

Assimilatory Process of Sound Changes from Proto-Austronesian to *Bahasa Aceh*

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Abstract

Bahasa Aceh is used as a medium of communication in the language community of Aceh. Aceh is one of the provinces in Indonesia, called Nanggroe Aceh Darussalam, and is situated in the northern part of Sumatera Island of Indonesia. This study aims at describing sound change of Proto-Austronesian to Bahasa Aceh which deals with various sub-type of assimilation along with a number of word examples were employed. The number of the vocabularies used as many as 200 pieces of words refers to the Swadesh word list. All the words were collected from two couples of husband and wife. These four informants are the native speakers of Bahasa Aceh, live in Banda Aceh, the capital city of the province. All of them were on their fifties. The most common type of sound change of Bahasa Aceh which underwent the assimilation is vowel harmony.

Keywords: palatalization, vowel harmony, final devoicing, assimilation

1. Introduction

All language changes over time and these changes are addressed by experts who concentrate on comparative study of historical linguistics as something that must be happened. The languages today are descended from the proto language (as the ancestor), which underwent a process of change over a period of time at least a thousand years and some have hundreds to millions of years. That change can be observed at all levels of languages, such as phonetically, morphemically, syntactically and semantically. But changes in the most widely talked about by experts, mostly focused on changes in the phonetic elements, however diachronic changes concerning with vocabularies lost, adapted words, and the grammatical system that involves morphological, syntactic, and semantic elements in relation to change meanings are also the subject matter of this linguistic study fields.

Talking about language change, Crowley, the expert of historical linguistics (1992:38) states that all languages undergo changing from time to time and it is not an impossible thing if two different languages changed the sound of the same elements at the same time as examples; historically sound [p] in Uradhi language which is used in North Queensland has undergone changed to [w], in Uradhi language today, such as * *pinta* → *Winta* which means *hand*. The similar changing also happened in Palauan language of Micronesia where the sound [p] is also changed to [w] in its modern language; i.e. * *paqi* → *waq* which means *foot*. Further, Crowley (1992:39) explains that the possibility of change can also occur from [p] to the sound [f], [b], or even to [v], so the most that we can say is that the history of the languages change indicate that any changes of sounds were generated from their proto language.

Like other languages, the sounds of *Bahasa Aceh* (hereinafter referred to BA) today was generated from its proto language. The other experts of historical linguistics like Sebeok, (1971) Blust (1977), Wurm and Wilson (1978) identify the proto language of Indonesian archipelago is Proto-Austronesian language (hereinafter referred to PAN). PAN is an abbreviation of Proto-Austronesian commonly used by those experts.

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BA is one of the vernacular languages in Indonesian archipelago and it is used as a medium language of communication in the community of Aceh. Aceh is one of the provinces in Indonesia, called Nanggroe Aceh Darussalam, and is situated in the northern part of Sumatera Island of Indonesia.

As stated before, sounds of languages change from their proto over periods of time. Therefore, it also happened to sounds of BA, where the sounds today were originated from PAN by some process of sound change which might be over thousands years. The changing sounds of BA will be discussed later is focused on the phonetic structure changes that occur in BA vocabulary. The discussion is only on the process of changing of sounds and do not compare it with other languages originated from PAN and the period changing time as well. Therefore, this discussion does not concern about the cognate language innovation nor language mutual retention problems either. This study does not use lexicostatistics calculations, it merely discusses about assimilation of sound changed with its sub-types from PAN to BA. Other processes of sounds changed like dissimilation, metathesis, and syncope will not be discussed.

The number of the vocabularies used as many as 200 pieces of words refers to the Swadesh word list. All the words were collected from two couples of husband and wife. These four informants are the native speakers of BA live in Banda Aceh, the capital city of the province. All of them were on their fifties. All of the words were the raw data, and were confirmed to the Austronesian Language Dictionary, written by S. A. Wurm and B. Wilson (1978)

1. Review of Literature

Any study that uses sound change theories of comparative historical linguistics should know the terminology of correspondence and the terminology of variations. Mahsun (1995:29) and Keraf (1996:79) and Mbetse (2010:12) report that correspondence terminology is used to explain the sound changes that occur regularly in a particular position on any appearance of that sound whereas a variation is of sound changes that are not regular occurrences (sporadic).

Crowly (1992:385), Mahsun (1995:34), and Keraf (1996:90) express that sound changes are characterized by a variation of sound changes which can be classified into several types, such as assimilation, dissimilation, metathesis, contraction, and syncope. The sound changed carry on the nature and the character of each. According to Hock (1988:63) and the three experts mentioned above, the most common kind of sound changes is assimilation and it happens in most common languages in the world.

Further, Crowley (1992:49) says that assimilation sound changed occur, when one sound causes another sound to change so that the two sounds end up more similar or identical to each other in some way and it is focused on the concept of phonetic similarities. Therefore two sounds can be regarded as similar or identical if both carry the same phonetic features in general or about the same before the change occurs, such as a combination of sound [np] in a language. Both of these sounds have the same phonetic features, such as the following:

[n]	[p]
Voiced	voiceless
Bilabial	alveolar
Nasal	stop

The process of changing in which two proto phonemes evoke sound changes into the same phoneme in derivation language are also included in the category of assimilation. The adjusting sound can be equated with the preceding phoneme to the next subsequent or otherwise the next phoneme is equated with phonemes that preceded it. The terminology for this assimilation is known as *progressive* and *regressive assimilation*.

Progressive assimilation is when a sound phonetic features adjusting to the sound that preceded it, such as:

- * np → nt (with voiced assimilation)
- * np → nt (with place of articulation assimilation)
- * np → nm (with manner of articulation assimilation)

The asterisk (*) refers to the proto sounds

Regressive assimilation occurs when the phonetic characteristics of a sound affect the preceding sound, such as: * np → bp from the two type of assimilation, the regressive assimilation most commonly found in all languages. The process of changing is characterized by the sound changes from right to left.

Assimilation can occur as a total assimilation. A total *assimilation* marked when a combination of sounds has phonetic features identically to each other. In other words, this assimilation occurs when all the characteristics of a sound are phonetically identical to the phonetic characteristics of the next sound totally, such as: *np → pp. Besides total *assimilation* there are also found *partial assimilation* which occurs when the changed sound retained at least one of the original features. Between these two types of assimilation, partial assimilation is commonly found in all languages. Example of partial *assimilation*; * np → bp, the assimilation is * [n] → [b] where these two sounds have the same phonetic features; voiced.

Another assimilatory change is known as *palatalization*. The assimilation refers to the changing of the place of articulation of consonant (bilabial, dental, velar, and others). Crowley (1992:53) remarks, *palatalization* also be understood as a process of assimilation whereby non-palatal sounds (*bilabial, dental, alveolar, velar, and others*) go into the palatal sounds in a certain environment, and usually before front vowel for example before the vowel [i] and [e] in a language such as in Fijian. Dental sounds [t] turned into sound palatal [c], like [tinana] turns into [cinana] means 'mother'.

Like *Palatalization*, *Vowel harmony* is also regarded as a process of assimilation. This process involves assimilation of one or more characteristic of one vowel to some or all of the other vowels of the sounds that undergone changes. As in the language of pre-Ancient Nordic, the word *[Laund] turns into [lɔnd] because the vowel /a/ is located in front of the vowel; /u/ turns into /ɔ/.

The next process of assimilation which also very common is *final devoicing*. This process refers to the changing of the voiced sound into voiceless sound in the final position of a word. The most common sounds that undergo this process are a fricative sound, stop sound, and including the vowel sounds, such as in German:

* ba : d → ba : t 'bath'

* ta : g → ta : k 'days'

Assimilatory processes can be described by the following rules or formulas;

Example: * ba : d → ba : t
d] → [t] / ____ #

The interpretation of this rule is:

[d] Becomes or changes to [t] in the end position of a word. This process happens where voiced sounds will be changed to voiceless sounds if the sound is on the end position of a word.

In discussion, some symbols will be used to describe the sounds changing. As follows:

The symbol [] represents the sound.

The symbol → means change to

The symbol / shows the environments in which the sound occur.

The symbol ____ # shows end position

The symbol # ____ shows initial position

The symbol # ____ # shows middle position

The symbol C is for consonant

The symbol V is for vowel

The asterisk (*) refers to the proto sounds or proto words

2. Discussion

From the data obtained in the lexical form, the following will be described the process of assimilation which associated with the sounds that undergo the process of assimilation from PAN to BA.

3.1. Palatalization

PAN sound * [d] → BA [dʒ]. The sound of the non-palatal dental [d] turned into a palatal sound [dʒ] before the vowel [a]. The environment of the change is in the initial position of the words, the formula can be written, as follows:

* [d] → [dʒ] / # ___ V

Examples:

PAN	BA	Gloss
*davuh	dʒiuh	far
*darum	dʒarum	needle
*dame	dʒame	guess

* [d] → [dʒ] / # ___ #

PAN sounds * [d] → BA [dʒ]. The sound of the non-palatal dental turned into a palatal sound, where the environment of the change is in the middle position of words.

Examples:

PAN	BA	Gloss
*tadam	tadʒəm	sharp
*hudan	udʒən	rain
*badu	badʒe	dress

This type of sound changed never occurs at the end position of a word.

3.2. Vowel Harmony

The combination of the two vowels, open central unrounded vowel * [a] and high back vowel * [u] of PAN underwent changed into half close back vowel [o] in BA when it was preceded by any sound of consonants, which is * [au] → [o]. Represented as follows:

* [au] → [o] / C___ #

PAN	BA	Gloss
*rau	uro	days
*lau	lon	l
*tau	top	stab
*danau	dano	lake
*daun	on	leaf
*taun	ton	year

PAN vowel underwent a process of assimilation in the position of second closed syllable in BA words. High front vowel * [i] changed to a half open front rounded [ε]. A closed syllable refers to a word ended by a consonant. The formula is:

* [i] → [ε] / ___ # C

Examples

PAN	BA	Gloss
*kulit	kulɛt	skin, leather
*kuniŋ	kunɛŋ	yellow
*laŋit	laŋɛt	sky
*pilih	pilɛh	select
*sempit	sempɛt	narrow
*tipis	lipɛh	thin

Vowel harmony assimilation also occurs in the sound of PAN, high front vowel *[i] is changed to [ɔ] in BA, when a word ends with the proto sound *[i]. The assimilation formula is as follows:

*[i] → [ɔ] / ____ #

Example:

PAN	BA	Gloss
*beli	blɔ	buy
*gigi	gigɔ	teeth
*tali	talɔ	rope
*laki	lakɔ	husband
*bəsi	besɔ	iron

Vowel harmony assimilation which also commonly happens from sound of PAN into sound of BA is in the sound of high back vowel *[u] to a closed front rounded vowel sound [e] in the final position of a word. These changes occur regularly. This process can be described as follows;

*[u] → [e] / ____ #

PAN	BA	Gloss
*abu	abe	ash
*asu	ase	dog
*bulu	bule	fur
*kayu	kaye	wood
*batu	bate	stone
*ulu	ule	head
*malu	male	shy
*lu	le	three

3.3. Final Devoicing Assimilation

Final devoicing assimilation from PAN into BA commonly occurs in the change of voice consonant sounds into voiceless consonant sounds in the final position of a word, and this process occurs regularly. This sub-type of assimilation will be discussed below.

Final devoicing assimilation process took place in voiced velar stop sound of PAN *[g] turned into a voiceless glottal fricative sound of BA [h], when a word ends with PAN sound *[g], which can be described as follows:

*[g] → [h] / ____ #

PAN	BA	Gloss
*bənig	bənih	seed
*tanag	tanoh	land
*buag	boh	fruit
*goasig	gasih	love
*pənug	pənoh	Full

4. Conclusion

Palatalization takes place when alveolar *[d] of Proto-Austronesian sound underwent change into the palatal [dʒ] of *Bahasa Aceh* in initial or in the middle positions of words of the sound environments. The most dominant sub-type of assimilation in the process of sound change from Proto-Austronesian to *Bahasa Aceh* is vowel harmony assimilation. Vowel harmony was undergone by the sound change of Proto-Austronesian into *Bahasa Aceh* when semi-vowel *[au] turned into vowel [o] of *Bahasa Aceh* in the end position of a word, like the word *danau* → *dano* the vowel sound of Proto-Austronesian *[i] underwent a process of assimilation into the vowel [ɛ] of *Bahasa Aceh* on

the environment of second closed syllable position in a word, like the word *pilih* → *pilɛh*. Vowel *[i] underwent a process of assimilation into the vowel sound [ɔ], when a word ends with a vowel sound *[i], like **laki* → *lakɔ*. Vowel [u] underwent a process of assimilation into the vowel [e], when the word ends with a vowel sound *[u], like **malu* → *male*.

Final devoicing consonant sound which underwent a process of assimilation is when voiced stop of velar sound *[g] turned into the voiceless of glottal fricative sound [h] and it happened when a word ends with a voiced stop of velar sound *[g], like **bəniɡ* → *bənih*.

All the sounds change from Proto-Austronesian to *Bahasa Aceh* is *partial assimilation*. It is said because the changed sounds always retained the original features of the unchanged sounds. Like *it → ɛt, in **kulit* (PAN) to *kulɛt* (BA), *li → lo, in **tali* (PAN) to *talo* (BA), *nig → nih, in **bəniɡ* (PAN) to *bənih* (BA) and others.

References

- Bellwood, Peter. (2000). *Prasejarah Kepulauan Indo-Malaysia*. Jakarta: PT Gramedia Pustaka Utama.
- Blust, R. (1977). *The Proto-Austronesian Pronounce and Austronesian Subgrouping: A Preliminary Report Working Paper in Linguistics*. Hawaii: University of Hawaii Press.
- Clark, John and Collip, Yalon. (1995). *An Introduction to Phonetics and Phonology. Second Edition*. Oxford: Blackwell Publisher Ltd.
- Crowly, Terry. (1992). *An Introduction to Historical Linguistics*. New York: Oxford University Press.
- Hock, Hans Henrich. (1988). *Principles of Historical Linguistics*. Berlin: Mouton de Gruyter.
- Kaswanti, Bambang, and Collins, J.T. (1985). *Telaah Komparatif Bahasa Nusantara Barat; Kumpulan Karya Robert A. Blust*. Jakarta: Penerbit Jambatan.
- Keraf, Gorys. (1996). *Linguistik Bandingan Historis*. Jakarta: PT. Gramedia Pustaka Utama.
- Kridaklasana, Harimurti. (1993). *Dictionary of Linguistics. Third Edition*. Jakarta: PT Gramedia Pustaka Utama.
- Lyons, John. (1995). *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press
- M.S, Mahsun. (1995). *Dialektologi Diakronis :Sebuah Pengantar*. Yogyakarta: Gadjah Mada University Press.
- _____. (2010). *Genolinguistik: Kolaborasi Linguistik dengan Genetika dalam Pengelompokan BAHASA dan Populasi Penuturnya*. Yogyakarta: Pustaka Pelajar Offset
- Mbete, Aron Meko. (2010). *Linguitik Historis Komparatif*. Bali: Udayana University Graduate Program.
- Mufwene, Salikoko S. (2004). *The Ecology of Language Evolution*. Cambridge: Cambridge University Press.
- Sebeok, Thomas A. (1971). *The Austronesian Languages and Proto-Austronesian*. Paris: Mouton the Hague.
- Wurm, S. A and Wilson, B. (1978). *English Finderlist of Reconstructions in Austronesian Languages (Post - Brandstetter)*. Series C - No. 33. Canberra: The Australian National University.