, some changes can also be recognized due to the phonetic environment or sporadic reasons. PAN*/i/ inherited linearly into /i/ in TL in initial, medial and final position of the word. However, sound change can also be recognized in */i/ > /ə/ and /e/. PAN */u/ inherited linearly to /u/ in TL in medial and final position. Due to sporadic correspondence, */u/ changed into /i/, /ɔ/ and /o/. PAN */ə/ inherited regularly into /ə/ in TL in initial and medial position. However, */ə/ also changes into /a/. Then */a/ inherited into /a/ in initial and medial position, yet, in final position /a/ is contributed complementarily with /ə/. This change happened sporadically due to error in language use or the influence of other language toward TL.

Key words: Proto Austronesian, inheritance, sound change, vowel, phoneme.

Introduction

Tamiang Language (hereinafter written TL) is one of the many regional languages in Indonesia, precisely in the islands of Sumatra. This language is spoken by the people who inhabit several villages in the Aceh Tamiang, district of Aceh Province. TL is a variant of the Malay language, as Durie (1985) mentions.

The Malay language, as written by Hasan (1974), Lee Hsia (1989), and Blust (2013) is a group of languages under the Austronesian (or called PAN) languages, precisely belonging to the western Austronesia group that includes Nusantara, Micronesia, Melanesia and Polynesia. The languages under the archipelago of Nusantara (Karim, 2008; Adelaar, 1988) include Sumatra, Kalimantan, Java, Bali, Sasak, Philippine, Sulawesi, and Halmahera-Irian Jaya. Malay together with Aceh, Minang, Batak, Nias, Lampung, and Laot people are under the Sumatra branch.

Adeelar (1988) documented at least fifteen dialects of Malay spread in various regions in Sumatera, such as Tamiang, Langkat, Deli, Asahan, Kualan, Bilan, Panai, Pinang City, Riau Malay, Mainland Riau Malay, Anak Dalam, Jambi Malay, Bengkulu Malay, Palembang Malay, and Bangka Belitong.

Researches on Proto-inheritance of relative languages have been widely practiced (see Nurhayati, 2006; Ardana, 2011; Dardanila, 2016). However, researches on the inheritance of phonemes from Proto language into Tamiang language as a Malay variant dialect spoken by the people who inhabited in several villages in Aceh Tamiang district, Aceh Province have not been done yet. Moreover, TL is potentially extinct because, based on the results of preliminary observations conducted by researcher, this language began threatened its existence because another language is dominantly used in the area, namely Acehnese. In addition, based on the results of field surveys conducted by researcher, generally the younger generation in the regions prefers to use the Indonesian language called as *basa toko*, compared to TL itself which they call *basa kampong*. This is considered as a causing factor of the extinction of a language. That is why this research is deemed necessary. Besides, researches with data from TL have not been done by other researchers, this research also as one of effort for language maintenance.
The researcher focuses this paper on the problem of PAN inheritance on TL. The objectives of this study were limited to the inheritance of PAN vowels in TL and the types of their changes.

Literature Review
This study is based on the theory of Comparative Historical Linguistics following Keraf (1984, p. 22), as a branch of linguistics that questioned the language in the field of time and the changes of language elements that occurred within that period. He adds that one of the purposes and interests of comparative historical linguistics is to organize the sub-grouping of languages into a single language family. The languages in the same family are not necessarily the same level of kinship or the same level of resemblance to one another.

Keraf (1984) also adds that the kin languages derived from the same proto will always show the following similarities:
(1) The similarity of the sound system (phonetic) and the sound arrangement (phonological).
(2) The similarity of word form and grammatical form (morphological).
(3) The similarity of relations between words in sentence (syntax).

This study limits only on the vowel phonemes in Proto Austronesian (PAN) language which is inherited into the Tamiang Language. The inheritance of the phonemes of proto language in its derivative languages is divided into two, namely: (1) inheritance while maintaining its phonemic features, or called linear inheritance, and (2) inheritance with phoneme changes either exchanging between proto phonemes and their derived language phonemes, or split, metathesis, aphaeresis, syncope, apocope, epenthesis, paragog and inheritance innovation (Widayati, 2016). Keraf (1984) claims that a word pair will be declared to be related if it meets one of the conditions, namely (a) the couple is identical, (b) the pair has phonemic correspondence, (c) phonetic similarity, and (d) a different phoneme.

Research Method
The data sources in this paper are from the 200 Swadesh lists that became the reference in data collection. Data were collected by following comprehensive method (Sudaryanto, 2015; Mahsun, 2005). By this method, researcher used recorded or tapped basic technique to collect the data. Data were obtained by

structured interview technique. The location of the research was conducted in three villages namely *Sekerak, Karang Baru* and *Bendahara*. Interviews were conducted from three respondents in which one respondent for one session from one village (one-on-one interview) (Creswell, 2009). Then the data were recorded and noted phonemically. PAN secondary data collection was done by the method refers to and assisted with the technique of note. Thus, PAN data are searched one by one in the PAN dictionary based on the gloss list used as the benchmark. The available data were then analyzed using qualitative methods. Mahsun (2005) suggests that by using qualitative methods, the data are grouped into a closer group of relationships, since they exhibit exclusive linguistic innovations that spread in comparable languages. In short, data collection was then classified into the respective categories of words containing any vowels in TL. Each word in each group is then confirmed to its gloss in PAN Dictionary to see whether any changes occur or not to find the answers of the objectives of this study.

Results and Discussion

Based on the results of reconstruction, PAN language has a vowel phoneme system as follows: * /i/, */u/, */ə/, */a/. Furthermore, TL has the inventory of the vowel phonemes as follows: /i/, /e/, /æ/, /a/, /ɔ/, /o/, /u/, /ə/. All elements of the phoneme in its development there are still showing the original form. However, changes in its development can also be recognized. The realization of the inheritance of PAN elements in TL can be explained as follows:

1. PAN */i/ > TL /i/

PAN phoneme /i/ regularly derived the TL /i/ phoneme as in the following data.

Table 1. PAN phoneme / i / regularly derived the TL / i / phoneme.

Position	PAN	TL	Gloss
Initial	*/it ə m/ */Iguŋ/	/itam/ /iduŋ/	Black Nose
Middle	*/t ə liŋa/ */atin/	/t ə liŋ ə/ /masin/	Ear Salty
Final	*/laki/ */tali/	/laki/ /tali/	Husband Rope

Phoneme PAN /i/ linearly inherited on TL /i/. The linear inheritance of PAN /i/ occurs regularly in TL in the initial, middle and final positions.

In addition, the inheritance of the PAN /i/ also underwent changes in TL, i.e. the vowel phoneme PAN * /i/ derived /ə/ and /e/ in TL, as in the following data.

Table 2. The vowel phoneme PAN * /i/ derived /ə/ and /e/ in TL.

Position	PAN	TL	Gloss
Initial	-	-	-
Middle	*/li̲hiR/	/l ə_he/	Neck
Final			

From the above data, it appears that the vowel PAN */i/ inherited changes in TL, became /ə/ in the position between consonants in closed syllables, and /e/ in open syllables. This change occurs because of the usual decline of the higher vowel phonemes in the inherited PAN in BT into lower vowel phonemes, i.e. /ə/ and /e/.

2. PAN */u/ > TL /u/

PAN vowel phonemes /u/ linearly inherited on TL /u/ as shown in the following table.

Table 3. PAN vowel phonemes /u/ linearly inherited on TL /u/.

Position	PAN	TL	Gloss
Initial	-	-	-
Middle	*/tulaŋ/	/tulaŋ/	Bone
	*/bulat/	/bulæʔ/	Round
	*/bulan/	/bulan/	Moon
Final	*/abu/	/abu/	Ash
	*/əbu/	/abu/	Dust
	*/bulu/	/bulu/	Feather

Linear Inheritance PAN */u/ occurs regularly in the middle and final position, but unseen in the initial position. The researcher assumes that PAN */u/ is also inherited linearly at the initial position at TL /u/. This opinion is based on the observations on similar research conducted by other researchers such as in PAN phoneme inheritance research on *Kaili* and *Uma* languages in Central Sulawesi conducted by I Komang Ardana (see Ardana, I Komang, 2011) and inheritance of PAN vowel phonemes In Gayo by Dardanila (see Dardanila, 2016).

Besides the PAN */u/ linear phoneme in the middle and final positions regularly at TL, the PAN */u/ phoneme also changes in its inheritance in TL into the vowel phoneme /ɔ/ and /o/ on TL, as shown in the following table.

Table 4. The PAN */u/ phoneme also changes in its inheritance in TL into the vowel phoneme /ɔ/ and /o/ on TL.

Position	PAN	TL	Gloss
Initial	-	-	-
Middle	*/gun<u>u</u>ŋ/	/gunɔŋ/	Mountain
	*/pən<u>u</u>h/	/pənɔh/	Full
Final	-	-	-

From the available data, only the inheritance of the vocal phonemes of PAN */u/ which was changed in TL to /ɔ/ in the middle position on two data from available data, but it is not found at the initial and final position.

A tentative rule can be made for this change as follows: */u/> /ɔ/ /#/n/ ___ = vocal phoneme */u/ inherited to /ɔ/ in conditional pennip position after sound /n/.

Table 5. */u/> /ɔ/ /#/n/ ___ = vocal phoneme */u/ inherited to /ɔ/ in conditional pennip position after sound /n/.

Position	PAN	TL	Gloss
Initial	-	-	-
Middle	*/təluR/	/təloR/	Egg
	*/dantuŋ/	/jantoŋ/	Heart
	*/tanduk/	/tandoʔ/	Horn
	*/dauh/	/jaoh/	Deep
	*/daun/	/daon/	Leaf
Final			

From the existing data, obtained some vocabulary in which found the inheritance of vocal phonemes PAN */u/ which has changed in BT, become /o/ in the middle position. Similarly, the change in inheritance of PAN */u/ to BT /ɔ/, even this

change is not found at the start and end positions. A tentative rule can be made for this change as follows:

1. /u/> /o/ /Alveolar ____ # = vowel /u/ inherited to /ɔ/ in position after alveolar sound (post alveolar).

2. /u/> /o/ > /a/ ____ # = vowel /u/ inherited to /ɔ/ in position after vowel /a/ sound.

3. PAN */ə/ > BT /ə/

Vocal phonemes PAN */ə/ also linear inheritance on BT /ə/ as shown in the following table.

Table 6. Vocal phonemes PAN */ə/ also linear inheritance on BT /ə/.

Position	PAN	TL	Gloss
Initial	*/əmpat/	/əmpæʔ/	Four
Middle	*/bəsa (r)/	/bəsaR/	Big
	*/təliŋa/	/təliŋə/	Ear
	*/bəɸat/	/bəRæʔ/	Weight
	*/təmpit/	/səmpit/	Narrow
	*/təluɸ/	/təloR/	Egg
Final	-	-	-

Vowel phonemes PAN */ə/ linearly inherited at TL /ə/ at initial and middle position, but not found at final position. It is assumed that this vocal phoneme also has the potential to appear in the final position when based on observations in previous studies in other kinship languages (see Ardana, 2011; Dardanila, 2016). Based on the data in the middle position, it can be given a tentative rule as */ə/ > /ə/ /K___K = PAN phoneme /ə/ remains unchanged in position between two consonants or penultimate position in closed syllables. Or in other words PAN */ə/ inherited /ə/ on TL between consonant clusters in the first syllable.

The vowel phonemes of PAN */ə/ are also inherited by changes in TL to /a/ as shown in the table below.

Table 7. The vowel phonemes of PAN */ə/ are also inherited by changes in TL to /a/.

Position	PAN	TL	Gloss
Initial	*/ ə̱bu/	/a̱bu/	Dust
	*/ ə̱ta/	/a̱tu/	One
Middle	*/it ə̱m/	/ita̱m/	Black
	*/al ə̱m/	/malam/	Night
Final	-	-	-

It can be given the rule for */ə/ > /a/ in any position. As seen in the data in the table above, the vowel phoneme PAN */ə/ reflected with the TL /a/ phonemes in the initial and middle position, but not found in the final position. Due to the limited availability of data, it is difficult to formulate the rules of the changes. It may be that these changes are only sporadic changes caused by errors or habits, or even the influence of external factors in the use of TL by speakers.

4. PAN */a/> TL /a/

The vowel phonemes of PAN */a/ are linearly in TL /a/ as shown in the data in the following table.

Table 8. The vowel phonemes of PAN */a/ are linearly in TL /a/.

Position	PAN	TL	Gloss
Initial	*/ata/ */ajah/ */akal/ */anak/	/ati/ /ajah/ /akɔR/ /anaʔ/	Heart Father Root Child
Middle	*/dagiɴ/ */baɸu/ */dalan/ */bulan/ */tali/	/dagiɴ/ /baRu/ /jalan/ /bulan/ /tali/	Meat New Street Moon Rope
Final	-	-	-

From the data above it can be seen that the vocal phoneme PAN */a/ is inherited linearly regularly at TL /a/ in the initial and middle position. But not found in the final position. It is found that in the final position TL is distributed in a complementary fashion with the vocal /ə/ phoneme, as in PAN */buŋa/ > TL /buŋə/ 'flower' and PAN */five/ > TL /limə/ 'lima' data. So it can be formulate as */a/ > /ə/ / _____ # = PAN vowel phoneme */a/ change to BT /ə/ at ultimate position.

However, the PAN */a/ vocal phoneme also changes in its inheritance on BT. PAN */a/ changes to /i/ and /e/ in TL, as shown in the data in the following table.

Table 9. PAN */a/ changes to /i/ and /e/ in TL.

Position	PAN	TL	Gloss
Initial	-	-	-
Middle	-	-	-
Final	*/ata/	/ati/	Heart

Position	PAN	TL	Gloss
Initial	-	-	-
Middle	*/əmpat/ */b ə Rat/	/ə mpæE?/ /b ə RæE?/	Four Weight
Final	-	-	-

From the above data it can be seen that this change cannot be modified because the amount of data that experienced the change is very little. In addition, this change may only be sporadic because of the pronunciation error factor or the influence of the Tamiang language.

Conclusions

Most PAN vowel phonemes were inherited linearly to TL, but there are also changes in their inheritance. Changes that occur can be based on the conditions of the phonetic environment or unconditionally, or so-called changes sporadically with various causes.

The vowel phoneme of PAN */i/ was inherited regularly at TL /i/ in the initial, medial and final positions. Meanwhile, inheritance */i/> /ə/ and /e/ cannot be formulated due to data limitations. So this inheritance is indeed a change or just sporadic correspondence alone.

Vowel phonemes of PAN */u/ was linearly inherited at TL /u/ in medial and final position. Inheritance is not visible in the initial position. In vowel inheritance */u/ also changes to /i/, /ɔ/, and /o/ TL, but due to data limitations, this change can be regarded to be a sporadic change. Formulated rules are also tentative.

The PAN */ə/ was also inherited linearly in TL /ə/ in the initial and medial position, but not found in the final position. */ə/ also changes its inheritance into /a/in TL.

The last is the PAN */a/ vowel phoneme which was inherited to TL /a/. This phoneme is inherited linearly into the TL at the initial and middle position, whereas in the final position TL /a/ contributes in a compliment with /ə/. Other changes that occur are */a/ inherited to /e/. This change is a sporadic change, which may be due to language-dependent factors or other language influences on TL.

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