

# MORPHOLOGICAL AWARENESS IN TASK COMPLETION AND TEXT PROCESSING

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## ABSTRACT

The objectives of this study were to investigate the way of how morphological awareness tasks completion relates to morphological awareness in text processing and to find out the reason why the relation occurs the way it does. This study was conducted by using descriptive qualitative design. The participants were the students grade 8 of SMP Budi Murni Medan which consists of 25 students. This study revealed that there is different consistency between Text Processing Awareness and Completion Task for derivational morpheme and inflectional morphology. It was concluded that completion task is suitable for inflectional morpheme while for derivational morpheme it does not totally measure awareness, most of them measure ability to produce word. Furthermore, judgment task is the simplest of three tasks that measure the students' awareness about morphological complex words. Some of the students have less awareness due to lack of vocabulary knowledge and the high frequency of words given.

**Keywords:** *morphological awareness, task completion, text processing*

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## I. Introduction

English has multimorphemic words that made students overwhelmed to understand every passage in their textbook. Multimorphemic or polymorphemic consists of more than one morpheme. For example, *happy* has one morpheme, while *unhappiness* has three. Morpheme is defined as the smallest unit of meaning in language (Apel, K., 2014). Most new words that students found are morphologically complex with clear morphemes. Due to the clarity, meanings of most morphologically complex words can be predicted from the meanings of their individual components (Nagy & Anderson, 1984 as cited in Oz, H. 2014). For instance, *unforgettable* with prefix *un-* (not), base word *forget*, and suffix *-able* (capable of) has meaning *incapable of being forgotten*. An appreciation of morphemes can support comprehension of complex English such as *employment, unemployment, employer, employee, employed, employing, employments, employable*. Those words are derived from *employ*. With better grasp of all the process, students will be better to infer the meanings of those words and will therefore learn more of them, as well as understand the text better. The process refers to morphological awareness. It is used to help students recognize and manipulate new words they found in the textbooks or reading passage. To sum up, if students have an awareness of the morphological structure of words, it can help them in learning new vocabulary and eventually understanding novel words they encounter in their reading.

Since English in Indonesia is a foreign language, there are possibilities that the English language students may get difficulties in understanding reading text and grasping academic vocabulary. It should be noticed that words can sound or look alike but do not have morphological relations (e.g., *hum* and *humanity*, or *moth* and *mother*). If the structural analysis alone be misleading, definitely it will interfere with the meaning. Based on the observation in which the researcher did in SMP Budi Murni 3 Medan in August 2019, it was found a fact that English teachers are seldom to teach morphology explicitly in the classroom. Whereas, promoting morphological awareness becomes very important in the middle school years. This problem was also found by the researcher during her practical teaching at SMP Negeri 8 Medan, that was the students were lack of vocabularies and had difficulty to understand reading passage.

Morphological awareness, one of linguistic awareness skills, which refers to a conscious awareness of or the ability to use the smallest units of meaning in a language, may be important in learning to read English (Carlisle, 1995, 2000 as cited in Muse, 2005). The awareness of individual morphemes within a word offers many benefits to the reader,

including pronunciation, and information about word origin, spelling, meaning and usage. Due to the benefits of morphological awareness offered, morphological awareness has been found as a valuable linguistic tool to significantly improve facilitate language and literacy outcomes for school age children with and without language and literacy deficits (Reed, 2008; Bowers et al., 2010; Carlisle,2010; Goodwin & Ahn, 2010; Goodwin et al., 2012 as cited in Wolter & Green, 2013).

To achieve the purpose of morphological awareness, it necessarily involves an awareness of both spoken and written morphemes, including an understanding of what written affixes (i.e., prefixes and suffixes) look like orthographically and the rules that govern how affixes attach to base words or roots. When this aspect of morphological awareness is not assessed, then a complete picture of students' morphological awareness abilities is lacking. Therefore, there are many studies that suggest several tasks completion to assess it but in this study, researcher only focused on analogy task, judgment task, and production task (Derwing & Baker, 1979 as cited in Ku & Anderson, 2003; Carlisle, 2000, Berninger, 2007; Apel et al., 2013, Goodwin et al., 2017; Hamavandi et al., 2017).

Meanwhile the problem is no consistent measure to assess the awareness because there also has been some confusion between the concepts of morphological awareness and morphological production, sometimes referred to as morphological knowledge . Furthermore, it is considered that morphological awareness in task completion did not measure the student's conscious awareness but it measure morphological production as the ability or inability to answer those tasks. So it may be assumed less natural task. As mentioned previously, morphological awareness is a conscious reflection on morphemes while morphological production involves the unconscious of morphemes, typically during spontaneous spoken language. When individuals converse, they produce morphemes but typically do not think actively about the morphemes they are producing (Apel K., 2014).

Another way to help students when they have difficulty in reading and grasping academic vocabulary is by promoting morphological awareness in text processing. Text processing, in this case is in sentence processing can be defined as two or more words of an utterance are combined to yield the interpretation of a sentence. It is a task which all people can do well: quickly, efficiently, effortlessly, and accurately (Crocker, M, 1998). Besides, sentence processing is the study of the representations people form as they understand a sentence or utterance and the mechanisms underlying the component processes. These include recognizing the words in a sentence, determining the syntactic and semantic

relationships among these words, and interpreting the sentence with respect to the relevant linguistic and non-linguistic context (Tanenhaus, K., 2006).

So, the researcher was interested to analyze tasks (i.e., completion task and text processing), whether both tasks have relationship, reason and also which one is the most appropriate way to achieve the awareness of morphological aspect.

## **II. Review of Literature**

### **A. Morphological Awareness**

In most investigations of students' morphological awareness, researchers have used a general definition of the skill, such as the ability to consciously consider and manipulate the smallest units of meaning in language (e.g., Carlisle, 1995, 2000; Kuo and Anderson, 2006; Larsen & Nippold, 2007; Deacon et al., 2009; Tong et al., 2011; Kirby et al., 2012; Wolter & Green, 2013). Morpheme, as the smallest meaningful language unit (Katamba & Stonham, 2006; Rosa, 2013), plays an important role in building the language meaning in a larger structure. Therefore, when student recognize the appearance of morphological structure of words such as affix attached on words (prefix and suffix) and then modify and manipulate that structure, he or she is engaging in morphological awareness. So, it allows the student to add or reduce prefix and suffix in certain word so that the meaning of that word changes, for example *act*, *action*, *active*, *activity*, *activate* etc.

The process which affixes combine with roots to create new words is called derivation. The derivational morphemes change the grammatical category (word class) and meaning of words. Hence its function is to build (derive) new words (Kess, 1992, p. 76; Yule, 2010, p.69). For instance, the addition of *-ify* to *pure-purify*-means "to make pure", and the addition of *-cation-purification*-means "the process of making pure". This means people must have a list of the derivational morphemes in his/her mental dictionaries as well as the rules that determine how they are added to a root or stem. The form that results from the addition of a derivational morpheme is called a derived word.

While, Inflectional morphemes are not used to produce new words in language, but rather to indicate aspects of grammatical function of a word. Hence, its function is to mark (inflect) words for the grammatical features a given language makes use of. Unlike derivational morphemes, Inflectional morphemes never change the grammatical category of the stems to which they are attached (Fromkin et al., 2013, p. 42). For instance: Laugh,

Laughs, Laughed, Laughing. The suffixes *-s*, *-ed*, *-ing* do not change the word class of the verb.

Morphological awareness has recently been a focus in both first language (L1) and second/foreign language (L2) literacy development and has especially been examined with regard to skills including reading, writing, and spelling development as well as vocabulary acquisition (Karimi, 2012; Kieffer & DiFelice Box, 2013 cited in Oz, H., 2014). Thus, students with morphological awareness are able to identify the smallest meaningful units of language such as free and bound morphemes as well as inflectional and derivational markers. This is especially when learners often have difficulty in reading and grasping academic vocabulary.

#### B. Morphological Awareness in Task Completion

Perhaps because of the general definition of morphological awareness, various tasks have been used to measure morphological awareness itself. The most common tasks used are (apel, et al., 2013):

##### 1. Analogy task

There are two types analogy task used in this research, word analogy and sentence analogy. Students are required to find the morphological relationship between a given pair of words and to use it to complete the pattern such as “*invitation: invite:: Information: \_\_\_\_\_*” or “*Today Peter plays at school: Yesterday Peter played at school:: Today Peter works at home: \_\_\_\_\_*”.

##### 2. Judgment task

This task typically involves semantic accuracy. In a judgment task, students have to decide whether or not one word is related to another. For example, given the question “*Does childish come from child?*” YES/NO. Another form of judgment task is students are asked to choose which of four options fitted the sentence best “*Did you hear the \_\_\_\_\_? a. direct b. directing c. directions d. directed.*”

##### 3. Production

This tasks challenge the students to decompose a multimorphemic word to yield its base word (e.g., *description*. The picture is hard to \_\_\_\_\_) or to derive a word (*Cheap*. Tono’s guitar is \_\_\_\_\_ than my guitar).

#### C. Morphological Awareness in Text Processing

Some words are easily predictable and some of them are difficult to analyze. Thus, morphological awareness in text processing may be one breakthrough to help the reader or listener understand the text naturally. Text processing in this case relates to sentence

processing. Sentence processing itself mostly studied reading via self-paced reading (moving window), other self-paced reading (word-by-word or chunks; centered or cumulative), and eye tracking during reading (Tanenhaus et al., 1995). Those are the ways students process the sentence in order to know and interpret it.

In this research, there are 10 constructed sentences in which some morphological aspects are found. They were presented in slide (running text) for certain range of time. The students task is to read and recognize or identify morphological aspect within the sentences and then parse words and analyze constituent morphemes for the purpose of constructing meaning (Carlisle, 2000) For example, sentence number 1 “*please refill the cookie jar*” are shown in the slide within different sequence of time started from 1 second, 2 seconds, 3 seconds up to 15 seconds. It is expected that students directly be aware to the word *refill* and reflect on it or know how the word is formed. There is prefix *re-* added to the base word *fill*. It can be interpreted as “some one asked to fill gain the cookie jar”. This comes up to the assumption that students have more natural awareness while doing this task rather than completing three aforementioned task. Because to be aware means to know or realize so this way is considered as the awareness of students naturally.

### **III. Research Methodology**

This research was conducted by applying descriptive qualitative design. Ary (2010) says that qualitative research focuses on understanding social phenomena from the perspective of the human participants in natural settings. Qualitative research studies behavior as it occurs naturally in classroom, an entire school, a playground, an organization or community, or in settings as they are found. The qualitative method was used to describe, analyze, and interpret students’ morphological awareness in task completion and text processing. The relation between both of awareness were also described.

The data of the study were the students’ awareness shown in the task completion and text processing and the source of data was 25 students of grade 8 at SMP Budi Murni 3 Medan. Students were assessed in a quiet room at their schools within school hours. In this study, the researcher gathered the data by using observation and semi-structured interview supported with tool videotaping or audio recorder. Research was divided into 2 days of about 60 min each. 3 tasks of morphological awareness were given in the first day and text processing latter.

On the first day observation, the researcher explained the task procedure and gave two practice items to the whole tasks. After that, each student was asked to work independently under the supervision of researcher. 3 morphological awareness tasks were presented in printed format. Analogy task was distributed first, next judgment task, and the last production task. Some task items underwent phonological and/or orthographic change as in *express-expression* (phonological change), *examine-examination* (orthographic change), *permit-permission* (phonological and orthographic change) in which case the morphological structure becomes less transparent. While other task items maintained its core phonological and/or orthographic form when embedded within the complex word *comfortable*, and after attaching suffix *-able*. This contributes to increasing morphological transparency.

On the second day, the researcher asked all the students to look at slide and then read the instruction. In order to get data naturally, researcher did not provide any examples. Students paid attention to the sentence number 1 in running text which shown in 1 second, then directly wrote down word(s) that had morphological aspect on a piece of paper. Researcher checked it if it is correct means she/he has been aware. If she/he is still wrong can go on to the next timing 2 seconds, 3 seconds, up to 15 seconds with same sentence until she/ he realizes the morphological complex word(s) and so on. There were 10 sentences presented to asses their awareness. Each students got various timing to be aware and these data answer research problem 1. After analyzing the data based on observation, researcher conducted semi-structured interview (i.e., a type of interview in which the interviewer asks only a few predetermined questions while the rest of the questions are not planned in advance (Anozie, 2017). The data then were transcribed and typed for analysis and it answered research problem 2, the reason why students did the way they did. So, the processes were:

1. Identify the data by using predetermined theories
2. Classify the data by using the recurrence the data as the category of classification
3. Find the interrelationship among the classification and find the underlying relation among the data.
4. Find the pattern of the data by using the underlying relation among the data.

#### **IV. Data Analysis, Findings, and Discussion**

Task completion consist of three types, they are (1) analogy task, (2) judgment task, and (3) production task. Each of these types has similarity in their perception towards the concept of *morphological awareness*. While text processing task has perception which is

much different from those perceived by the three task. By using this theoretical stand, the data analysis was conducted by comparing the measurements resulted from the *text processing task* to each measurement resulted from the first three tasks.

This study revealed that (1) there is a different consistency between Text Processing awareness and Completion Task for derivational morpheme. This is shown by the following results of data analysis:

- a) Text Processing Task measurement tends to be Consistent with Word Level rather than the sentence level in the Analogy Task.
- b) Text Processing Task measurement tends to be Consistent with both Word Formation Choices with Free and Bound Morpheme Yes/No Question in the Analogy Task.
- c) Text Processing Task measurement tends to be Consistent with Knowledge Based rather than Communicative Based in Production Task.

(2) Text Processing Task is quite consistent with completion task for inflectional morpheme. This is shown by the following results of data analysis:

- a) Text Processing Task measurement tends to be Consistent with Analogy Task
- b) Text Processing Task measurement tends to be Consistent with Judgement Task
- c) Text Processing Task measurement tends to be Less Consistent with Production Task

Based on the summary, it is concluded that the completion task is suitable to measure awareness of inflectional morpheme, while for derivational morpheme it does not totally measure awareness, most of them measure ability to produce words.

Based on the data analysis, this research shows that morphological awareness in task completion requires subject's vocabulary knowledge so that they can answer all the task correctly. While for text processing task, subjects are more aware to recognize the existence of morphemes in words. whether it is base word or it has received affixation. So, dominantly the participants can figure out using morphemes.

Furthermore, based on the data above, there is tendency that judgment task and text processing have uniquely contributed to semantic accuracy and sentential meaning. It is proved with the total participants can recognize the appearance of morphological structure of words (prefix and suffix) and then modify and manipulate that structure, he or she are engaging in morphological awareness.



Text processing task has less tendency with production task because more vocabulary mastery is needed to decompose words into their small meaningful part or to derive it into a new word. Moreover, vocabulary concerns with words and the meaning. It makes sense if most participants cannot comprehend the meaning of sentence in task completion. There are similarities and differences in the nature of the relationship between morphological awareness task and text processing. Morphological awareness provides insights about the mapping between print and speech in addition to the alphabetic principle (Kuo & Anderson, 2006; Nagy et al., 2003, 2006). English has morphological complex words, which is another reason that morphological awareness facilitates reading. Moreover, Awareness of derivational morphology is related to word reading. This research findings are consistent with those of studies examining morphological processing in visual word recognition in adult readers. Production task requires more language specific knowledge. For example, language specific vocabulary knowledge is necessary to understand the meaning of derived forms. The shortest time students got to be aware was considered 2 seconds of sentence in running text and the most is more than 15 seconds.

Based on the result it can be shown that in production task, derivational process are more closely related to students ability to define morphologically complex words than decompositional process because producing derived forms, like defining derived forms, requires knowledge of grammatical roles and meanings of suffixes, not just relational knowledge. Additionally, because defining morphologically complex words may involve analysis of the meanings and grammatical roles of the morphemic constituents, this task may tap processes similar to those participants might use when they meet morphologically words in reading.

It is different with in text processing, the participants awareness is perceived more natural. Although “consciousness” is sometimes used to mean knowledge, in the sense that if one is conscious of something, one also has knowledge of it. At any moment, much knowledge is unconscious, or implicit. So conscious or awareness cannot be co-extensive.

Despite the variation in tasks used, morphological awareness in task completion and text processing seems to play strong role in word-reading and vocabulary knowledge. This research is related to previous research study, James.E. et. al., 2021, there is contributions of vocabulary knowledge and morphological awareness predicted to reading comprehension.

## **V. Conclusion and Suggestion**

### **5.1 Conclusion**

The results also Based on the results of data analysis, conclusions are drawn as follows:

1. Morphological awareness task and text processing have strong tendency to measure the students' awareness especially inflectional and derivational morphemes.
2. Text processing task assigns students to identify words which have morphological aspects while completion task assign another aspect such as vocabulary knowledge and reading comprehension.

### **5.2 Suggestion**

1. It is important to develop the morphological awareness of the learners because it is helpful to increase the students' vocabulary and to recognize the meaning easily by viewing affixes attaching in words.
2. Students need to see the applicability of their new morphologically skills in every day situations. Students can be taught to identify morphologically complex words in class literature, spelling assignments, and content area textbooks and then use their morphological awareness to discern meaning (Wolter & Green, 2013)

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