

Morphophonemic Analysis on Prefix ‘Ma’ in Verbs of Toba Batak

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ABSTRACT

Language is hierarchically realized in sound, morph, words, phrases, clauses, sentences, paragraphs, and text. Toba Batak as one of the Austronesian languages has the same content, one of them is the realization of the prefix *ma-* in verbs. The realization of the prefix *ma-* in verbs of Toba Batak, in this study is analyzed in two parts (1) morphemic analysis and (2) phonemic analysis. This study is conducted by applying the observation as the instrument on an online dictionary of Toba Batak. After observing 146 verbs with the prefix *ma-*, the following findings are defined. Firstly, the prefix *ma-* is realized in 5 (five) morphemes in verbs of Toba Batak, they are *ma-*, *man-*, *mam-*, *mang-*, and *manga-*. Secondly, phonemically, the realization of the prefix *ma-* in verbs of Toba Batak defined three types of sound assimilation which are classified by the voicing characteristics. The finding defined that verbs begin with vowels, semi-vowels, and all voiced consonants have regressive and additional phonemes in their sounds of assimilation, the additional phonemes are before the lexemes by added the existence of phonemes [n, m, ŋ] or nasals, however, all the verbs begin by voiceless consonants have reciprocal/mutual and changing the phonemes in the sound assimilation, in this finding the bilabial sound of [p] is turned into [m] or homorganic, and sound [t, s] is turned into [n] or alveolar homorganic. This study also defined that all verbs that begin by nasal have no sound assimilation in their attachment.

INTRODUCTION

Language is naturally a meaningful sound that is transcript into written form, ruled, can be translated into other languages, and used as a means of communication. That sentence defined language as written and spoken forms of communication. Furthermore, hierarchically language is structured by sound, morph words, phrases, clauses, sentences, paragraphs, and text. These are the source of language issues, starting from sound and higher up to text. The issue of sound is defined into vowels and consonants by the existence of obstruction; the vowels are also defined into high, low, close, and open classification, while consonants are defined by their place and manner of articulation, and voicing. Higher, phonemes are united into morph which is defined as a free morpheme (lexeme) and bound morpheme. The bound morphemes are defined into inflectional morphemes and derivational morphemes which are seen when they are attached to the lexeme. The realization of inflectional morpheme doesn't change the meaning of the lexemes while derivational morpheme changes the meaning of the lexemes.

The existence of language hierarchy is found in all languages including the Austronesian languages, and one of them is Toba Batak language. Toba Batak language is one of the Austronesian languages which is used by Toba Batak people in North Sumatera, Toba Samosir Regency. Toba Batak language is actively and massively used by Toba Batak people in their daily communication and traditional ceremony. This article tries to overlook the morphophonemic process of the prefix ‘ma’ in the verbs by focusing to see the morpheme changes and sound assimilation which is happened in the morphophonemic processes (Ambarita, 2018, 2022; Nair, Sneha G, 2015; Sianturi, 2019).

The realization of a morpheme in a lexeme creates two changes, they are (1) form changing and (2) sound changing, the sound changing in the morphological process is called a morphophonemic process (Ambarita, 2022; Cassim et al., 2022, 2022; Genon-Sieras & Language Studies, 2020; Jomaa, 2022; Kholisin et al., 2022; Sciences, 2022; Sianturi, 2019). Morphophonemic-producing sound assimilation is defined into (1) phonemic assimilation and (2) phonetic assimilation. Phonemic assimilation is sound changing in the process of morphology that changes the phoneme in the morphemes, while phonetic assimilation is sound changing in the process of morphology that doesn't change the phoneme (Assefa, 2019; Jomaa, 2022). Due to the place of changing, sound assimilation also can be defined into these several types (1) regressive assimilation when the sound changing is happened because of the sound following it, while progressive assimilation is happened because of the sound preceding it, last reciprocal assimilation is happened by the mutual relationship of the sounds around. Moreover, sound assimilation is also happened due to the consonant classifications of (1) assimilation due to the manner of production, (2) assimilation due to the place of production, and (3) assimilation due to the voicing; voiced, and voiceless (Sciences, 2022).

A study on exploring deverbal nominals of Toba Batak found that it happened by the realization of suffixes as the following prefix *par*, *pan*, confix *ha-an*, *paN-an*, *par-an*, and *paN-on*, last suffix *paŋin* and *paŋun* (Ambarita, 2022). Then, there is a study on Arabic morphophonemic in the case of irregular plural, and the findings say that there are 43 varieties forms of irregular forms in the Saudi Arabia language, further the study also defined that during the analysis it was found that there is a relationship between animate and human or non-human relations due to the meaning of the lexemes (Abdulsada, 2018). Another study on the morphophonemic process in a novel of *dibawah bayang-bayang Ode* by Sumiman Udu, it was found that there are three types of morphophonemic realization such as (1) the morpheme changes in the suffixes process are realized in the following forms of *men-*, *pen-*, *ber-*, *per-*, *ter-*. Then, there were also found the changes in morphophonemic which is realized in the form of *men*, *me*, *meny*, *meng*, and *mem*, further the changes of affix *peN* are in the form of *pe-*, and *penye-*.

Another study of morphophonemic is on Bahasa Talaud. This study precisely defined the process of morphophonemic in Bahasa Talaud and found out that the morphophonemic processes happen in three, they are (1) phonemic changing, (2) phonemic deletion, and (3) phonemic addition. Those three morphophonemic processes happened automatically and not automatically. Furthermore, the findings defined that the morphophonemic processes are structured due to the phonemes around the changing (Lalira, 2015). There was also a study of adverbial derivation which defined the following findings (1) the existence of affixes in adverbs in Toba Batak is a derivational morphology process; deriving the meaning of the adverb, (2) the affixes in the derivational process are [man-], [par-], [mar-], [-umal-], and [-umar-], last (3) the adverbial derivational also effected to the sound assimilation around the phonemes (Ambarita, 2018).

There was also a study about morphophonemic analysis on Kamano language of Papua New Genuine. After the analysis, the following findings are defined, such as (1) there are 7 morphological rules by the affix attachments, (2) from 7 morphological rules existed in the affixes attachments, there were 6 phonological assimilations which happened, they are deletion of nasal sound, the substitution of glottal sound, deletion of the vowel [a], the substitution nasal [n] to nasal [m], and substitution plosive [t] to lateral [r]. Another finding from the analysis was also defined that the sound assimilation which is happened in the morphophonemic process in Kamano Language is due to the sound manner and place (Wardah & Subiyanto, 2019). Another study was morphophonemic analysis on Ezha dialect, a part of a different Gurage language, and the findings defined that the morphophonemic process in Ezha is realized in the existence of sound assimilation by the existence of labialization, palatalization, depalatalization, fronting vowel, vowel deletion, deletion of glide and vowel, epenthesis, and spirantization (Assefa, 2019).

METHOD

This study is triggered by the inquiries of how the realization of the prefix *ma-* in verbs of Toba Batak language. It is a phenomenon to be described since the realization of the prefix *ma-* various due to the verbs' phonemes initiation. Furthermore, the realization of sound assimilation such as regressive, progressive, or reciprocal, is also questioned. Then, are they homorganic or not, what factor affected the most such as manner of articulation or place of articulation are also questioned in this study. So, this study is triggered by the phenomenon of morphology and phonemic process of the prefix *ma-* to the verbs in Toba Batak. The data is taken by administering observation supported by Toba Batak dictionaries and also completed by the process of elicitation by interviewing an informant of Toba Batak native speaker. Moreover, the data are analyzed by applying the method of content analysis. In this study, there are 146 verbs collected and analyzed related to their morphemic and phonemic processes. In conclusion, this is a qualitative study.

RESULTS AND DISCUSSION

The findings of this study will be explained in two parts (1) morphemic analysis and (2) phonemic analysis.

Morphemic analysis of Prefix *ma-* in verbs of Toba Batak

The realizations of the prefix *ma-* in verbs of Toba Batak are as the following:

1. Prefix **Ma-** become **Mang-** when it is added to verbs initiated by vocals, 'h', and 'g'.
Such as the following:

Ma + alap	= Mangatur	'to arrange'
Ma + abbat	= Mangabbat	'to stop'
Ma + hutur	= Manghatur	'to shake'
Ma + haol	= Manghaol	'to hug'
Ma + gabus	= Manggabus	'to lie'
Ma + gosa	= Manggosa	'to squeeze'
2. Prefix **Ma-** become **Mam-** when it is added to verbs initiated by the letter 'b'.
Such as the following:

Ma + baen	= Mambaen	'to make'
Ma + boan	= Mamboan	'to bring'
3. Prefix **Ma-** become **Man-** when it is added to verbs initiated by the letter 'd' and 'j'.
Such as the following:

Ma + dampol	= Mandappol	'to massage'
Ma + dahi	= Mandahi	'to taste'
Ma + jou	= Manjou	'to call'
Ma + jaha	= Manjaha	'to read'
4. Prefix **Ma-** become **Manga-** when it is added to verbs initiated by the letter 'l'.
Such as the following:

Ma + lele	= Mangalele	'to chase'
Ma + lehon	= Mangalehon	'to give'
5. Prefix **Ma-** become **Ma-** when it is added to verbs initiated by the letter 'p,m,t,s, & ng'.
Such as the following:

Ma + peop	= Mameop	'to hold'
Ma + pilit	= Mamilit	'to choose'
Ma + muni	= Mamuni	'to sound'
Ma + topak	= Manopak	'to clap'
Ma + togu	= Manogu	'to guide'
Ma + ngolu	= Mangolu	'to live'
Ma + sussi	= Manussi	'to wash'

Phonemical analysis of Prefix *ma-* in verbs of Toba Batak

The results of phonemical analysis or sound assimilation in the morphological process of the prefix **Ma-** to verb in Toba Batak have been explained in three ideas (1) types of assimilation, (2) phonemics' changing, and (3) process of assimilation. Those three results will be exposed preceded by the following data:

I

álap	maŋálap	'to pick up'
hútur	maŋhútur	'to shake'
gábus	maŋgabus	'to lie'
báen	mambáen	'to make'
dámpol	mandampol	'to massage'
jáha	manjáha	'to read'
léhon	maŋaléhon	'to give'

II

pílit	mamílit	'to choose'
tíop	maníop	'to hold'
sússi	manússi	'to wash'

III

múni	mamúni	'to sound'
ngólu	maŋólu	'to live'

The finding displayed above tells abundant meanings. The first is due to the types of assimilation; regressive, progressive, and reciprocal/mutual relations. The findings above explained that verbs initiated by vowels, consonant glottal [h], velar [g], bilabial [b], alveolar [d, l], and palatal [j] are having sounds changing regressively. Next, verbs initiated by consonants of bilabial [p], plosive alveolar [t], and fricative alveolar [s] are having sounds changing reciprocally/mutually. However, verbs initiated by consonant bilabial nasal [m] and velar nasal [ŋ] have no sound changes. Due to the types of assimilation, sounds of vowels and all voiced (except nasal) have regressive sounds assimilation, while all voiceless have reciprocal/mutual sounds assimilation, but nasal sounds have no sound assimilation to the prefix *ma-* in verbs of Toba Batak.

To the phonemics' changing; additional, deletion, and changing, the results can be defined into two. The first is additional phonemes, the results above defined that all verbs initiated by vowels and voiced consonants have additional phonemes when they are combined with the prefix *ma-*. In contrast, all verbs initiated by voiceless consonants have to change phonemes such as [p] becoming [m], while [t] and [s] become [n]. While verbs begin with consonants nasal [m] and [ŋ] have no assimilation in their sounds.

With the sound's manner and place of articulation and their voicing; voiced or voiceless, the results above are also defined as meaningful. As those were explicitly explained (1) all vowels, semi-vowels, and voiced consonants have sounds assimilation regressively by having additional phonemes which are patterned as the following:

$$1. \text{ Prefix } ma- + [\text{voiced}] = ma- + [\text{nasal}] + [\text{voiced}]$$

The results defined the pattern of how the prefix *ma-* attached to the verbs initiated by vowels, semi-vowels, and voiced consonants by the realization of nasal sounds [n, m, ŋ]. Due to its manner and place of articulation and also the voicing of the consonants, it was found that the prefix *ma-* is supported by nasal sounds to be united to the verbs preceded by vowels, semi-vowels, and voiced consonants.

Another condition has happened to the verbs preceded by voiceless consonants. The results show that when the prefix *ma-* is united to the verbs preceded by voiceless consonants, the voiceless consonants are omitted and replaced by the homorganic sounds, you may consider the following pattern.

$$2. \text{ Prefix } ma- + [\text{voiceless}] = ma- + [p - m, t, s - n \text{ homorganic sound}]$$

Furthermore, the homorganic sounds are as the following [p] become [m] both of them are bilabial, then [t] and [s] become [n] and both of them are alveolar sounds. When [p] in the process of affixation turned into [m] it is called a homorganic sound and when [t] and [s] turned into [n] in the process of affixation it is also called a homorganic. In conclusion, when the prefix *ma-* meets verbs preceded by voiceless, the voiceless sounds get the homorganic process.

Last, is the realization of the prefix *ma-* which is attached to verbs preceded by nasal sounds of [m] and [n] remained has no phonemic change. In other words, verbs preceded by nasal sounds have no change in their phonemic sound when they are combined with the prefix *ma-*.

The explanation of the results of the study has been exposed detailed from three perspectives (1) types (2) phonemic changing, and (3) process of assimilation; manner, place, and voicing. The results can be concluded in three conditions which are illustrated better in the following table.

Table 1 Conclusion of the Results

Assimilation views	Voiced	Voiceless	Nasal
Types; regressive/progressive /reciprocal	Regressive	Reciprocal/Mutual	No Assimilation
Phonemic Changing; addition, deletion, change	Addition	Changing	No Assimilation
Process of Assimilation	Patterned by Voicing	Patterned by Voicing	No Assimilation

CONCLUSION

Morphophonemic analysis of prefix *ma-* in verbs of Toba Batak realized in two parts (1) morphological analysis and (2) phonemical analysis. Morphologically, the prefix *ma-* in verbs of Toba Batak has been realized in 5 (five) forms, they are *ma-*, *man-*, *mam*, *mang-*, and *manga-*. However, the phonemic prefix *ma-* created some conditions due to sound assimilation. Firstly, the findings defined the sound assimilation of the prefix *ma-* in verbs of Toba Batak exposing groups of phonemes (1) vowels, semi-vowels, and voiced consonants, (2) voiceless consonants, and (3) nasal. Furthermore, it was found that the existence of the prefix *ma-* in all verbs beginning with vowels, semi-vowels, and voiced is defined to get the process of regressive additional phonemes in the sound of assimilation. Moreover, the existence of the prefix *ma-* in verbs begin with voiceless consonants getting the reciprocal and changing phonemes in the sound of assimilation, the changing phonemes are homorganic. However, the existence of the prefix *ma-* in verbs which is preceded by nasal consonants is realized by no sound of assimilation at all.

REFERENCES

- Abdulsada, M. N. (2018). *Morphophonemic Changes in Arabic Morphophonemic Changes in Standard Arabic : The Case of Irregular Plurals Lecturer : Mohammed Nasser Abdulsada 1 . Introduction and Definition Morphophonemic changes are the morphological and phonological changes, alterat. November 2017.*
- Ambarita, E. (2018). Adverbial Derivation in Toba Batak Language: A Generative Transformational Study. *LANGUAGE LITERACY: Journal of Linguistics, Literature, and Language Teaching*, 2(2), 104. <https://doi.org/10.30743/ll.v2i2.689>
- Ambarita, E. (2022). Comparative Forms of Adjectives by Suffix –an in Toba Batak. *The Explora*, 7(2), 1–9. <https://doi.org/10.51622/explora.v7i2.521>
- Assefa, E. (2019). Major Morphophonemic Operations in Ezha (Ethio-Semitic). *Macrolinguistics*, 7(10), 29–44. <https://doi.org/10.26478/ja2019.7.10.2>
- Cassim, M., Shathifa, S., Haneefa, M., & Munas, A. (2022). *Assimilation Process In Tamil And Arabic Languages : A Contrastive Study Assimilation Process In Tamil And Arabic Languages : A Contrastive Study. September.* <https://doi.org/10.18860/ijazarabi.v5i3.15147>
- Genon-Sieras, S. V., & Language Studies, I. J. of E. (2020). Affixations and Allomorphs in Verbs and Nouns in a Research Abstract: A Morphemic and Morphophonemic Analysis. *SSRN Electronic Journal*, July. <https://doi.org/10.2139/ssrn.3661273>
- Jomaa, N. J. (2022). *ASSIMILATION OF SOUNDS IN THE TURKISH LANGUAGE : A CASE STUDY OF HIGH SCHOOL STUDENTS AT KARABUK REGION (TURKEY) ASSIMILATION OF SOUNDS IN THE TURKISH LANGUAGE : A CASE STUDY OF HIGH SCHOOL STUDENTS AT KARABUK REGION (TURKEY) well as the spoken langua. July.*
- Kholisin, K., Tohe, A., & Dariyadi, M. W. (2022). The Social Religious Values Behind The Morphophonemic Rules Of Assimilation In Arabic. *Ijaz Arabi Journal of Arabic Learning*, 5(1). <https://doi.org/10.18860/ijazarabi.v5i1.13923>
- Lalira, J. (2015). Morfofonemik Bahasa Talaud. In *Kajian Linguistik* (Vol. 1, Issue 1). <https://doi.org/10.35796/kaling.1.1.2013.7298>
- Nair, Sneha G, J. V. R. (2015). International Journal of Research and Review. *International Journal of Research and Review*, 2(6), 343–347.
- Sciences, M. (2022). *Acquisition of English Lateral Allophone by Khowar Adult Speakers Acquisition of English Lateral Allophone by Khowar Adult Speakers. April.*
- Sianturi, S. (2019). *Resultative Constructions in Toba Batak Language Resultative Constructions in Toba Batak Language. August*, 2–6. <https://doi.org/10.32996/ijllt.2019.2.4.7>
- Wardah, N., & Subiyanto, A. (2019). Morphophonemic Analysis on Postpositional Affixes in Kamano Language of Papua New Guinea: An Item and Process Approach. *PAROLE: Journal of Linguistics and Education*, 9(2), 90–100. <https://doi.org/10.14710/parole.v9i2.90-100>