THE PHONOLOGICAL PROCESS OF BATAK TOBA LANGUAGE

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Abstrak

Indonesia terkenal dengan kekayaan akan budaya yang diwariskan oleh nenek moyang. Bahasa daerah merupakan salah satu yang termasuk didalamnya. Sebagai bentuk penghargaan terhadap bahasa itu, maka sangat perlu dilakukan penelitian tentang apa saja unsur-unsur yang terkandung di dalamnya. Dalam kesempatan ini, penulis mengambil kesempatan untuk menganalisis sebuah bahasa daerah yaitu bahasa Batak Toba. Dimana status penulis sekaligus sebagai penutur asli bahasa Batak Toba telah memberikan kemudahan dalam melakukan penelitian. Penelitian ini ialah tentang analisis beberapa proses fonologis Bahasa Batak Toba. Tujuannya adalah mendeskripsikan jenis-jenis proses fonologis yang terdapat dalam bahasa Batak Toba. Penulis mengoleksi data dari sebuah Kamus Bahasa Batak Toba-Indonesia yang disusun oleh Drs. Richard Sinaga sebagai data utama dan kosakata di luar dari kamus tersebut sebagai data sekunder. Masalah yang dikaji fokus pada kosa kata bahasa Batak Toba yang ada di dalam kamus tersebut yaitu tentang pengklasifikasian kata berdasarkan jenis-jenis proses fonologis yang ada. Untuk menjawab masalah tersebut, penulis melakukan penelitian dengan metode penelitian deskriptif kualitatif. Dari hasil penelitian tersebut terdapat empat macam proses fonologis di dalam bahasa Batak Toba yaitu: assimilation, metathesis, addition dan reduction.

I. Introduction

1.1 Background of the Study

Batak tribe lives in North Sumatera and it has 6 (six) sub-tribes. Every sub-tribe has its own language. They are Batak Toba language, Batak Simalungun language, Batak Karo language, Batak Pak-pak Dairi language, Batak Angkola language and Batak Mandailing language. Because the writer comes from Batak Toba tribe, she chooses Batak Toba language to analyze. It makes her easier to analyse the data because of her deep knowledge about the language. Recently, many Bataknese speak the form of words as the same way as they write it. Otherwise, between the spoken words and the written words are different. For this case, the writer has asked her friend to write a word *gonghon* (an invitation). As the result, she wrote it with /gokkon/ (the pronounciation of *gonghon*). This case leads the writer to research about her own language especially in phonology since she also realises that she is not really a good native speaker of Batak Toba language. In this occation, the title

of the research is *The Phonological Process of Batak Toba Language*. There are many kinds of phonological process. Nevertheles, the phonological process will be analysed with focus on assimilation, metathesis, sound addition, reduction.

1.2 Purpose of the Study

The purposes of this research, first the writer would find out the kinds of the phonological process in Batak Toba language. Second, she would describe and explain it qualitatively.

1.3 Underlying Theory

To assess a language, we need to study the sound of the spoken language. Ramelan (1969:6) said that phonology is the study of phones on speech sounds patterns in a language. It is different from phonetics which focuses its study on the description of speech sounds, phonology deals with how the speech sounds form. Phonology explains how to identify the sounds which can distinguish meaning in a certain language and those which cannot. When we pronounce a word, the sounds that we use in the pronunciation are called phones or phonetic units. Muslich on his book (2011:118-127) mentioned some kinds of phonological process that is found as the result of this research. They are assimilation, metathesis, sound addition and reduction.

1.4 Organization of Writing

The outline of this paper will be as follows:

1. Introduction

This chapter contains the background of the study, purpose of the study, underlying theory, and a brief explanation about the presentation of the paper.

2. Methodology

It contains the types of the research, the data and the source of data, method of collecting data includes population and sample, research procedure, and tehnique of analyzing data.

3. Discussion

This chapter consists of the data collected and the data analysis. It discusses phonological process of Batak Toba language that consists of assimilation, metathesis, epenthesis, vowel and consonant reduction.

4. Conclusion

The last chapter is the conclusion that presents the result of whole analysis.

II. Methodology

2.1 Data

The primary data are vocabulary which obtained directly from the dictionary Kamus Batak Toba-Indonesia and the book Bahasa Batak Toba untuk

Pemula-Naposo Bulung. Both were written by Drs. Richard Sinaga. The secondary data here are those words that may come from another language to give a description before describing about this regional language. They may come from books, some specific websites, regional song and conversation with Bataknese respondents.

2.2 Collection

a. Population

The population are all words which are found in *Kamus Batak Toba-Indonesia* and the book *Bahasa Batak Toba untuk Pemula-Naposo Bulung* that written by Drs. Richard Sinaga, especially the pronunciation change obtained directly from Batak Toba dictionary itself such the word *dokhon* that will be pronounced as /dokkon/ and this word can be concluded into assimilation especially progressive assimilation.

b. Sample

In this research, the writer uses purposive sampling technique. She takes the samples by determining the particular criteria of the data before collecting the data, such as what kind of words that include into assimilation, metathesis, sound addition or even reduction. In other words, she has choosed the criteria or made the aim that is exactly phonological process before she starts the research.

III. Discussion

Data analyses present the kinds of phonological process in Batak Toba language with focus on Assimilation, metathesis, sound addition and reduction.

3.1 Assimilation

Assimilation is something which varies in extent according to speaking rate and style. It is more likely to be found in rapid, casual speech and less likely in slow, and careful speech. Generally in Batak Toba language, the cases that most often describe below are all assimilations affecting the consonants. The process of changing may also occurs in one syllable or more than one. Even it also occurs in a word that preceded by perfixes or followed by sufixe. All the pronounciation of words of Batak Toba language should be the same way as they written in the phonetic trancriptions in the dictionary of Batak Toba language dictionary. In Batak Toba language, assimilation may be classified in three kinds. They are regressive assimilation, progressive assimilation, and reciprocal assimilation.

3.1.1 Regressive Assimilation

Table 1. Regressive Assimilation Process

NO.	Words	Process	Regressive Assimilation	Meaning
1.	Gansip	/n+s/ = > /ss/	Gassip	A hammer
2.	Ha nd ang	/n+d/=>/dd/	Ha dd ang	Fence
3.	Ha ml et	/m+t/-/ll/	Hallet	Boyfriend or girlfriend

The above example especially number 1 (one) shows that sound /n/ in base form of word *gansip* becomes /s/. Hence, it will be pronounced as *gassip*. The sound /n/ is adjusted or is assimilated from /s/ that follow it. Both /n/ and /s/ do not change the articulation of mechanism because both /n/ and /s/ come from the same articulation that is alveolar consonant. If we hear this word, the sound /s/ seems like sound /c/. Whereas in Batak Toba language, there is no sound /c/. Everything that sounds like /c/ it must be sound /s/.

The second, we can see from the second example with the base form word *handang* where /n+d/ becomes /dd/ which means that /n/ surely changed into /d/ because the sound /n/ is influenced by sound /d/. So /n/ in word *handang* is assimilated with sound /d/. Thus, it is pronounced as *haddang*. In this example, there is still no change of the articulation of mechanism since sound /n/ comes from alveolar consonant and apparently it is followed by sound /d/ which comes from alveolar consonant too.

Based on the table, there is just one word that comes from the different consonant articulation. This phenomenon happens rarely. The base form of word is *hamlet*. The process of regressive assimilation occurs when sounds /m/+/l/becomes /ll/. Sound /m/ comes from bilabial consonant articulation while sound /l/ comes from alveolar consonant articulation. As sound /l/ influences sound /m/ so /m/ surely changes into /l/ and the consonant articulation becomes alveolar consonant articulation. From the word list on the table above, we see that the consonant articulation may not change.

Here are the examples where a preceding sound is influenced by the following sound. The regressive assimilation does not occurs only in sound /n+s/or/n+d/ but also some sounds which influence sound /m/and/n/ (the following phoneme). In fact, sound /m/and/n/h have an important role in regressive assimilation process. Table 2 below will show that sound /m/and/n/h frequently appear in regressive process.

In regressive assimilation, we can see that some of the process may come from the same articulation or the different articulation and it may change. But due to the fact, regressive assimilation mostly comes from the same articulation so the process will not change the articulation. The changing of the articulation generally depends on the sound that influences the preceding sound. This process commonly comes from the base from the vocabulary of Batak Toba language

3.1.2. Progressive Assimilation

This is totally different from regressive assimilation. Here are the examples of progressive assimilation.

Table 2. Progressive Assimilation Process

Words	Process	Progressive Assimilation	Meaning
Do kh on	/k+h/-/kk/	Do kk on	Say
Paingo th on	/t+h/-/tt/	Paingo tt on	Remember

In the first example, the base from of word *dokhon* which has the meaning "say" undergoes the process of regressive assimilation. Where sound /k/influences the following sound /h/ and creates the pronunciation change into /k/. Previously, the sound /h/ comes from glottal consonant articulation but after /h/ is influenced by /k/ that comes from velar consonant articulation, both of them become velar consonant articulation. Consequently, the word *dokhon* is pronounced as *dokkon*.

The second is the same process where /h/ in word *paingothon* pronounced as *paingotton*. This word comes from the base form *ingot* that means remember. It shows that paingothon comes from prefixe *pa*- and sufixe *-hon*. Sound /h/ in *paingothon* is influenced by the preceding sound /t/. Sound /h/ comes from glottal consonant articulation and sound /t/ comes from alveolar consonant articulation. Eventually, both become alveolar consonant articulation.

Different from regressive assimilation, progressive mostly comes from different articulation. The changing will follow the sound which influences the next sound articulation.

3.1.3 Reciprocal Assimilation

Commonly, some researchers called this phenomenon as "total assimilation". In this phenomenon, all the sound are definitely changed and it is frequently to find the process of changing that followed by sufixes.

Table 3. Reciprocal Assimilation Process.

No.	Words	Process	Reciprocal Assimilation	Meaning
1.	Baraŋ h u	/ŋ+h/-/kk/	Bara kk u	Mine
2.	Dala nh u	/n+h/-/kk/	Dala kk u	my way

The first example of reciprocal assimilation proves that in Batak Toba language especially in word *baranghu* undergoes the process of total assimilation that creates a new pronunciation. This word comes from the base form *barang* and followed by the sufixe *-hu*. Previously, sound /ŋ/ comes from velar consonant articulation and /h/ comes from glottal consonant articulation. Sound /ŋ/ assimilates sound /h/ and conversely sound /h/ influences sound /ŋ/. This process creates a new pronunciation becomes /kk/. After getting the influence, the word /baranghu/ is surely pronounced as /barakku/. Because of this, the articulation changes into velar consonant articulation. Coincidentally, the articulation of sound /ŋ/ and sound /k/ come from the same articulation. After getting the reciprocal assimilation, somehow the new articulation is determined by one of the sound which "influences" or "is influenced".

The second, the word *dalanhu* is pronounced as *dalakku*. This word comes from the word *dalan* and followed by sufixe –*hu*. The process of reciprocal assimilation comes from sound /n+h/ which is changed into /kk/. As mentioned above this is a kind of total assimilation where the preceding sound and the following sound have a great chance to change. This is a kind of example of total change between the two sounds which are assimilated each other and both create a new articulation. As sound /n/ comes from alveolar consonant articulation and sound /h/ comes from glottal consonant articulation. Both totally change into /kk/ and the articulation also becomes velar consonant articulation.

3.2 Metathesis

The original shape and form metathesis equally present in that language as a kind of language variation. This type might be distinguished, though it is not so important for the description of spesifically phonological system. It frequently occurs in all languages as the type of speech error and is a common feature of child phonology.

In Batak Toba language, the writer finds that some words compete to use but somehow the reason is that it is easier to pronounce. In fact, this phenomenon undergoes a process mostly by changing a consonant and vowel phonemes. It seldom in finding the word that reorders the phoneme. Metathesis can be classified in two kinds. They are vowel metathesis and consonant metathesis.

In this phenomenon, the writer inserts the data (in this case some words that are classified as metathesis) in a conversation. Otherwise, it is important to remember that below conversation is not the data. Actually, the data are those words that was made intentionally in a bold font. So, it is just the explanation of the writer that aims to make the readers able to imagine how this phenomenon exist in Bataknese environment.

3.2.1 Vowel Metathesis

Below is the example of using the data in a conversation:

- A: **Ogos** roha ni natua-tua i marnida anak boru na ro tu jabu na i.
- → The mother was **offended** when the girl came to her house
- B: Bah **boasa**?
- \rightarrow Why?
- A: Holan rupana do na bagak alai pangalahona roa. Aut sugari denggan mangkatai tu natua-tua na dang songoni di palao sian jabu nai.
- → She is beautiful but not her heart. If she is polite to the mother, she will not be kicked out from her house.

Table 4. Vowel Metathesis

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No.	Position	Words	Vowel Metathesis	Meaning	
1.	Initial	Ugus	Ogos	Offended	
2.	Medial	Beasa	Boasa	Why	
3.	Final	-	-	-	

Both of them are used by Bataknese. Otherwise, when people have a conversation with them, we will see that the following form /boasa/ and /bolong/ are used frequently. From the table, sound /u/ changes into /o/ in a word ugus and /e/ changes into /o/ in a word beasa. Otherwise, It does not mean that the preceding/original words above lost but somehow they are still used by Bataknese. It depends on the native speakers to choose what they prefer to use in their daily conversation. The pronunciation change is not only in initial and medial position of the words but it may be change in the final position of the words. Vowel metathesis process also occurs in a reduplication process. Otherwise, it is just a little case. Phonologically, this is a rather complex phenomenon, and in many respects it is better regarded as a morphological process rather than a phonological one. However, it is a process which involves a phonological modification of the morphemes it affects and such can be seen as lying on the boundary between phonology and morphology.

Such in words:

Ruhet-ruhet—ruhot-ruhot Lomuk-lomuk—lomok-lomok Paga-paga—ampapaga

This process can be classified according to the amount of a form that is duplicated, whether complete or partial. The first and the second are include to complete from and the last includes to partial.

3.2.2 Consonant Metathesis

Consonant metathesis and vowel metathesis do not have an insertion sound. It is just reorders the phoneme into the easier one to pronounce. Both in vowel metathesis and consonant metathesis, the reordering of sound may take place in initial, medial, and final position.

The conversation is made to describe how the words are used in daily conversation.

- A: Songon na godang do rongit on ate? Manang na ala **jonok** tu mual do jabu ni opung on nuaeng.
- → There are so many masquitos here, aren't they? I think because grandmother' house is **nea**r the river now.
- B: Bah ido?
- → Oh really?
- A: Innon ai gabe **ristop** hu hilala.

Yes, i'm feeling **itch** now!

B: Ingkon ni **songkal** majo sahali on. Molo hudok, ai na so maridi do pe ra ho. I am not **dissagree with** this one. I think, it is due to the fact that you are not take a shower yet!

Table 5. Consonant Metathesis

No.	Position	Words	Consonant Metathesis	Meaning
1.	Initial	D onok	J onok	Near
2.	Medial	Rintop	Ristop	Itch

Actually, there is no complicated discussion about this phenomenon. The words compete each other to use in a daily conversation. Yet, they do not undergo change in meaning.

3.3 Addition

After researching, the writer finds that it is true that Batak Toba language has the phenomenon of addition but this phenomenon is not as frequent as metathesis. Actually addition is still a part of metathesis. The difference is that metathesis is a process that just reorders the sequence of the phoneme with the same number of the phoneme. According to the research, the writer finds that the maximal number of additional sound involves two phonemes. For example: ambolong and bolong. Addition can be classified into three kinds, namely: prothesis (initial), epenthesis (medial) and paragogue (final).

In this phenomenon, the writer inserts the data again (in this case some words that are classified as addition) in a conversation. Actually, the data are those words that was made intentionally in a bold font. It makes the readers are easier to identify the data. So, it is just the explanation of the writer that aims to make the readers able to imagine how this phenomenon exist in Bataknese environment.

3.3.1 Vowel Addition

Beyond this simple description, however, vowel addition processes vary enormously in their characteristics, and many aspects of their typology are still not well understood. However, the focus in this section is on how the form of vowel addition exist in Batak Toba language. In Batak Toba language, this phenomenon is simplier than in any other languages.

Conversation 1.

A : **Sian** dia halak tulang?

B: Where you have been uncle?

A : Tarborot nangkin motor ni opungmu di gambo-gambo na di Parsoburan an. Jai **mangereet** motor i nangkin

B: Your grandfather's lorry trapped on the mud in Parsoburan. So we moved it.

Table 6. Vowel Addition

No.	Position	Words	Vowel Addition	Meaning
1.	Prothesis	Bolong	Ambolong	Expelled
2.	Epenthesis	San	Sian	From, where
3.	Paragogue	Orot	Ereet	Move

As we can see the example above. That is a kind of vowel addition in Batak Toba language. The first example *bolong* has changed into *ambolong*. It means that there is an insertion syllable *am*. Both are used by Bataknese. In fact, the quantity of using this words are different. The word *bolong* is used dominantly. The first reason is that it is simplier. The word *san* which has the meaning 'from' becames *sian*. There is an additional vowel between phoneme /s/

and /a/ that is phoneme /i/. Commonly, san is used in a short conversation. The word san is usually followed by the pronoun of direction an. If the word san is used in a sentence it is a kind of couple with an. Such as san an. It is usually pronounced as sanan. It has the meaning that is "from over there". The word san is usually used by children. Since it is easier to pronounce than sian.

This is a strong fact that vowel addition always occurs fewer than consonant addition.

3.3.2 Consonant Addition

The term "consonant addition" can refer to any process in which a consonant is added to an utterance. Commonly it consists of two phonemes in Batak Toba language cases. Below, the writer makes a short conversation to make the reader able to imagine how the words are used by Bataknese.

Conversation 2.

- A: **Umbuk** majo jas hi manang na boi do tu ho.
 - → Try to wear my coat perhaps it is suitable for you.
- B: **Marsogot** ma hu umbuk i, ai nganeng pataruhon indahan ni oma dope au tu porlak.
 - → I will try to wear it tommorow, now I want to deliver some food for mom to the garden.
- A: Bah, **laho** ma ho ai nunga male ra omak mi. Alai unang lean indahan na tata i.
 - → Oh, you may go now, perhaps your mother is hungry. Otherwise, do not give the unripe one.

B: Olo bang.

→ Ok brother.

Table 7. Consonant Addition.

No.	Position	Words	Consonant Addition	Meaning
1.	Prothesis	Umbuk	Tumbuk	Try
2.	Epenthesis	Lao	Laho	Go
3.	Paragogue	Tata	Tanta	Unripe

According to the writer, it is just to show that there is a case of simple metathesis phenomenon in Batak Toba language as a part of phonological process. There is no complicated problems to discuss in this phenomenon. The case is in the quantity of using the different words and they compete each other to use.

3.4 Reduction

The reduction occurs in three places such as apharesis (initial syllable), syncope (medial syllable), and apocope (final syllable). Otherwise, this phenomenon does not occur in all places since some of the fact show that this

phenomenon only occurs in medial and final. Also, it does not occur in all vowel and consonant. Otherwise, It occurs only in some part of it.

3.4.1 Vowel Reduction

Vowel reduction is a process of deleting a vowel sound from a certain contexts. After collecting some words, the writer finds sound /u/ experienced the reduction especially in a pronoun of direction on, an and i.

The reduction can be seen from the example below:

Ise na di jolo **jabumu an**?

Who is in the front of your house

Here, *jabumu an* is pronounced as /jabuman/. It occurs since the following sound is vocal too. This phenomenon mostly occurs in the word followed by possesive pronoun *mu* that means *yours*. An here means a pronoun of direction which is far from a speaker or the hearer. Or the other words, it means *over there* or *there*.

The three examples below deal with possesive pronoun which is shown by hu. Hu means mine. So all of the words which are followed by possesive pronoun hu and mu will have a reduction especially in vowel u. The writer is classifying some words that include vowel reduction like the examples below.

Table 8. Vowel Reduction

No.	Words	Process	Vowel Reduction	Meaning
1.	Obukm u i	Obukm u +i	Obuk mi	Your hair
2.	Anakhu on	Anakh u +hon	Anakh on	My son
3.	Tash u an	Tash u +an	Tash an	My bag

The following vowel influences the preceding vowel. When we pronounce the word, the preceding vowel will lost. Otherwise, vowel reduction also occurs in the words *jo. Jo* actually comes from word *jolo* which has the meaning *firstly* and *in front of*. But *jo* here does not mean like those. *Jo* here has the implicit meaning *please*.

Conversation 3.

Jolo sapu jo jabunta i asa laho ho tu singkola da.

 \rightarrow Sweep our house *firstly* then you may go to school.

Hundul-hundul do nasida di jolo ni jabu nai.

→ They sit in front of their house.

Buat jo buku na di ginjang ni lamari i.

Please take the book which is on the cupboard.

Above, they are kind of words with *jolo* and *jo* in some sentences. Now, let us see the vowel reduction processes with word that is followed by the word *jo*. Otherwise, there is one thing to remember. The process of this word may consist of one word or two words (syllable).

Table 9. Reduction Process

Note: Remember jo means please

No.	Words	Meaning	Process of	Reduction	Meaning
			reduction		
1.	Dia	Give me	Dia+jo	Dijo	Give me please
2.	Nian	That one	Nian+jo	nijo	That one please
3.	Awas	Excuse me	Awas+jo	anjo	Excuse me, please

There is another part of this phenomenon. In the process of reduction, the vowel in prefix pa- reduces when it is combined with a root started with the phoneme that comes from alveolar consonant articulation /r/.

Table 10. Reduction Process

No.	Words	Meaning	Process of Reduction	Reduction	Meaning
1.	Rajom	Sharp	Pa+rajom	Prajom	To make sharper
2.	Rambas	Cut	Pa+rambas	Prambas	To cut down
3.	Rarat	Spread up	Pa+rarat	Prarat	To spread up
4.	Rapat	Close	Pa+rapat	Prapat	to get closer

3.4.2 Consonant Reduction

Consonant reduction is a process of deleting a consonant sound from a certain phonetic contexts. It is different from English reduction that mostly undergoes in consonant blend such as the word [nest] pronounced as [nes]. The reduction of silent letters [p,t,k] in final position is a wrong strategy which can create a serious errors. The words tend to be pronounced as easily as the speakers can. In Batak Toba language, word /ahu/ that has the meaning /i or possesive pronoun me/ is usually pronounced to be /au/. This case mostly happens in phoneme /h/.

Look at the example:

Leon surat on tu ibana!

Give this letter to him!

Because sound /h/ is reduced, it made the word /lehon/ pronounced as /leon/. It mostly happens between the two vocals (before or after the reduce sound). The writer thinks that the best reason for this phenomenon is that sound /h/ is placed in between the two vowels. So it makes the speaker is easier to pronounce the word. Below are the others example of consonant reduction.

Table 11. Consonant Reduction Process

No.	Words	Process of the Reduction	Meaning
1.	A h u	/au/	Me
2.	Ba h en	/baen/	Make
3.	Le h on	/leon/	Give
4.	Rahis	/rais/	Steep

BIBLIOGRAPHY

- Anggraeni, Dian Martha. (2010) "Articulation Errors In Pronouncing Indonesian Words Containing Consonants Clusters". Thesis, Universitas Diponegoro, Semarang.
- Chaer, Abdul. (2009) Fonologi Bahasa Indonesia. Jakarta: Rineka Cipta.
- Fromkin, Victoria. (1968) *An Introduction to Language*. Sydney: Mc person's Printing Group.
- Hume, Elizabeth. (2001) *Consequences of Word Recognition for Metathesis*. Athens: OSU University.
- http://akademik.nommensen-id.org
- hhtp://repository.usu.ac.id.
- Koetjoroningrat. (1990). Methodology Research. Jakarta: Gramedia.
- Manik, Sondang. (2008) "Evidensialitas dalam Bahasa Batak Toba". Thesis, Universitas Sumatera Utara, Medan.
- Muslich, Masnur. (2010) *Tata Bentuk Bahasa Indonesia: Kajian ke arah Tata Bahasa Deskriptif.* Jakarta: PT Bumi Aksara.
- Muslich, Masnur. (2011) Fonologi Bahasa Indonesia: Tinjauan Deskriptif Sistem Bunyi Bahasa Indonesia. Jakarta: PT Bumi Aksara.
- O'Grady, William. (1987) *Contemporary Linguistics: An Introduction*. London: Copp Clark Pitman.
- Puji Rini, Setiyo. (2008) "Phonological Errors Made by Beginning Learners of Primary 2 and Primary 3 In Graceland Learning Centre Semarang". Thesis, Universitas Diponegoro, Semarang.
- Ramelan. (1983) English Phonetics. Semarang: UNNES PRES.
- Riyadi, Sugeng. (2011) "Phonological Interference in "Suami-Suami Takut Istri" Comedy Series". Thesis, Universitas Diponegoro, Semarang.
- Roach, Peter. (1983) *English Phonetics and Phonology : A Practical Course*. Cambridge: Cambridge University Press.
- Siaahan, Sanggam. (2007) "The Phonological Process of Batak Toba Language". Thesis, Universitas Sumatera Utara, Medan.
- Sinaga, Richard. (2007) *Bahasa Batak Toba untuk Pemula Naposobulung*. Jakarta: Dian Utama.
- Sinaga, Richard. (2008) Kamus Batak Toba-Indonesia. Jakarta: Dian Utama.
- Spencer, Andrew. (1996) *Phonology: Theory and Description*. Pontypridd: Blackwell Publishing.
- Sudaryanto. (1993) *Metode dan Aneka Teknik Analisis Bahasa*. Yogyakarta: Duta Wacana University Press.
- Warsito, Herman. (1992). *Pengantar Metodologi Penelitian*. Jakarta: Gramedia Pustaka Utama.

APPENDIX

Table 1. Regressive Assimilation Processes

No	Words/Pronounciation	Regressive Assimilation	Meaning
1.	Ambal/abbal	/m+b/-/bb/	Tossed
2.	Ampe/appe	/m+p/-/pp/	Load
3.	Angkang/akkang	/ng+k/-/kk/	Nick name for
			sister or
4		, , , , , , ,	brother
4.	Anju/ajju	/n+j/-/jj/	Forgive
5.	Antar/attar	/n+t/-/tt/	Pretend
6.	Balansu/balassu	/n+s/-/ss	Cotton
7.	Balintang/balittang	/n+t/-/tt/	Weave
8.	Ba nj ar/ba jj ar	/n+j/-/jj/	Village
9.	Bi ns ar/bissar	/n+s/-/ss/	Rise
10.	Bontar/bottar	/n+t/-/tt/	White
11.	da mp ol/da pp ol	/m+p/-/pp/	Massage
12.	da nd an/da dd an	/n+d/-/dd/	Adorn
13.	Da ng ka/da kk a	/ng+k/-/kk/	Branch
14.	Di mp os/dippos	/m+p/-/pp/	Neat
15.	Do mp ak/do pp ak	/m+p/-/pp/	Direction
16.	Galu mb ang/galu bb ang	/m+b/-/bb/	Wave
17.	Ga nj ang/ga jj ang	/n+j/-/jj/	Long
18.	Ga ns ip/gassip	/n+s/-/ss/	Hammer
19.	Gondang/goddang	/n+d/-/dd/	Drum
20.	Gonti/gotti	/n+t/-/tt/	Change
21.	Ha ml et/hallet	/m+l/-/ll/	Boy/girlfriend
22.	I mb ang/i bb ang	/m+b/-/bb/	Honey
23.	Impas/ippas	/m+p/-/pp/	Finished
24.	ja nj i/ja jj i	/n+j/-/jj/	Promise
25.	ja ngk o/ja kk o	/ng+k/-/kk/	Excessive
26	Li ngk ang/li kk ang	/ng+k/-/kk/	Peeled
27.	Li nt om/li tt om	/n+t/-/tt/	Lose
28.	Mani mb il/mani bb il	/m+b/-/bb/	Digress
29.	Ma nd ar/ma dd ar	/n+d/-/dd/	Sarong
30.	Me nd at/me dd at	/n+d/-/dd/	Warped

Table 2. Progressive Assimilation Processes

No.	Words/Pronounciations	Progressive Assimilation	Meaning
1.	Bo kh on/bo kk on	/k+h/-/kk/	Give; bring
2.	do kh on/do kk on	/k+h/-/kk/	Say

3.	Paingothon/paingotton	/t+h/-/tt/	Remember
4.	Pahato ph u/pahato pp u	/p+h/-/pp/	Too fast
5.	Pasahathon/pasahatton	/t+h/-/tt/	Tell
6.	Pagola ph u/pagola pp u	/p+h/-/pp/	Too dark

Table 3. Reciprocal Assimilation Processes

No.	Words/Pronounciation	Reciprocal Assimilation	Meaning	
1.	Bara ngh u/bara kk u	/ng+h/-/kk/	Mine	
2.	Dala nh u/dala kk u	/n+h/-/kk/	My way	
3.	Ho ph op/ho kk op	/p+h/-/kk/	Tug at, hug	
4.	Hu mh am/hu kk am	/m+h/-/kk/	Make up	
5.	Huru mh u/huru pp u	/m+h/-/pp/	My cheek	
6.	Hu ph up/hu kk up /p+h/-/kk/ Close		Close	
7.	Martutu ngh ian/martutu kk ian	/ng+h/-kk/	Muse	
8.	Tanga nh u/tanga kk u	/n+h/-/kk/	My hand	
9.	Hudo nh u/hudo kk u	/n+h/-/kk/	A kettle for	
			cooking a rice	

Table 4. Vowel Metathesis Processes

No.	Position	Words	Vowel Metathesis	Meaning
1.	M	Beha	bo ha	How
2.	M	Boasa	beasa	Why
3.	M	B u tima	b o tima	Thus
4.	M	Egol	egal	Sway
5.	M	Galasa	g u lasa	Fluttering
6.	M	Geneng	gonong	Round
7.	M	Gilok	g u lok	Caterpillar
8.	M	Golmit	g u lmit	Movement
9.	M	Gur i t	gur a t	Scratch
10.	M	Inong	inang	Mother
11.	M	Jejer	jojor	Chronological
12.	M	Joang	j u ang	Bad
13.	M	Jompok	jempek	Short
14.	M	Lamot	lamet	Soft
15.	F	Lango	lang u	Tasteless
16.	M	Longkang	l i ngkang	Peel
17.	M	Mantak	montok	Stop
18.	M	Melos	Malos	Wilted
19.	M	Marpuretek	marpur a t a k	Producing a sound
20.	M	Metap	metep	Worn out
21.	I	Oban	Boan	Bring
22.	I	Olgap	algip	Greedy
23.	M	Pellet	Pellat	Sit on the floor
24.	M	Posat	pisat	Press
25.	M	Rap	r u p	Together

26.	M	Sirnip	sernep	Fast asleep
27.	M	Surup	sorop	Possess
28.	M	S u sulu	s i sulu	Sunbathe
29.	M	T a ruan	toruan	Level land
30.	M	T i mburak	t a mburak	Dust
31.	M	Tolpang	tolping	Steep
32.	I	Ugus	ogos	Offended

Note: I:Initial; M:Medial; F: Final

Table 5. Consonant Metathesis Processes

No.	Position	Words	Consonant Metathesis	Meaning
1.	I	D onok	j onok	Near
2.	M	Epes	eles	Too small shirt
3.	I	G ajut	H ajut	A wicker bag
4.	M	Li b e	Li p e	Disobey the rules
5.	I	Momos	gomos	Tight
6.	M	Porlak	pollak	Garden
7.	IM	P u h ut	n u n ut	Tenacity
8.	M	Pulguk	Jurguk	Stack
9.	I	Redem	d erem	Fast asleep
10.	I	Ringkorang	b ingkorang	Scar
11.	I	Rinsir	Linsir	Slippery
12.	M	Rintop	Ristop	Itch
13.	F	Sampak	sampat	Throw
14.	F	Songkar	songkal	Disagree with
15.	F	Tongko k	tongko p	Hammer
16.	M	Tontor	tortor	Batak dance

Note: I:Initial; M:Medial; F: Final

Table 6. Vowel Addition Processes

No.	Position	Words	Vowel Addition	Meaning
1.	PR	Bolong	ambolong	Expelled
2.	EP	San	Sian	From, where
3.	PA	Orot	Ereet	Move

Note: PR: Prothesis; EP: Epenthesis; PA: Paragogue

Table 7. Consonant Addition Processes

No.	Position	Words	Consonant Addition	Meaning
1.	PR	ampang	D ampang	Dosage;measuring
2.	PA	Asa	asa ng	Property
3.	EP	dorum	dorsun	Used to be dirty
4.	EP	Hutik	Hurtik	Touch
5.	EP	Lao	la h o	Go
6.	EP	manogot	ma rs ogot	Tomorrow
7.	EP	Nai	na r i	Again;more

8.	EP	Posa	porsa	In serious condition
9.	PA	Samo	samon	Blurred
10.	PA	Tata	ta n ta	Unripe
11.	EP	Topa	to m pa	An order
12.	EP	Tong	tong tong	Permanent
13.	PR	Umbuk	Tumbuk	Try

Note: PR: Prothesis; EP: Epenthesis; PA: Paragogue

Table 8. Consonant Reduction "h" Processes

No.	Words	Reduction	Meaning
1.	Ahu	/au/	I, me
2.	Lehon	/leon/	Give
3.	Obukh u i	/obukhi/	My hair
4.	Rahis	/rais/	Steep
5.	Siubeon h u	/siubeonkku/	My stomach
6.	La h o	/lao/	Go

Table 9. Vowel Reduction Processes "u+...(pronoun direction)"

No.	Words	Process	Vowel Reduction	Meaning
1.	Obukm u	Obukm u +i	Obuk mi	Your hair
2.	Anakh u on	Anakh u +hon	Anakh on	My son
3.	Tash u an	Tash u +an	tash an	My bag

Table 10. Vowel Reduction Processes "...+jo"

No.	Words	Process of Reduction	Reduction	Meaning
1.	Dia	Dia+jo	dijo	Give me please
2.	Nian	Nian+jo	nijo	That one please
3.	Awas	Awas+jo	anjo	Excuse me, please

Table 11. Vowel Reduction Processes "pa+..."

Table 11. Vowel Reduction Flocesses $pa+$									
NO.	Words	Meaning	Process of	Reduction	Meaning				
			reduction						
1.	Rajom	Sharp	Pa+rajom	prajom	To make sharper				
2.	Rambas	Cut	Pa+Rambas	Prambas	To cut down				
3.	Rarat	Spread up	Pa+rarat	Prarat	To spread up				
4.	Rapat	Close	Pa+rapat	Prapat	to get closer				
5.	Rarak	Plentiful	Pa+rarak	prarak	To make plentiful				
6.	Rurus	Drop all	Pa+rurus	prurus	To drop all				
7.	Ruak	Open up	Pa+ruak	pruak	To open up				
8.	Rimas	Bad	Pa+rimas	primas	To get bad temper				
		temper							