MORPHOLOGICAL ANALYSIS OF ADJECTIVAL AFFIXATIONS IN TOBA BATAK LANGUAGE

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Abstract

The objective of this paper is to explore adjectival affixations in Toba Batak language. The theory applied in this study is structural morphology proposed by Nida (1949). Structuralists state that morphologically words can be analyzed and described based on structural phenomena of a language. The method of this study is qualitative descriptive; it is a method of study which describes language phenomena naturally without any exception. Morphologically, there are two types of adjectives in Toba Batak language, namely, adjectival bases and adjectival derivations. Affixes, such as prefixes, infixes, suffixes, and confixes can be attached only to adjectival bases to generate adjectives. In other words, such affixes cannot be attached to other types of parts of speech to form adjectives. The results show that there are seven adjectival affixations in Toba Batak language, they are: (1) prefix [um-], (2) infix [-um-], (3) suffix [-an], (4) confix [marsi- ... -i], (5) confix [ha--assa], (6) confix [ma- ... -hu], and (7) confix sa- + full ... reduplication of base adjectives + -na. The attachments of prefix [um-], infix [-um-], suffix [-an], and confix [um- ... -an] to base adjectives form comparative degree. Superlative degree is formed by attaching premodifier na to comparative form that consist of prefix [um-]. The results of the adjectival affixations are inflectional because the attachment of the affixes does not change the syntactic category.

Key words: affixations, base adjectives, descriptive analysis, inflectional

1. INTRODUCTION

Language as a communication tool plays important roles in human interaction. Therefore, the grammars of any languages should be studied properly for the shake of better communication between or among individuals in a society. The grammar of every language meets certain specified formal conditions (Chaer, 1994: 23). The property of having a grammar meets a certain abstract condition if shown to be a general property of natural languages. A person might utter one sentence in different ways depends on where he is, with whom he is speaking to, etc. (Ambarita, 2017a: 8557)

One of the regional languages in Indonesia used in North Sumatra province is Toba Batak language. According to Hasibuan (1977: 16) Toba Batak language has six dialects. It belongs to Austronesian spoken by 3 million people in Sumatra (Crystal, 1993: 40). The original homeland of the speakers of Toba Batak language is located around Lake Toba. In the heart of the Batak territory lies Samosir island and on the northwest bank of Lake Toba, stands Mount Pusuk Buhit which the Toba Batak believe marks the point of origin of all the Batak people (Hasibuan, 1979: 5).

Remembering the necessity of the functions of the regional languages, it is very important to carry out research on regional languages. Therefore, researchers have conducted research on various regional languages including Toba Batak language. Took (1864) was the first researcher that researched Toba Batak language entitled *Tobasche Spraakunst*. Scott and Kemball translated it into English in 1867 entitled A *Grammar of Toba Batak*. Apart from Took, other researchers also carried out studies on Toba Batak language, such as, Silitonga (1973) wrote *Some Rules on Reordering Constituents and their Constraints in Batak*, Hasibuan (1977) wrote *Afiksasi Bahasa Batak Toba*, Hasibuan (1979) wrote *Deskripsi Bahasa Batak* Toba, Nababan (1981) wrote *A Grammar of Toba-Batak*, Sitorus (1986) wrote *et al Sistem Kata Benda dan Kata Sifat Bahasa Batak Toba* (1986), and there are still a lot of studies on Toba Batak language.

General descriptions of the studies above show that the concept called as adjectival affixations in this paper has offered space to be explored. Therefore, this paper explores adjectival affixations in Toba Batak language morphologically from the view point of structural morphology. This paper is divided into some sub topics, they are, a brief note on affixations, a brief note on adjectives, data classifications and data validity, findings and discussions, and conclusions.

2. A BRIEF NOTE ON AFFIXATIONS

Talking about affixation, we, firstly, should understand morphology. It is because affixations are treated under morphological processes. Morphology as the study of morphemes and their arrangements in forming words (Nida, 1949: 1). For example, in *smaller*, *small* is a free morpheme and *-er* is bound morpheme. Other linguist defines morphology as a science that studies the internal structure of words, that is the way in which morphemes function as constituent of word structure (Aarts: 1982: 4, Mathew: 1974: 3, Katamba: 1994: 1, and Haspelmath, 2002: 1). A constituent is a linguistic unit which is an element of a longer construction.

Affixations are the processes of word formation by attaching affixes to base forms, either to simple base forms or to complex base forms (Putrayasa, 2008: 5). Affixations as one of the morphological processes will produce new words when affixes are attached to bases. In other words, a base morpheme can be modified in order to form new word by affixation processes (Ambarita, 2017c: 131). Morphological processes of forming new words are done by combining free morphemes with bound morphemes. The new word can be inflectional or it can derivational. Affixations are divided into four types, namely, prefixation, infixation, suffixation, and confixation.

Prefixation is the formation of a new word by attaching an affix before a base form (e.g. prefix un- + happy \rightarrow unhappy). Infixation is the formation of a new word by inserting an affix within a base form. Infixation is not found in English. In Toba Batak language, for example, sonang 'happy' + infix -um- \rightarrow sumonang 'happier. Suffixation is the formation of a new word by adding an affix after a base form (e.g. small + $-er \rightarrow$ smaller). Confixation is the formation of a new word by simultaneously adding a pair of affixes to a base form (e.g. prefix un- + certain + suffix $-ty \rightarrow$ uncertainty). Based on the explanation above, it can be seen that words, morphologically, can be processed to form new word through affixes as morphemes (Ambarita, 2017b: 14).

3. A BRIEF NOTE ON ADJECTIVES

Adjective is distinguished from nouns and verbs by different types. It means that nouns have plural markers, verbs have tenses while adjectives do not have such properties. Adjective is also a word that modifies a pronoun or a noun following it (Houghton, 1984: 18). There are four criteria for adjectives to be considered (Quirk, 1985: 402, they are:

- (1) Adjectives can freely occur in attributive function (e.g. an *ugly* painting).
- (2) Adjectives can freely occur in predicative function (e.g. The book is *thick*).
- (3) Adjectives can be premodified by the intensifier adverbs like *extremely*, *very*, and *so*. (e.g. The painting is *extremely* ugly). In Toba Batak language adjectives can be premodified by intensifier adverbs like *massai*, *tung*, *apala*, and *lam* (Sitorus, 1986: 94).
- (4) Adjectives can take comparative and superlative forms by means of the inflections -er and -est or by the addition of the premodifiers more and the most (e.g. The children are happier now. She is the prettiest baby I know. The students are more responsible. Lake Toba is the most interesting lake in Indonesia).

Furthermore, with gradable adjectives three types of degrees of adjective comparisons are possible, they are, comparison to a lower degree, to the same degree, and to a higher degree (Quirk, 1985: 458 and Murphy, 1987: 54). Gradable adjectives are adjectives that accept the -er/-est inflection or modification by degree adverbs. In other words, adjective is a modifier that has grammatical property of comparison (Frank, 72: 109). Comparison is comparison of two or more things or persons or ideas by using adjectives. Comparative and superlative forms, therefore, are tendencies toward differences (Hartanto, 1980: 80).

4. DATA CLASSIFICATIONS AND DATA VALIDITY

The data presented in this paper are taken from *Kamus Batak Toba Indonesia* (Joosten, 2001), *Kamus Indonesia Batak Toba* (Joosten, 2014), *Bibel Bahasa Batak Toba* (1983), *Majalah Parbarita* Vol. XL (1996), and *Majalah Parbarita* Vol. XLI (1997). The data are classified according to similar affixes. Besides, the validity of the data is done through triangulation (Cohen: 2002: 112). As the result, there are 11 data classifications as presented in the following.

4.1 Data Classification A

ummias	/ummias/	`cleaner'
ummasom	/ummasom/	`sourer'
ummila	/ummila/	'shier'
ummuli	/ummuli/	'more beautiful'
ummune	/ummune/	`more suitable'
ummahal	/ummahal/	`more expensive'

4.2 Data Classification B

umbalga	/ubbalga/	`bigger'
umbirong	/ubbiron/	`blacker'
umbongak	/ubboŋak/	`prouder'
umburju	/ubburju/	`kinder'
umbutong	/ubbuton/	`fuller'
umgogo	/umgogo/	`stronger'

4.3 Data Classification C

unjempek	/ujjeppek/	`shorter'
unnipis	/unnipis/	`thinner'
unnunut	/unnunut/	`more diligent'
unsangap	/ussaŋap/	`more respectful'
unsompit	/ussopit,/	`narrower`
untonggi	/uttonggi/	'sweeter'

4.4 Data Classification D

urringgas	/urringas/	'more punctual'
urroa	/urroa/	'uglier'
urrara	/urrara/	'redder'

4.5 Data Classification E

dumao /dumao/		`further'
dumimpos	/dumippos/	`tidier'
gumaga	/gumaga/	'prouder'
gumale/gumale/		`weaker'
gumarang	/gumaraŋ/	`stronger'
gumelleng	/gumellen/	`smaller'

4.6 Data Classification F

asoman	/asoman/	`sourer'
elesan	/elesan/	`lighter'
iasan	/iasan/	`cleaner'
ilaan	/ilaan/	`shier'
otikan	/otihan/	'least'
gompisan	/goppisan/	`smarter'

4.7 Data Classification G

ummelesan	/ummelesan/	`lighter'
ummasoman	/ummasoman/	`sourer'
ummetekan	/ummetehan/	`smaller'
ummiasan	/ummiasan/	`cleaner'
ummaloan	/ummaloan/	`cleverer'
ummalean	/ummalean/	'hungrier'

4.8 Data Classification H

umbongakan	/ubboŋahan/	`prouder'
umbidangan	/ubbidaŋan/	'wider'
umbisukan	/ubbisuhan/	'cleverer'
umpaetan	/uppaetan/	`bitterer'
umpiran	/uppiran/	`harder'
umposoan	/upposoan/	`younger'

4.9 Data Classification l

urraraan	/urraraan/	`redder'
urrataan	/urrataan/	'greener'
urriburan	/urriburan/	`happier'

ISSN 2528-7370

4.10 Data Classification J

unjoloan	/ujjoloan/	`earlier'
unjonokan	/ujjonohan/	`nearer'
unneangan	/unneaŋan/	`lighter'
unsagatan	/ussagatan/	`fuller'
untajoman	/uttajoman/	`sharper'
untangkasan	/uttakkasan/	`clearer'

4.11 Data Classification K

na ummotik /na ummotik/	`the least'
na ummuli /na ummuli/	`the most beautiful'
na umbalga /na ubbalga/	`the biggest'
na unjebu /na ujjebu/	'the most passionate'
na umpogos /na uppogos/	'the poorest'
na umporlu /na upporlu/	`the most important'

5. FINDINGS AND DISCUSSIONS

In Data Classification A, the common semantic distinctiveness among the data is prefix um. The word ummias, for example, can be separated into two parts to identify its morphemes, thus, ummias is formulated from prefix um- + *ias*. From the word separation, it can be seen that the base of ummias 'cleaner' is *ias* 'clean'. Talking about morphemes within the word ummias, it consists of two morphemes, namely, um- as a bound morpheme and *ias* as a free morpheme. The um- is inflectional.

The base form of *ias* is preceded by vowel /i/ therefore the last phoneme of the prefix um- is doubled. This process is called nasalization. In the data above the words are written ummias (double m), not umias (single m). As the result of the affixation as presented in the Data Classification A above, morphological process occurs to the base adjectives. In short, if prefix um- is attached to adjectives preceded by vowels, the last phoneme of the prefix is doubled. Thus, prefix um- becomes umm-.

Nasalization, however, does not occur to adjectives preceded by consonants. The word *ummahal*, for example, if separated to identify its morphemes will be: *um- + mahal*. From this morpheme separation, it can be seen that *um- is* a prefix and *mahal* 'expensive' is a base form of *ummahal* 'more expensive'. It is not true to say: *umm- is* a prefix and *ahal is* a base form because there is not such word *ahal* in Toba Batak language, it is meaningless. The same morphological process also occurs to other adjectives of this kind like in Data Classification B.

Example of a sentence using the word *ummahal* is presented below.

<u>Ummahal</u> do bahenongku sada jolma sian sere palangki, jala <u>ummahal</u> sada jolma sian sere na sian Opir. (Source: *Bibel Batak Toba*, 1983, Yesayas 13: 12, page 820).

Common similarity is also found in Data Classification B. The word *umbalga*, for example, can be identified as morphemes um- + balga. Um- is a prefix and balga 'big' is a base adjective umbalga 'bigger'. Some words in Toba Batak language are pronounced differently from they are written. The words umbalga in Data Classification B belongs to this criteria. The words umbalga and umporlu, for examples, are not pronounced as they are written. They are pronounced /ubbalga/ and /upporlu/ instead. The phoneme /m/of the prefix um- is dropped and is substituted by /b/ in /ubbalga/ and /p/ in /upporlu/ because of the influence of the consonant following it.

Thus, the prefix um-, if attached to base adjectives of which initial sound is a plosive or glottal consonant, it is no longer pronounced /um/, but it is pronounced according to its neighboring phoneme. In so doing, the morphological process occurred in the word is allomorph, that is a variant of a morpheme according to its environment. The same morphological process also occurs to other adjectives of this kind like in Data Classification B.

The word *unjeppek* in Data classification C derives from um- + *jeppek*. Um- is a prefix and *jeppek* 'small' is a base adjective. Morphological and phonological processes occur in this formation. The morphological process is that the phoneme /m/ of the prefix um- is dropped and changed to phoneme /n/ in spelling. Therefore, um- + *jeppek* \rightarrow *unjeppek* not *umjeppek*. Phonological change occurs in the word formation when the modified /n/ in /unjeppek/ is pronounced /j/ instead due to the neighboring phoneme.

The word *untonggi* undergoes modification where prefix *um*- is changed to *un*-. In constructing *untonggi*, there is a change morphologically in which the phoneme /m/ of the prefix *um*- becomes /n/. Next, the other change occurs phonologically when the modified /n/ in *untonggi* is pronounced /t/ dealing with the first phoneme of the base adjective *tonggi* 'sweet'. Thus, *um*- + *tonggi* \rightarrow *untonggi* and this word is pronounced /uttongi/.

Below is a sentence consisting of prefix um- + toru where the initial phoneme is also /t/.

Hurang do sintong na molo parkarejoan na kasar dibereng halak <u>untoru</u> sian parkarejoan na halus. (Source: *Majalah Parbarita*, Vol. XL No. 06/August 1996, page 10). In Data Classification D, the common similarities among the data is *urr*. The word *urringgas*, for example, derives from um- + ringgas. Um- is a bound morpheme while ringgas 'punctual' is a free morpheme. The result of word formation between um+ ringgas - urringgas 'more punctual' and it is pronounced /urringgas/ not /umringgas/.

There is a change in the word formation phonologically. The phoneme /m/of the prefix um- is dropped and it is substituted by /r /both in spelling and in pronunciation. Thus, the prefix um-, if attached to base adjectives of which initial phoneme is an alveolar rolled consonant /r/, it is no longer pronounced /um/; it is pronounced /ur/according to its neighboring phoneme. In so doing, the morphological process occurred in the word is allomorph. The same morphological process also occurs to other adjectives of this kind.

Looking at the Data Classification E, *-um- is* the common semantic distinctiveness among them. The word *dumimpos* derives from the combination between *-um-* and *dimpos*. From the word *dumimpos*, *-um-* is an infix and *dimpos* 'tidy' is a base form of *dumimpos* 'tidier'. Based on this elaboration, it can be stated that infix *-um-* is inserted between the first and the second phoneme of the base forms of adjectives. Phonological change, however, is shown within the base form of the adjectives and this change is not the result of infixation. The words *dumimpos* is pronounced */dumippos/* derives from *dimpos* pronounced as */dippos/* double phoneme /p/ or /pp/. The same process also occurs *jumungkat /jumukkat/* and *rumingkot /rumikkot/* where phonemes */ng/* within the words are pronounced */kk/*.

The following is a sentence consisting of adjective with infix -um-.

Sai mangan do sogot angka na dangol i jala butongan, sai <u>huminsa</u> do rohamuna salelenglelengna. (Source: *Bibel Batak Toba*,1983, Psalm 22: 27, page 678).

The common similarities in Data Classification F is suffix *-an* which is put at the end of the words. Different from prefix *um-* and infix *-um-*, *-an is* attached directly to the final position of the base form of the adjectives without any change in the word formation. The word *asoman*, for instance, derives from asom + - an. Asom 'sour' is the base form of *asoman* 'sourer'. The same affixation also occurs to all words in Data Classification F.

Inflectional morpheme umm- ... -an in Data Classification G is a confix. The word ummelesan can be separated to identify morphemes as um- + eles + -an. It can be seen that um- is a prefix, eles 'light' is the base adjective and -an is a suffix. Thus, in one way ummelesan /ummelesan/ 'lighter' can be regarded as the affixation within prefix um- + eles + -*an* as suffix in which prefix *um*- and suffix -*an* are attached simultaneously to *eles* as base adjective. The final phoneme of the prefix *um*- in the word *ummelesan is* doubled. It is because the first phoneme of the base form of the adjective is a vowel.

The basic principle is the same with attaching prefix um- to base adjectives preceded by vowels. As the result of the affixation morphological process occurs to the base adjectives. The attachment of the prefix um- to the base forms brings about addition to the two elements. Thus, phoneme /m/ is doubled becomes /mm/. This process is called nasalization. The same morphological process also occurs to other adjectives of this kind.

The word formation process in *ummelesan* above is different from that in the words *ummalean*. The word *ummalean* 'hungrier' derives from prefix um- + male + -an as prefix. From this morpheme separation it can be seen that male not ale is the base form of *ummalean*. For these kinds of adjectives, prefix um- is attached directly to base form of adjective without any change.

The following is a sentence showing adjective which consists of confix um- ... - an.

Ai tangkas do diboto <u>ummaloan</u> do Debata Jahowa sandiri manarihon angka natinompana. (Source: Majalah Parbarita, Vol. XLI No. 06/August 1997, page 17).

In Data Classification H, if we cut the word *umbidangan* to identify its morphemes, it will be um- + bidang + -an. Um- is a prefix and bidang 'wide' is a base form of *umbidangan* 'wider'. In this word confix um- ... -an functions as a degree marker that is comparative degree; in English it is identical with inflection -er or modifier *more*. The word *umbidangan* is not pronounced as it is spelled. It is pronounced /*ubbidanan*/ instead. The phoneme /*m*/ of the prefix um- *is* dropped and it is substituted by /*b*/ because of the influence of the neighboring phoneme following it. In so doing, the morphological process occurred in the word is allomorph. The same morphological process also occurs to other adjectives of this kind.

The word *urriburan* in Data Classification I, for example, derives from um + ribur + an. Um- is a bound morpheme while ribur 'happy' is a free morpheme. The result of a word formation between um- ... -an + ribur \rightarrow urriburan 'happier' pronounced /urriburan/ not /umriburan/. Urriburan which has been attached by confix um- ... -an actually has the same meaning with urribur 'happier' (prefix ur- + ribur).

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The word *untajoman* 'sharper' derives from um- + tajom + -an. There are two changes occurs in this construction, they are, morphological change and phonological change. Phoneme /m/ of the prefix um- is dropped and changed to phoneme /r/ in spelling. Therefore, um- + tajom + $-an \rightarrow untajoman$ not umtajoman. Phonological change occurs in the word is when the modified /n/ in untajom is not pronounced /n/ but it is pronounced /t/ instead due to the neighboring phoneme. Other data of this kind in data classification J also undergo this process.

Different from data classifications above, Data Classification K is presented in different style. The presentations of all adjectives that have been discussed above consist of inflected um-, -um-, -an and um- ... -an. In Data Classification K, the data are presented as the combination of inflected forms and premodifier na /na/ written separately from modified adjectives in comparative form particularly with prefix um-.

The word *na ummarga*, for example, derives from premodifier na + prefix um- + arga. The succession of premodier na with modified adjective like *ummarga* (*na ummarga*) clearly expresses superlative meaning which is in English is equal to inflected -est or premodifier *the most*.

The following is an example of sentence that consists of such adjective in superlative form:

Alana Yesus sandiri pe marhite silang do manaluhon musu <u>na umbalga</u> di nasa na mangolu ima hamatean. (Source: Majalah Parbarita, Vol. XLI No. 06/August 1997, page 24).

Anakhon hi do na <u>ummarga</u> di au. (This is a very famous proverb among Toba Batak people).

6. CONCLUSIONS

This paper has examined adjectival affixations in Toba Batak language. Adjectives in Toba Batak language have been analyzed descriptively. From the discussion, seven adjectival affixations in Toba Batak language have been recognized, they are: (i) one prefix (*um*-), (ii) one infix (-*um*-), (iii) one suffix (-*an*), and (iv) four confixes (*marsi*- ... -*i*, *ha*- ... -*assa*, *ma*- ... -*hu*, and *sa* + full reduplication of base adjectives + *na*. The results of the adjectival affixations are inflectional. Prefix *um*- and confix *um*- ... -*an* which are added to base adjectives will undergo morphophonemic process, such as (i) prefix *um*- \rightarrow *umm*- if base adjectives are preceded by vowels; (ii) prefix *um*- \rightarrow *un*- if base adjectives are preceded by phoneme /s/, /j/, or /t/; (iii) prefix *um*- \rightarrow *ur*- if base adjectives are preceded by phoneme /r/. Inserting infix -*um*- within base adjectives and attaching suffix -*an* to base adjectives will not make any changes, both to the base adjectives and to the affixes. The attachments of prefix um-, infix -um-, suffix -an, and confix um- ... -an to base adjectives will form comparative degree.

REFERENCES

- Aarts et al. 1982. English Syntactic Structure: Function and Categories in Sentence Analysis: Pergamon Press.
- Ambarita, Esron. 2017a. Sociolinguistic Routines in Social Interactions in Toba Batak Language. Jurnal Ilmiah KULTURA, Vol. 18 No. 1 Juni 2017, ISSN 1411-0229, Medan: Penerbit Universitas Muslim Nusantara (UMN) Al Wasliyah.
- Ambarita, Esron. 2017b. *Denominal Verbs in Toba Batak Language*. The Episteme: Journal of Linguistics and Literature, Volume 3 Number 3, May 2017. ISSN 2442-9392 (Print), ISSN 2460-3236 (Online), Medan: Published by English Department, Faculty of Language and Arts Nommensen HKBP University, Medan, Indonesia.
- Ambarita, Esron. 2017c. Morphological Analysis of Adjective Reduplications in Toba Batak Language. Jurnal Penelitian Pendidikan Bahasa dan Sastra, Vol. 2 No. 1 April 2017 ISSN: 2502-9584, Medan: Penerbit Lembaga Penelitian dan Pengabdian Pada Masyarakat Universitas Muslim Nusantara Al Wasliyah.
- Bibel Bahasa Batak Toba. 1983. Jakarta: Lembaga Alkitab Indonesia.
- Chaer, Abdul. 1994. Linguistik Umum. Jakarta: Rineka Cipta
- Cohen et al. 2002. Research Methods in Education. London: Routledge.
- Crystal David. 1993. An Encyclopedic Dictionary of Language and Languages. Massachussetts: Cambridge.
- Frank, Marcella. 1972. Modern English. New Jersery: Prantice Hall.
- Hartanto, John Surjadi. 1980. Tata Bahasa Inggris. Jakarta: Binarupa Aksara.
- Hasibuan, Saidi Anthony. 1977. *Afiksasi Bahasa Batak Toba*. Medan: Skripsi Sarjana Muda, Fakultas Sastra, Universitas Sumatera Utara.
- Hasibuan, Saidi Anthony. 1979. *Deskripsi Bahasa Batak Toba*. Medan: Skripsi Sarjana. Fakultas Sastra, Universitas Sumatera Utara.
- Haspelmath, Martin and Sims, Andrea D. 2002. *Understanding Morphology*. New York: Oxford University Press.
- Houghton, M. 1984. Grammar and Composition. Sixth Course. Boston: University of Texas.
- Joosten, P. Leo, OFM Cap. 2001. Kamus Batak Toba Indonesia. Medan: Bina Media Perintis.
- Joosten, P. Leo, OFM Cap. 2014. Kamus Indonesia Batak Toba. Medan: Bina Media Perintis.

- Katamba, Francis. 1994. Morphology: Modern Linguistics: London: Macmilland Press.
- Majalah Parbarita. Vol. XL No. 06/August 1996.
- Majalah Parbarita. Vol. XLI No. 06/August 1997.
- Mathews, P.H. 1974. *Morphology: An Introduction to Theory of Word Structure*. Cambridge: Cambridge University Press.
- McCarthy, Andrew Carstairs. 2002. An Introduction to English Morphology: Words and Their Structure. Edinburgh: Edinburgh University Press Ltd.
- Murphy, Raymond. 1987. English Grammar in Use. Avon: Cambridge University Press.
- Nababan, P.W.J. 1981 A Grammar of Toba- Batak. Pasific Linguistic, series D-No. 37, Department of Linguistic Research School of Pasific Studies, The Australian National University.
- Nida, Eugene. 1949. *Morphology: The Descriptive Analysis of Words*. Ann Arbor: The University of Michigan Press.
- Putrayasa, Ida Bagus. 2008. Kajian Morfologi (Bentuk Derivasional dan Infleksional). Bandung: PT. Refika Aditama.
- Sitorus, Mathias *et al.* 1986. *Sistem Kata Benda dan Kata Sifat Bahasa Batak Toba*. Jakarta: Pusat Pembinaan dan Pengembangan Bahasa. Departemen Pendidikan dan Kebudayaan.
- Tuuk, H. N. Van der. 1864. A Grammar of Toba Batak. (translated by Miss Jeune Scott-Kemball from its original title 'Tobasche Spraakunst'). Nederland: The Hague-Martinus Nijhoff.
- Quirk, Randolph *et al.* 1985. *A Comprehensive Grammar of the English Language*. New York: The University of Michigan Press.