

# SUCCESSIVE CYCLIC MOVEMENT IN STANDARD INDONESIAN'S VERBAL PREFIXES

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## Abstract

Standard Indonesian has several unique word formations, such as affixation. Some studies discuss about this patterning, like Sato in 2010, who came up with the prefixation *meN-*, nonetheless, the analysis is not quite precise, where the actual form of the prefix is *me-*, which then experience automatic phonological process by the surrounding sound(s), and subsequently the base form *me-* will then be conjugated in order to match to the root. Additionally, this paper would also reveal the genuine form of the other prefixes in Standard Indonesian, including any possible phonological changes according to the sounds circumstance. Moreover, the discussion will be extended under the principles of syntax-morphology parameter, exactly in the phenomenon of successive cyclicity, which particularly involves *wh* and *NP* movement.

**Keywords:** *cyclicity, movement, pied-piping, insitu*

## Abstrak

Bahasa Indonesia memiliki sejumlah pembentukan kata yang unik, seperti halnya imbuhan. Beberapa studi membahas tentang pembentukan tersebut, seperti Sato (2010), yang membahas tentang pengimbuhan *me-N*, kendatipun demikian, analisisnya tidak begitu presisi, dimana bentuk yang tepat dari awalan tersebut adalah *me-*, yang mana kemudian mengalami proses fonologi otomatis oleh bunyi-bunyi sekitarnya, dan selanjutnya bentuk dasar *me-* tersebut akan terkonjugasi sehingga menempel pada kata dasarnya. Sebagai tambahan, artikel ini juga akan mengungkap bentuk-bentuk dasar dari awalan dalam Bahasa Indonesia, termasuk perubahan fonologi yang dapat terjadi seturut dengan bunyi sekitar, tepatnya melalui fenomena successive cyclicity, yang secara khusus melibatkan proses perpindahan kata tanya (*wh*) dan frase kata benda.

**Kata kunci:** *perputaran, perpindahan, penyatuan, tempat semula*

## INTRODUCTION

This paper basically represents some studies about the distribution of *verbal prefix* (Soh, 2010) in Standard Indonesian (henceforth: SI). In what follows, I try to come up with similar analysis by accounting for another verbal prefix *ber-* as the so-called *active voice marker* in the language. The analysis itself is conducted through a phase-theoretic approach to the syntax- morphology interface, particularly in successive cyclic movement. Concerning with this, it is, in the first place, necessary to assert that the data presented here are formulated according to Standard Indonesian, in order to avoid any profound from the other Malay dialects, which could definitely present dissimilar structure as well as interpretation for the language per se. With regard to the previous studies, I try to give some fundamental arguments as well as comments to the analysis presented in the papers, including a basic theoretical concept about the characteristic of the verbal prefix. Briefly, this paper is organized as follows. In Section 1, I will represent the characteristics of the verbal prefix *me-*, including the base pattern which important to assert for the sake of consistency. Subsequently, the second section covers previous studies concerning the similar discussion to this discussion. Then, the research questions are presented in the section 3, followed by the discussion and results in the section 4, and the final section will be the conclusion of this study.

## Research Questions

This research is basically directed to answer the following questions: (i) What kind of change would be applied in the prefix *ber-*? Furthermore, as has been attested in the previous studies, the prefix *me-* is always deleted when an object (NP/*wh*-phrase) moves across it, even more than one prefix simultaneously [ $XP_i$  *me-V me-V t\_i*]. Then I was interested to see (ii) what is going to

happen with the deletion when the prefixes crossed are different, such as *ber-* and *me-* respectively or the other way around. Given this condition, I wondered whether both of them should be deleted, or either one, which one, and to what extent? With respect to the claim by Cole & Hermon (1998), I want to attest (iii) what kind of wh-phrases would affect the deletion of the prefix *ber-*? Does it also depend on the object position?

## LITERATURE REVIEW

### The characteristics of *me-*

First of all, I would like to argue the different inconsistent types of prefix *me-* proposed in some previous studies. Cole and Hermon (1998) mentioned *meng-*, while Sato (2010) came up with *meN-*. Further in this paper, I am not going to talk about the in-depth morphological or phonological aspect, yet I would rather use the original form of the prefix is *me-*, which then would experience morpho-phonological process when assimilated. This study will focus on the morpho-syntax, rather than morpho-phonology. Nevertheless, it is important to maintain consistency and originality of the property of our research corpus. Accordingly, I will differentiate the base form of prefixes from the inflection and root, by using original patterns, and present the after-formed pattern in appropriate glosses, as given in the following examples:

- › *me-* cari = (men) cari = ‘to look for’
- › *me-* buat-kan = (mem) buat-kan = ‘to make’

In addition to this, the so-called active voice marker *ber-* is mostly used for Intransitive verbs. However, there are some verbs in Standard Indonesian, constructed with the prefix, such as *ber-* main (to play), *ber-*lomba (to race), and so on and so forth.

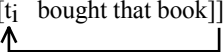

### Previous Studies

There have been a large number of researches conducted in Standard Indonesian, particularly in the properties of cyclic movement. Soh (2010) proposed that *verbal prefix me-* in Malay language is assumed to be an *active voice marker*, with respect to subject and object wh-phrase positions. He also represents several supporting examples from Saddy (1991), Soh (1998) and Cole and Hermon (1998) that they all compare both the positions, given below:

- (1a) Siapa-kah<sub>i</sub> yang t<sub>i</sub> beli buku itu?  
who-Q that buy book the  
‘Who bought the book?’
- (1b) Siapa-kah<sub>i</sub> yang t<sub>i</sub> mem-beli buku itu?  
who-Q that MEN-buy book the  
‘Who bought the book?’
- (2a) Apa-kah<sub>i</sub> yang Ali mem-beli t<sub>i</sub>?  
what-Q that Ali buy  
‘What did Ali buy?’
- (2b) \*Apa-kah<sub>i</sub> yang Ali mem-beli t<sub>i</sub>?  
what-Q that Ali MEN-buy  
‘What did Ali buy?’

From the examples above, we can easily see the different properties of the prefix *me-*, over the subject and object positions. In (1a), the verb *beli* does not take *me-* form, while in (1b), the verb is attached to the prefix, which then becomes *mem-beli*, given that both the sentences share wh-phrase in subject position. In addition to this, I would like to argue about the example in (1a) which is assumed to be correct. In fact, although the sentence is understandable, it is ungrammatical. For the sake of argument,

when the wh-phrase move and does not cross any verb, there should not be any omission of the prefix *me-*. Then we can consider the following example in (2a), where the object wh-phrase moves to the front-position of the sentence, so that the prefix *me-* is omitted. In other words, if the verb still takes the prefix *me-* after the wh- movement, the sentence will be ill-formed. Accordingly, Soh (2010) discussed this phenomenon within syntactic framework of Government Binding Theory/Minimalist Program, which analyzes the movement of the wh-phrases to the initial position of the sentence (Spec CP). The movements are described below:

- (3) [CP Siapa-kah yang [TP <siapa> mem-beli buku itu]]  
 [Who<sub>i</sub> [t<sub>i</sub> bought that book]]  

- (4) \*[CP Apa-kah yang [TP Ali mem-beli <apa>]]  
 [What<sub>i</sub> [did [Ali buy t<sub>i</sub>]]]  


It is obvious from the example that when the wh-phrase moves across a verb, the prefix ought to be omitted.

Furthermore, Sato (2010) attested the generalization with A'-movement, A-movement, and NP vs. Non-NP movement. From the examples he provided, it can be claimed that the active voice prefix *me-* must be deleted from the matrix verb *mem-beritahu*, not from the embedded verb *men-cintai*, as given in (5), while the deletion of *me-* is also prompted by A-movement, as shown in (6).

- (5) Siapa<sub>i</sub> yang Bill (\*mem)-beritahu ibu-nya [CP yang t<sub>i</sub> (men)-cintai Fatimah]?  
 Who Bill AV- tell mother-his AV- love Fatimah  
 'Who does Bill tell his mother that loves Fatimah?'
- (6) Ali saya (\*men)-cubit t<sub>i</sub>.  
 Ali I AV- pinch  
 I pinched Ali./Ali was pinched by me.'  
 (Standard Indonesian; Cole and Hermon (1998: 232))

In addition, Sato (2010) came up with a claim respect to the wh-movement theory, that the deletion of *me-* is not applicable in some wh-phrases in Standard Indonesian, such as *kenapa* (standard form should be *mengapa*), *dimana*, dan *kepada siapa*, meaning why, where, and to whom respectively. He gave an example to support this claim, as follows:

- (7) Kenapa<sub>i</sub> Mary mem-beli buku itu t<sub>i</sub>?  
 Why Mary AV- buy book that  
 Why did Mary buy that book?'

This is not a good example, since it is ungrammatical if we return the sentence to the previous pattern, where wh-Q remains in situ. In Standard Indonesian, the sentence is ungrammatical. In the light of this, there is no reason to move the wh-phrase to the initial position of the sentence. In other words, there is no movement established here. Regarding this issue, Sato does not mention any argument that explains the exception that he come up with, rather than stated that the prefix is obligatory in the very environment. For the sake of argument, when a wh-phrase (either one of the three) act as the object of the transitive verb, it will compel the deletion of the prefix *me-*, so that the sentence will be grammatical, despite the fact that keeping the prefix is sometimes acceptable and is applied in spoken language even in some formal contexts. This would be best illustrated in the following example:

- (8) [PP Kepada siapa<sub>i</sub>] John (mem)-percayakan protokol tersebut t<sub>i</sub>?  
 to whom John AV- entrust protocol the  
 'To whom did John entrust the protocol?'  
 (Standard Indonesian; modeled on Cole and Hermon (1998: 231, 232))

Cole and Hermon (1998) generalized that the obligatory omission of the prefix *me-* in Indonesian indicates the movement of an NP or wh-question. They provided the following examples:

- (9) Buku itu<sub>j</sub> adik saya ~~mem~~-beli t<sub>i</sub>. book that brother my AV- buy  
 'My brother bought that book./That book was bought by my brother.'  
 (Cole and Hermon 1998: 232)
- (10) Ali mem-beritahu kamu tadi [apa<sub>j</sub> yang Fatimah ~~mem~~-baca t<sub>i</sub>]?  
 Ali AV- tell you just now what Fatimah AV- read  
 'What did Ali tell you just now that Fatimah was reading?'
- (11) \*Kenapa<sub>j</sub> Mary ~~mem~~-beli buku itu t<sub>i</sub>?  
 Why Mary AV- buy book that  
 'Why did Mary buy that book?'

Similarly, when the object wh-phrase moves across the verb, the prefix *me-* is deleted (9). Importantly, when it moves partially, it will not affect another particle which is outside the scope of the movement, as given in (10). Meanwhile, the sentence (11) is ungrammatical, and the movement could not trigger the verb to delete the prefix, since the wh-phrase is not the part of the object that moves across the verb (see Cole & Hermon 1998).

## DISCUSSION

The cyclic movement of prefix *ber-* after wh- and NP-

Basically, I will provide the evidence of the change yielded from the movement of the prefixes over transitive verbs, and the combination of the two prefixes mentioned above. In the first place, when an NP or wh-q moves across the transitive verb, the prefix *ber-* should be omitted, beside the addition of suffix *-kan* as the verb marker. This could be shown in the following examples:

- › Wh- movement
- (12) Saya tidak tahu apa<sub>j</sub> yang John sedang (\*ber-)main-kan t<sub>i</sub>.  
 I don't know what John is AV- playing t<sub>i</sub>  
 'I don't know what John is playing'.

Based on the grammatical rule of SI, it is compulsory to add the suffix *-kan*, which is an additional particle to indicate the class of the verb. Without the suffix, the meaning of the verb could be misinterpreted as a noun or an adjective, which is different among some verbs; hence, I will henceforth use the suffix as the verb marker.

- › NP- movement

Besides, as can be seen in the following example, we can see the deletion of the prefix *ber-* after the movement of the NP, only there could be an addition of suffix *-lah*, which functions as the auxiliary-particle.

- (13) Mereka ber-adu ketangkasan.  
 Ketangkasan-lah<sub>j</sub> yang mereka ber-adu-kan t<sub>i</sub>. Agility they AV- compete  
 'It's agility that they compete.'

### Combinations of *me-* and *ber-* in sequence

According to the previous research, whenever an NP or wh-phrase moves across verbs with prefixes *me-*, all the prefixes should be omitted, as can be seen in the following example:

- (14) John merasa dia mempercayakan orang yang tepat.  
 Orang<sub>j</sub> yang John ~~me~~-rasa dia ~~mem~~-percaya-kan adalah t<sub>i</sub> yang tepat. Person John AV-thought he AV- entrust is right  
 'The person<sub>j</sub> who John entrust is right t<sub>i</sub>'

Referring to the second research question, what would happen with both the combination of prefixes of *ber-* and *me-* respectively, when NP or wh-Q moves across them at once.

Example:

- The sequence of *me-* and *ber-*  
 (15) Dia ~~men-~~coba untuk ~~ber-~~bicara tentang apa  
 Apa<sub>i</sub> yang dia coba bicara-kan t<sub>i</sub>? What<sub>i</sub> he tried talk  
 'What did he try to talk about?'
- The sequence of *ber-* and *me-*  
 (16) Apapun yang kami berlombakan<sub>i</sub> dia selalu ~~men-~~dukung t<sub>i</sub>.  
 Whatever we race he always AV- support. Whatever we race, he always support.

As shown in the examples above, all the prefixes are omitted in any order of *sequence*. However, the distribution cannot be generalized that way. In fact, there is also another rule of the distribution which involves another affixes, where the prefix *ber-* is changed into prefix *pe-*, and there is addition of suffix *-i*, which is shown in the following examples:

- (17a) Dia belajar membuat apa?  
 (17b) \*Apa<sub>i</sub> yang dia ~~me-~~ajarkan untuk ~~mem-~~buat t<sub>i</sub>?  
 (17c) Apa<sub>i</sub> yang dia pelajari untuk buat t<sub>i</sub>?  
 What he learn to make  
 'What does he learn to make?'

The only possible reason to explain this distribution is the change of meaning. In (17a), the verb *belajar* means 'to learn'. While in (17b), *ajar-kan* means 'to teach', which is contradictive to the previous meaning that is originated. Thus, the sentence should derive the rule of changing *ber-* into *pe-* and adding the suffix *-i*, in order to preserve the original meaning, i.e *pelajari*, which means 'to learn' (17c).

The distribution resulted from the other wh-movements:

In the previous discussion, we have seen the distribution of both the prefixes *me-* and *ber-* over what, who, to whom and why. Now we can see whether the prefix deletion is applicable to the other wh-questions, such as which, when, where, whose and how. Speaking to this concern, it is important to notice in advance that Standard Indonesian, to some extent, allows sentences to have wh-question in-situ, as given in the examples below.

- (18) Which  
 Yang mana<sub>i</sub> yang kamu ~~me-~~ pilih t<sub>i</sub>  
 Which you AV- chose  
 'Which one do you choose?'
- (19) Where  
 Dimana<sub>i</sub> dia letakkan kuncinya t<sub>i</sub>  
 Where he put his key  
 'Where did he put his key?'
- (20) When  
 Kapan itu terjadi<sub>i</sub> saya tidak ~~me-~~ketahu-i t<sub>i</sub>  
 When it happens I don't AV- know.  
 'I don't know when it happens.'
- (21) Whose  
 Bukunya siapa<sub>i</sub> yang harus saya ~~me-~~cari t<sub>i</sub>  
 Book whose should I AV- look for  
 'Whose book should I look for'
- (22) How  
 Bagaimana bumi terbentuk<sub>i</sub> masih mereka perdebatkan t<sub>i</sub>  
 How earth formed still they debate.  
 'They still debate about how the earth is formed.'

Notice that some of the wh-questions pied-pipe the NP, so that the movement is not merely a wh-question, but more likely to NP movement.

## CONCLUSION

From the analysis above, it is clear that the movement of the verbal prefix *ber-* and *me-* prove the existence of the covert movement, since the movements trigger the deletion of prefixes *ber-* and *me-*. Regarding with this, the results of this research prove that whenever the NP and wh-Q move across the transitive verbs, which are attached to the prefix either *ber-*, *me-*, or the combination of both, in any sequence, the prefixes should be omitted. Besides, despite the evidences shown in this study, there are some other processes that appear, such as the addition of suffixes, yielded from the movements per se. In this light, it is obvious that the additional process is related to this very study, which needs to be discussed thoroughly. Finally, this study also suggests that the movement all wh-questions might affect the prefix (Active Voice) deletion, although some of them are identical with A-movement, by pied-piping the whole NP from the object position into the front-position of the sentence.

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