



Processes of Prefixation, Assimilations, and Allomorphs Formation in Bataknese Language

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Abstract

This research deals with affixations, specifically prefixation as well as its processes, changes of prefix forms resulting in allomorphs via assimilations, functions, meanings, its distributions, and uniqueness. The data are gathered by recording speech of native speakers of Batakneselanguage descended from Proto-Austronesian (PAN) in various areas and occasions. Since I am a native speaker of the language, I find it easy to understand what they say and desired data, From the speeches as source of data, I sort out complex words undergoingprefixation to be analyzed. The analysis reveals that Bataknese language have seven prefixes which are or not productive namely prefixes {ma-} with its allomorphs: /ma/ /maŋ-/ /mar-/ /mab-/ and /man/, prefix {pa-} with its allomorphs /pa-/ /paŋ-/ /par-/. prefix {ta-} with its allomorphs: /ta-/ and /tar-/, prefix /na-/ without allomorph, prefix /na-/ without allomorph, prefix /hu-/ with its allomorphs /hu/ and /hum/, prefix /lam-/ without allomorph, prefix {um-} with its allomorphs /um-/ /un-/ and /up-/, and prefix /si-/ without allomorph. Those prefixes with allomorphs are the productive prefixes and those with the least and without allomorphs are the unproductive ones.

Keywords: prefixes, assimilations, allomorphs, Bataknese language, process

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I. INTRODUCTION

One of the ways of how new words are formed in languages other than loan words are inflectional and derivational morphological processes characterized by prefixation, affixation, infixation, and confixation. Every language though languages especially those belonging to the same language family, the processes may have something in common, has its typical morphological process. In English, for instance, morphological inflectional process is conducted by prefixation carried out by adding prefixes and suffixes to base forms without changing its grammatical category and meaning. Morphological derivational process is conducted with affixation by adding prefixes and suffixes to base forms resulting in changes of grammatical category and meaning. However, it is just preliminary insight into the two types of morphological processes, for there are violations to the theory. For example, free morpheme happy followed by prefix un- will construct unhappy that is like its base form has adjective grammatical category but its meaning change. With this in mind, this is not purely inflectional but partly derivational. Similarly, base forms child of which grammatical category is noun when followed by suffix hood, there will be new word childhood which is also noun though its meaning changes from

II. LITERATURE REVIEW

Leong et al. (1995) suggests that morphology is the study of hierarchical and relational aspects of words and the operation on lexical items according to word formation rules to produce other lexical items. This is in line with what Aronoff et al. (2011) proposes that morphology is a study dealing with words, their internal structures and how they are formed. Practically speaking morphology as a branch of linguistics takes up the way new words are constructed in accordance with phonotactic rule in a given language.

The way new words in English, are constructed by two procedures namely inflectional procedure and derivational procedure. Inflectional procedure is conducted by adding bound morphemes in the forms of suffixes to bases as seen in the following examples.

2.1 Construction of Inflection Morphology

In English, inflexion is conducted by adding grammatical markers (suffix) to the bases namely –s (3rd person singular), -ed (past tense), -ing (progressive), -en (past participle), -s (plural), -er (comparative), -est (superlative), and ‘s (possessive).

Basically, inflection does not result in the change of grammatical category of the bases to which the suffixes are attached nor basic meanings. The affixes function to adjust the bases forms to the speeches where they are distributed in order for the speeches to be grammatical. In terms of grammar, in certain cases, it is difficult to break down plural in two morphemes as in walks → walk + s when plural is marked with change of vowel in the middle of words as in feet→foot instead of feet→feet+s or in zero modification as in fish as singular and fish as plural. It is also important to know that not all prefixes are inflectional prefixes such as un- as in unhappy where happy and and unhappy are adjectives though when preceding verb like do to form undo both of which are verbs and their meanings are changed.

Derivational morphology occurs when combination of morphemes changes the grammatical category and meaning of the base as seen in the following :

2.2. Construction of Derivational Morphology

Bases	Categories	Suffixes	Prefixes	Functions
quickly	dverb	ly		adjective becomes adverb
management	noun	ment		verb becomes noun
childish	adjective	ish		noun becomes adjective
comfortable	adjectives	able		noun becomes adjective
actor	noun	or		verb becomes noun
intensify	verb	ify		adjective becomes verb
useless	noun/adjective	less		noun becomes adjective
explosive		ive		noun becomes adjective
stupidity		ity		adjective becomes noun
enrich			en-	adjective becomes verb
enlarge			en-	adjectives becomes verb
deform	noun		de-	noun becomes verb

There are some facts in derivational morphology worth considering as follows

#Not all suffixes added to base form change the bases' grammatical category as in child

which is noun when added with suffix –hood results in childhood and remains noun and red when followed by suffix –ish results in redish that remains adjective.

#Derivation may also be stemming from compounding words such as white+board→blackboard and bitter+sweet→bittersweet the first of which is called endocentric compound and the second is exocentric compounding.

#Derivational words go through processes with grammatical internal structure with several steps as follows:

Following this are the example of how complex words, where there are multiple affixations are constructed and broken down propose by Black (Retrieved from <https://slideplayer.com/slide/9914281>, September 16, 2022)/

nation

national

nationalise

denationalise

denationalisation

antidenationalisation

preantidenationalisation

To comprehend better all of the variables in this research, it is important that they be discussed. Finegan et al. (1989) states that suffixes are bound morphemes following the bases. They are attached to the base as in boy as singular plus /-s/becomes boys which is plural. Prefixe is bound morpheme preceding the base. It is attached to base as in prefix /miss-/is attached to construct new word misunderstanding as antonym of understand. Infix is a bound morpheme that is inserted a morpheme instead of being attached to prefix and suffix. Example, in English, /tth/ is available making it possible to create singular and plural by changing /oo/ into /ee/ as in /tooth/ becomes /teeth/ as well as /goose/ that becomes /geese/. Another one is circumfixes, morphemes occurring in two parts on both sides on another morpheme. But this kind of morphological process does not exist in English. Compound word formation is also included in morphology.

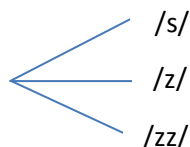
Morphological processes either inflection or derivation in certain languages including Bataknese the process may result in sound changes of neighboring sounds. Pike (1947) puts forward that sounds tend to be modified by

their environments. In other words, adjacent sounds tend to affect one on another in order for the conditioned sounds to be similar or the same as conditioning sounds.

Such sound changes are called assimilations. Gleason (1961) proposes that there are two types assimilation namely progressive assimilation where conditioned sounds immediately follow the conditioning sounds. Whereas regressive assimilation occurs when conditioned sounds are followed by conditioning sounds. Both types of assimilation bring about variants of sounds in two conditions, if sound is phonologically conditioned or conditioning, it is called allophone, but if sounds are morphologically conditioned or conditioning, it is called allomorph.

To understand it better, we had better examine Hartmann et al. (1973) proposing that allophone is a speech sound which is one of a number of variants of a phoneme. For example, sound [p] in initial position is different from those of in middle and final positions in terms of aspirations as in peak where [p] is fully aspirated, in attempt [p] is partly aspirated, and in stop [p] is almost without aspiration. Thus, there are three variants of [p] due to their environments. Allomorphs are non-distinctive variants of morphemes like /s/ as in wants /wɒnts/, cars /kɑːz/, and /zz/, as in houses [haʊz].

Such allomorphs can be shown: {s}



Another variable of the problems is how to recognize morphemes. Langacker (1972) and Gleason (1955) figure out that morpheme is the smallest meaningful sequence of phonetic units occurring with constant meaning. This can be clarified with read that occurs repeatedly and regularly with constant meaning as in reads, reading, and reader whereas /-s/ occurs in speaks, stands, sleeps, etc., and -ing as in going, coming, eating, etc.

Related to morphological processes is reduplication that is not dealt with clearly in linguistics references because it is not productive in English and European languages.

It is said in Reduplication (Retrieved 7 November 2022 from <https://en.wikipedia.org/wiki/Reduplication>), reduplication is a morphological process in which the root or stem of a word (or part of it) or even the whole word is repeated exactly or with a slight change. Furthermore, reduplication function to indicate such concepts as distribution, plurality, repetition, customary activity, increase of size, added intensity, continuance.

Unlike English, Austronesian languages, including Bahasa Indonesia, and Bataknese languages use reduplication extensively and productively in creating new words. But it is not discussed rigorously in this research, for it it does not concentrate on it though it judges it a bit.

Since this research is in Bataknese language, it is important to introduce briefly Bataknese language. Panggabean et al. (2013) singles out that Bataknese one of variants of Bataknesenamely, Batak Toba, BatakAngkola, BatakMandailing, BatakKaro, BatakDairi, BatakPakpak, and BatakSimalingun some of which are still in the status of dialects and some others are distinct languages, are descended from Proto-Austronesian (PAN).

III. METHODOLOGY

The research is conducted by recording randomly the utterances native speakers of Batakneselanguage in many areas where the language is spoken. Though I am a native speaker, I want to assure that the data are completely reliable and this is the reason why I don't use the data of my own. I got them to utter in Bataknese grammatical morphemes to enrich the utterances I recorded beyond their knowledge. However, not all of hundreds of grammatical morphemes recorded are included in the analysis. The data that are analyzed are only the native terms instead of loan ones.

For inflexional and derivational processes are conducted via affixation namely prefixation, suffixation, infixation, circumfixion, reduplication, and compounding are too broad, I restrict the research into prefixation resulting in inflexions and derivation. However, dealing with prefixation in Bataknese language frequently involves reduplication, in the theoreticallterature, they are discussed briefly.

Gathering adequate data, I did the following procedures, though the order of the analysis does not necessarily abide by the order of the following procedures.

1. Making a list of grammatical morphemes.
2. Breaking down the grammatical morphemes into smaller units.
3. Separating base forms (free or content morphemes) from bound or function morphemes) on the basis of recurrence and constant meaning.
5. Examining the changes of adjacent sounds resulting in allomorphs by analyzing their distributions.
6. Discussing the morphologically inflectional and derivational by determining their functions and meanings.

7. Making the inventory of bound morphemes along with their classification.

Not all initial sounds or phonemes of morphemes or words following the prefixes along with the examples of the bases are included in the analysis, since there are too many sounds that can be attached to the bases.

IV. RESULTS AND DISCUSSION

From gathering the data, I found out the data composed of content morphemes and function morphemes written in italics. Here is the list of grammatical morphemes or words:

1. Prefixes {ma-} with its allomorphs: /ma-/, /maŋ-/, /mar-/, /mab-/, and /man-/

1.1. Allomorph /ma-/

Prefix /ma-/ in Bataknese language is very productive and changes into various variants or allomorphs when followed by morphemes with various initial phonemes due to progressive and regressive assimilation. Following this, are details of processes resulting in the variants, functions, and meanings.

Prefix /ma-/ does not result in form change of the base when followed by morphemes of which initial sounds are vowels as in the following: ma + uas → /mauas/ ‘thirsty, ma + ila → /maila/, and ma + oto /ɔtɔ/ → /maɔtɔ/ ‘foolish’. It occurs because, /ma-/ is conditioned by vowels with regressive assimilation. Prefix /ma-/ changes the grammatical category from of uas and ila as Noun into Adjective. Thanks to it, the process of word formation is called derivational prefixation and /ma-/ is called derivational prefix. However, in word formation of /maɔtɔ/, the assimilation does not change grammatical category of /ɔtɔ/ as adjective.

Prefix ma- + mora/mɔra/ → /mamɔra/ ‘become rich’. The prefix changes category of the base from adjective into Verb. Consequently, the process is derivational prefixation and /ma-/ is derivational /ma-/. From now on, all inflexional prefixes will be called inflexional prefixses and all derivational prefixes are called derivational prefixation.

1.1. Allomorph /maŋ-/

Despite that prefix /ma-/ does not change when followed by vowels as shown above, it can change into /maŋ-/ even though it is followed by vowels when it functions to construct verb. For instance, ma + allang/allan/ → mangallan/maŋallan/ ‘to eat’, ma + ungal/ukkal/ → mangungkal/maŋukkal/ ‘to dig’, ma + ula → mangula/maŋula/ ‘to work, and ma + angguk → msngangguk/mangaŋguk/ ‘cry’. Since the assimilation does not change the category that remains Verb, the word formation is inflexional prefixation.

1.2. Allomorph /mar-/

Prefix ma- + suru → marsuru /marsuru/ ‘order’. Prefix /ma-/ changes into /mar-/ when followed by morpheme of which initial sound is /s/. But it can change into /man-/ to form /manuru/ without changing meaning. Since the prefixation, does not change the word class of the base, Verb remains Verb, it is inflexional prefixation.

Prefix -ma- + soban → marsoban/ ‘collecting dry wood in forest’. The prefix infrequently changes into /man-/ though ma- + suru → manuru /manuru/ occurs. The prefixation changes the word class of the base from Noun into Verb in the first occurrence but it does not change the base word class, Verb remains Verb. It means that the first occurrence is derivational prefixation and the second one is inflexional prefixation.

It is interesting to find out that in this case, prefix /ma-/ can vary to be /mar-/ and /man-/ though the initial form and category of the bases are the same.

Prefix /ma-/ + porang → marporang /marpɔraŋ/ ‘involved in war’. It occurs when followed by base of which initial sound is /p/. The change of /ma-/ into /mar-/ changes the category of the base from Noun into Verb. Similar to it is ma- + payung → marpayung /marpayuŋ/ ‘to use umbrella’. Since the occurrences do not change the category of the bases, the process is inflexional prefixation.

Prefix /ma-/ changes into /mar-/ when followed by morpheme of which initial sound is /t/ and the base has Noun category as in ma- + tondong → martondong /martɔndɔŋ/ ‘to be related or relatives’. The other examples are ma- + tendzu → martendzu /martɛddʒu/ ‘fight’, and ma- + tungkot → martungkot /martukkɔt/ ‘to use stick’. The process changes Noun category of base into Verb so it is derivational inflexion. It is important to know that /nt/ is pronounced /tt/.

Prefix ma- + gondang → margondang /margɔddan/ ‘play drum’. When followed by morpheme of which initial phoneme is /g/. The base of which category is Noun, /ma-/ changes into /mar-/. It is worth understanding that /nd/ in written form is pronounced /dd/. Another examples are ma- + gogo → margogo /margogo/ ‘powerful, and ma- + padan → marpadan /marpadan/ ‘to make appointment’ and ma- + pangkas /marpaŋkas/. In the first two prefixations the category of the bases does not change from Noun meaning that the processes are inflexional prefixations but in the third process, the category of the base changes from Noun into Verb meaning that the process is derivational prefixation.

Prefix /ma-/ changes into /mar-/ when followed by base of which initial sound is vowel and its base category changes from Noun into Verb as in ma- + onan → maronan /marɔnan/ ‘buying things in traditional market’, ma- + ubat → marubat /marubat/ ‘to have medical treatment’, ma- + ujung → marujung /marudʒuŋ/ ‘to have end’, ma- + alo → maralo /maralo/ ‘against’.

It can change into /maŋ-/ followed by the same word /alɔ/ to become /maŋalɔ/ of which meaning changes a bit. These prefixational processes change category of the base from Noun into Verb making them derivational prefixations. But the same process can change the base category from Verb and Noun into Adjective as in /maralɔ/ 'against' making it derivational prefixation.

Prefix ma- +niang → marniang /marniaŋ/ 'thin'. The prefix changes into /mar-/ when followed by Adjective of which initial sound is /n/. Another examples are ma+ nonang → marnonang /marnɔnaŋ/ 'talking one to another' and ma+nipi → marnipi /marnipi/ 'to dream'. The bases have different grammatical category namely in the first the category does not change the category of base as Adjective, the second and the third process changes the category from Noun into Verb. Based on this, the first process is inflexional preposition whereas the second and third are derivational prefixations.

Prefix /ma-/ changes into /mar-/ when followed by morphemes of which initial sound is /l/ and their grammatical category are various namely Verb and Noun as in ma-+lojong → marlojong /marlɔʒoŋ/ 'to run', and ma-+limut → marlimut /marlimut/ 'mossy', ma-+lubang → marlubang /marlubanŋ/ 'have hole'. Since the prefixation does not change the grammatical category of the base as in /marlɔʒoŋ/ this is inflexional prefixation and in /marlimut/ and /marlubanŋ/, it does not change base class, this is derivational inflexion.

Prefix ma- +tamba → martabba/ 'increase'. The category of the base as Adjective changes into Verb. The change of category makes the process derivational prefixation. It can also be followed by tamba /tabba/ by reduplication that becomes martamba-tamba → martabbatabba/ 'keep increasing' without changing the category making the process inflexional prefixation. As aremider, /mb/ in written form is pronounced /bb/. The same process can be seen in ma-+tulang → martulang /martulanŋ/ 'to have uncle' but its grammatical base as Noun changes into Verb, Since the former changes the grammatical category of base, the prefixation is called inflexional prefixation. The process can also occur when /ma-/ is followed by morpheme which is Verb as in mar-+tudu → martudu/ 'raise hand' as Verb, For there is no change of grammatical category of the base, it is inflexional preposition.

Prefix ma- +dalan → mardalan /mardalan/. The prefix changes into /mar-/ when followed by Noun as base and the prefixation changes into Verb /mardalan/. /dalan/ can be reduplicated resulting in /mardalan-dalan/ which is also Verb with a bit difference of meaning. The first means to walk and /mardalan-dalan/ means picnic. Another example is ma+dame → mardame /mardame/ 'to be peaceful' but it changes base dame 'peace' as Adjective and in /mardame/ as Verb. So the morphological process here is derivational prefixation and /ma-/ here is derivational /ma-/.

1.3 Allomorph /mab-/

Prefix ma- bahen → mambahen /mabbaen/ 'to make'. This process changes /ma-/ into /mab/ by adding /b/ after /b/ called by Crowley (1992) exeresence via the progressive assimilation; the following sound is conditioned by the preceding sound to be identical with it namely bilabial. The same process happens to ma-+boan → mabboan/ 'to bring' ma- +bungka → mabbukka/ 'to open', ma-+buat → mabbuat/ 'to make'. The prefixation does not change the category of the base as Verb. Consequently, it is called inflexional prefixation. Another example is ma-+boan → mamboan /mabboan/ 'to bring' and ma-+balbal → mambalbal /mabbalbal/ 'to fiercely hit'. It is necessary to note, that /balbal/ is not reduplication, for there is no meaning of /bal/ itself.

1.4 Allomorph /man-/

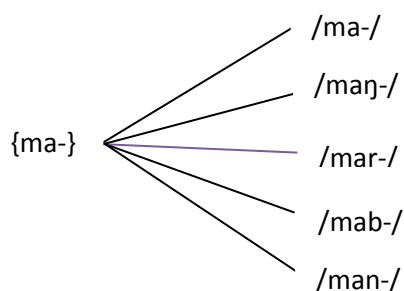
Prefix ma-+tutung → manutung /manutuŋ/ 'to burn'. Prefix ma- changes into man- when followed by morpheme of which initial sound is /t/ resulting in grammatical category that does not change the grammatical category of the base making the process inflexional preposition and /ma-/ inflexional /ma-/.

Prefix ma-tomu → manomu /manomu/ 'to fetch'. To give pragmatic emphasis, tomu is reduplicated to construct manomu-nomu /manomunomu/ 'to fetch'. The change of /ma-/ into /man-/ is due to regressive assimilation where /ma-/ condition /t/ to be in harmony with /n/. The process does not change the category of the base and remains Verb resulting in inflexional prefixation and /ma-/ is inflexional /ma-/.3.

1.5 Allomorph /mam-/

Prefix ma-+pangke → mamangke /mamakke/. Prefix ma- changes into /mam-/ due to regressive assimilation where /ma/ conditions the adjacent sound as in initial position of morpheme following it namely /p/ in order for it to be similar to it as bilabial nasal. This results in unchanged category of base form pangke as Verb in comparison with /mamangke/ as Verb. Consequently, it is inflexional prefixation.

On the basis of the analysis of the prefixation /ma-/ changing into /mar-/, /maŋ-/, /mam-/, the following diagram of allomorphs of /ma-/ can be shown as follows



2. Prefix {pa-} with its allomorphs /pa-/, /paŋ/, and /par-/
 2.1. Allomorph /pa-/

Prefix pa- +ias→paiaŋ /paiaŋ/ ‘to clean’. Here, /pa-/ is followed by morpheme of which initial sound vowel /i/ that changes word class of the base from Adjective into Verb. On the basis of it, it is derivational prefixation and /pa-/ is derivational /pa-/. Another occurrence is pa-+ila-paila /paila/ ‘defame’. In this process, /pa-/ is followed by morpheme of initial form is vowel /i/ that changes the word class of the base from Noun into Verb resulting in derivational prefixation and /pa-/ is derivational /pa-/.

Prefix pa-ulak→paulak/paulak/ ‘to return’. In this process, /pa-/ is followed by phoneme of which initial sound is /u/ that is Verb maintains the base as Verb resulting in inflexion prefixation and inflexion /pa-/. Prefix pa-+unsat→paunsat/paunsat/ ‘move’ resulting in unchanged base category as Verb and /pa-/ is inflexional/pa-/. Reminder, /ns/ iortofraphy is pronounced as /ss/.

2.2. Allomorph /paŋ-/

Despite that /pa-/ remains unchanged when followed by morpheme of which initial phonemes are vowels but it can also change into /paŋ-/ as in pa- + ula→pangula /paŋula/. Since the base category as Verb and the prefixation changes it into Noun, this process is derivational prefixation and /pa-/ is derivational /pa-/. The same process occurs when it is followed by base / usir/ ‘drive away’ as Verb, it becomes pangusir /paŋusir/ ‘somebody who drives away’ as Noun and /isi/ Verb/Noun changes into /paŋisi/ ‘somebody who fills in’ which is Noun. Since /pa-/ as the base category can change into either Verb and Noun, the processes can be either inflexional and derivational processes and /paŋ-/ can be either inflexional/pa-/ or derivational /pa-/.

More examples, pa-uhum→paŋuhum/‘punisher’. Prefix /pa-/ changes into /paŋ-/ resulting in change of base category from Verb into Noun (derivational prefixation). Prefix pa-+utang→ pangutang/paŋutang/’debtor’. The change of Verb into Noun brings about derivational prefixation.

2.3. Allomorph /par-/

Prefix /pa-/ changes into /par-/ in accordance with initial sounds of morphemes following it both vowels and consonants. Although /pa-/ followed by morphemes with vowels in initial positions, it does not change /pa-/ as shown before, it changes it into /par-/ when its base grammatical category is not Adjective instead of Noun as seen in the following.

Prefix pa- +ila→parila /parila/ ‘a person who is easily shy’. The change is due to the initial sound of morpheme following it is vowel /i/ resulting in change of category from Noun into Adjective and making it derivational preposition. The same process occurs in pa- +ubat→parubat /parubat/ ‘somebody being medically treated or selling drug’ where category of the base does not change from Noun and it results in inflexional prefixation and pa- + ulok→parulok/parulok/ ‘somebody rearing snakes’ that does not change category of the base as Noun and brings about inflexional prefixation.

Prefix pa- +monang→parmonang /parmonang/ ‘winner’. It changes into /par-/ when followed by morpheme of which initial sound is /m/ resulting in grammatical category change from Verb into Noun of the base making it become derivational prefixation.

Prefix pa- +mabuk→parmabuk/parmabuk’. Prefix /pa-/ changes into /par-/ when followed by morpheme of which initial phoneme is /m/ resulting in the change of category of the base from Verb into Noun making the process become derivational prefixation.

Prefix pa-+boras→parboras/parboras/ ‘to have abundant rice’ It changes into /par-/ when followed by morpheme of which initial morpheme is /b/ that does not change category of the base from Noun resulting in inflexional prefixation making it derivational prefixation.

Prefix pa- jahat→parjahat /pardjahat/ ‘criminal’. The change occurs when /pa-/ is followed by morpheme of which initial sound is /dʒ/ resulting in change of category of the base from Adjective into Noun making the

process become derivationalprefixation. Another example is pa- + juji→parjuji /pardʒudʒi/ resulting in inflexionalprefixation which occurs when prefix /pa-/ is followed by morpheme with initial sound /dʒ/.

Prefix pa- +jongjong→jongjong /pardʒoŋdʒoŋ/ ‘the way somebody stands up’. The process here is the same as the above processes though this process does not change the base category from Verb and it is inflexionalprefixation.. Commonly, /pardʒoŋdʒoŋ/ is followed by suffix/-na/ standing for third person as in /pardʒoŋdʒoŋna/ ‘his or her way of standing up’ and /-ta/ standing for our as in /pardʒoŋdʒoŋta/ ‘the way we stand up’. It is also important to understand that /dʒoŋdʒoŋ/ is not reduplication rather a content word.

Prefix pa- + hata→parhata/parhata/ ‘speaker’. Prefix /pa-/ changes into /parhata/ which is Verb is followed by /hata/ as Noun. Due to the fact that base category does not undergo change, the process is inflexionalprefixation. The same process can also be seen in par-+huta ‘village’→parhuta/parhuta/ ‘owner of village’.

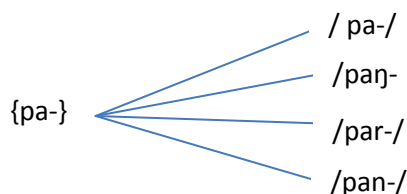
Prefix pa- +lapo→parlapo/parlapo/ ‘owner of café’. Prefix /pa-/ changes into /par-/ when followed by morpheme of which initial sound is /l/ as in pa+lapo→parlapo/parlapo/ ‘owner of café’. The process does not change the category of the base as Noun, it is inflexionalprefixation. Despite it, it is different from the change of /pa-/ into /par-/ where base category changes as in pa-+lupa→parlupa/parlupa/ from Verb into Noun. The change of the category of the base is derivational prefixation.

2.4. Allomorph /pan-/

Prefix pa-+tanom→pananom /pananom/ ‘burrier’. The prefix changes into /pan-/ when followed by morpheme of which initial sound is /t/ and it changes the category of base from Verb into Noun. Due to the change, the prefixation is called derivational prefixation. The same process can also be seen in pa-+tiham→paniham ‘stabber’. In this process, the category of base as Verb changes into Noun making it derivational prefixation and /pan-/.

Prefix pa-+tangko→panangko/panakko/ ‘thief’. Prefix /pa-/ changes into /pan-/ due to the fact that /p/ as voiceless stop bilabial conditions /t/ as voiceless stop dental to be nasal dental /n/ for sound harmony. Since the process changes the category of the base /tangko/ as Verb into panangko as Noun making it derivational prefixation.

The changes of {pa-} into its allomorphs can be seen in the following diagram;



3. Prefix {ta-} with Its Allomorphs: /ta-/ and /tar-/

3.1. Allomorph /ta-/

Prefix ta- +bahen→tabaen /tabaen/. Prefix /ta-/ remains unchangeable in this datum though, it is not an evidence that /ta/ is unchangeable when followed by morpheme of which initial phoneme is /t/ as in martungkar /martukkar/ or /manukkar/ ‘exchange’ instead of /matukkar/. Prefix /-ta/ maintains the form of the base /bahen/ ‘make’ as Verb in /tabaen/ as Verb. Consequently, the process is inflexionalprefixation. The same occurrence is also available in other prefixations. Concerning the omission of sound /h/ between two vowels or intervocalic and in other positions is common in all languages including Bataknese (Panggabean, 2014).

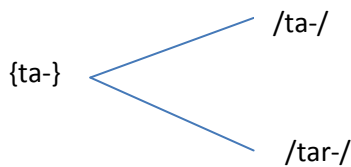
3.2 Allomorph /tar-/

Prefix ta-gulung→tagulung /tagulun/ ‘we coil’. Prefix /ta-/ followed by morphemes of which initial sound is /g/ does not change the grammatical category of the base and remains Verb and the meaning is we coil. Because of it, the prefixation is inflexionalprefixation. The same process can also be found in ta-+gusting→tagusting /tagustin/ ‘we clim’, /ta-/ +boan→taboan/taboan/, etc.

Prefix ta-+allang /allan/ ‘we eat’. The process occurs because /ta-/ is followed by morpheme of which initial sound is vowel and it does not change the category of the base and remains Verb. On the basis of it, this prefixation is inflexional preposition. The same occurrence can also be seen in ta-umpat→taumpat /tauppat/ ‘we remove’, ta-+ombus→taobbus/taobbus/ ‘we blow’. Notice that sequence of /mp/ is pronounced /pp/.

Prefix ta-+allang → tarallang /tarallan/ ‘to eat something not deliberately’ or be able to eat’. It is interesting to discover that /ta-/ can change into /tar-/ though it is followed by the same morpheme with the same initial sound /allang/. Why there is change are meanings. Since there is no change of category of the base as Verb in this process, it is inflexionalprefixation.

The prefix {ta-} and its allomorphs can be drawn as follows



5. Prefix /na-/without Allomorph

Prefix /na-/ +balga→/nabalga/ 'the big' and na-+pogos→napogos /napɔgɔs/ 'the poor'. This process occurs when the preposition /na-/ is followed by morpheme of which initial sounds are voiced bilabial /b/ and voiceless bilabial /p/ as well as all other sounds including vowels as in when followed by vowel like /u/ as in na-+uli→nauli/nauli/ 'the beautiful', etc. With this in mind, all prefixations using /na-/ are inflexional prefixations. However, /na-/ can change into /naum-/ via multiple prefixations when the speaker wants to express comparative as in /balga/ 'big', /umbalga/ 'bigger', and /naumbalga/ 'the bigger'. This is to show that /naum-/ exists to mean comparative. The multiple prefixation here does not bring about change of the category of the base making it inflexional prefixation.

6. Prefix {hu-} with its Allomorphs /hu/ and /hum/

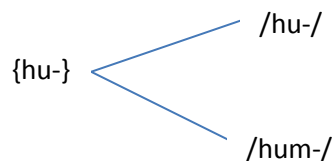
6.1 Allomorph /hu-/

Prefix hu-unsat→huussat /huussat/ 'I remove'. Prefix /hu-/ does not change the base category. Like prefix /na-/, prefix /hu-/ is exactly the same as the above prefix /na-/ in that whatever initial sound of the morpheme following it does not change grammatical category of the base. Even if, it is followed by consonants, for instance, Prefix hu- boan→huboan /huboan/ 'I bring' does not change the form of /hu-/ and its function and meaning.

6.2 Allomorph /hum-/

However when followed by morpheme of which initial phoneme is /h/. it changes into /hum/. For instance hu-+hapal→humapal /humapal/ 'thicker', hu- hohom→humohom 'more silent hu-hansit→humansit /humassit/. The change of /hu-/ into /hum-/ occurs due to the effect of the initial sounds of the bases following preceding sound hu in progressive assimilation. It is important know that the /hu-/ here is different from the previous one in terms of function of meaning. It does not verbalize the base rather maintain the category of the bases as Adjective and its meaning is not I do the action mentioned by the base but to show comparative.

The prefix {hu-} and its allomorphs can be shown



below.

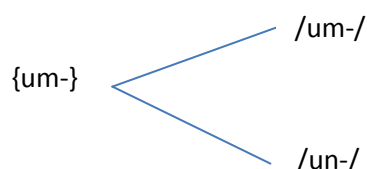
7. Prefix {um-} and Its Allomorphs /um-/ and /un-/

Prefix um-+ maol→ummaol /ummaol/ 'more difficult'. Prefix um- is almost the same as those of two previous prefixes in that most of the time, it does not change whatever initial sound of the base is and its function remains the same (to form the base without change of category) and its meaning is comparative. On the basis of it, prefixation using um- is inflexional preposition. More examples are um-+mura→ummura/ummura 'cheaper', um-+poso→upposo/upposo/, um-+pistar→uppistar/ 'smarter'.

7.2. Allomorph /un-/

Prefix /um-/ changes into /un-/ only when followed by morphemes of which initial phonemes are voiceless dental /d/ as in um-+dao→undao/ 'further' um-+ dangol /uddaŋɔl/ 'more painful', um-+dao→undao /uddaɔ/ and um-+tabo→untabo /uttabo/ 'nicer'. The process takes place after /um-/ changes into /un-/ after initial sounds dental /d/ and /t/ condition the preceding nasal /m/ to be similar with them as dental n/ via progressive assimilation resulting in /dd/ and /tt/. Similarly, um- changes into voiceless dental /t/ when followed by morpheme of which initial sound is voiceless /t/ as in um-+tabo→untabo/ 'nicer'.

The prefix {-um} and its allomorphs can be drawn as follows.



6. Prefix /lam-/ without Allomorph.

Prefix /lam-/ +godang→/lamgodan/‘more’. The prefixation occurs when /lam-/ is followed by morpheme of which initial sound of base following it are stop voiced dental and voiceless dental. Prefix/lam-/ maintains category of the base and its meaning is comparative. In terms of how the process takes place is just the same as those of in /na-/ and /hu-/ processes.

However, in certain occurrences, /so/ is combined with /lam-/ for negative meaning via multiple affixations as in /lamsobinoto/‘more difficult to understand’. It can be broken down into some morphemes boto/boto/ ‘know’, sobinoto/sobinoto/’ be not understood’, lamsotarida /lamsotarida/ ‘ more invisible’ deriving from ida/ida/’see’, sotarida/sotarida/’invisible’, and lamsotarida/lamsotarida/’more invisible’.

7. Prefix /si-/ without Allomorph

Prefix si- + jokal→/sidʒokal/ ‘somebody who is stubborn’. The prefixation using /si-/ changes the category of the base from Adjective into Noun but does not change the form of /si-/ and the meaning of the base. Whatever initial sound of morphemes follows prefix /si-/, there is change of its form. So this prefixation is inflectional prefixation. Other examples are si-+boan→siboan/sibɔan/’carrier’, si-+allang /allan/ ‘eater’

8. Prefix /sa-/ without Allomorph

Prefix sa-+huta→sahuta/sahuta/ ‘the whole population of a village’ and ‘people from the same village’. The prefix /sa-/ does not change when followed by any morpheme of which initial phonemes are any sound and does not change the category and the meaning of the base as numeral, all, and the whole belonging to one. On the basis of it, the prefixation is inflexion. Other examples are sa-ompu→saoppu/ ‘all members of grandparents’ and ‘people descended from a couple of grandparents’.

Prefix sa- can also be attached to some morphemes of which initial sounds are / b/, /r/, etc. as in sa-+balga→sabalga/’as big as’ and sa-+roha→saroha/saroha/’the same thought’. The prefixations do not change the grammatical category change of the bases making them inflexionalprefixations.

V. CONCLUSION

Based on the analysis, it can be concluded that:

1. There are seven prefixes in Batakese language namely prefixes {ma-} with its allomorphs: /ma/, /maŋ-/./mar-/./mab-/ and /man/, /par-/./pa-/./paŋ/./par-/. prefix {ta-} with its allomorphs: /ta-/ and /tar-/, prefix /na-/ without allomorph, prefix /hu-/ with its allomorphs /hu/ and /hum/, prefix /lam-/ without allomorph, prefix {um-} with its allomorphs /um-/, /un-/ and /up-/, and prefix /si-/ without allomorph.

2. Batakese prefixes are productive but some of them are not productive for they are rarely used. In terms of productivity, they are classified into three types namely the ones that are most widely distributed namely prefix /ma-/./pa-/, and /na-/, the ones that are less widely used namely /lam-/ and /um-/ as well as /si/ and /sa/ which are used the least.

3. Unlike in English where almost all prefixes result in derivation instead of inflexion for instance, in Batakese there are many prefixes that result in both inflexion and derivation as in prefix ma-+mora/mɔra/→/mamɔra/’become rich’. The prefixation changes the category of the base form from Adjective into Verb yielding derivation. The prefix changes category of the base from adjective into Verb. Consequently, the process is derivational prefixation.

4. What is unique is, in Batakese, assimilation whether progressive and regressive is complex to determine since in adjacent sounds in prefix and base, the sound changes may be different although the sounds are the same as seen in **um**-dao → umdao → undau /uddao/ and **um**-+tabo → untabo /uttabo/. Sometimes, it is the grammatical category of the bases that determines the changes as seen in **ma**-tungkar/**martukkar**/’change without being done’ and ma-tungkar → **man**ukkar/’to change by somebody’

5. In Batakese, multiple prefixation is conducted through prefixations by adding many prefixes and conducting reduplication but the procedures of multiprefixation in English is carried out by prefixation and suffixation. In

Bataknese, there are two kinds of prefix namely the ones with many allomorphs and the ones without allomorphs.

6. Most of the inflexions in Bataknese is constructed by prefixation. But unlike in English, though prefixation may also result in derivation, prefixation in Bataknese can construct prefixational and derivational morphology.

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