#### **Relationship between Morphological Awareness and Vocabulary Mastery**

Adam

English Education Department, University of Riau Kepulauan adamedumy@gmail.com

#### Abstract

The aim of this research was to find out whether there is significant correlation between students' morphological awareness and their vocabulary mastery. The sample of this research was thirty two students of SMK Kemilau Bangsa Batam. The design of this research used ex-post-facto design in term of co-relational study. The instruments were Morphological Awareness and vocabulary tests. The result of calculation showed that coefficient correlation was higher than the critical value of r table (0.729>0.449). Simple regression was done to analyze how far the contribution of morphological awareness to students' vocabulary mastery. The result revealed that morphological awareness influenced 51.5% toward students' vocabulary mastery. Therefore, it can be concluded that there is a significant correlation between students' morphological awareness and their vocabulary mastery. It is implied that morphology can be applied as strategy of increasing students' vocabulary mastery.

Keywords: morphological awareness, vocabulary mastery

# **INTRODUCTION**

Vocabulary is the building block of a language. Even with a perfect grammar, language learning cannot be successful if the emphasis on vocabulary is ignored. Without grammar, very little can be conveyed but without vocabulary, nothing can be conveyed (Wilkin 2006:110). This means how important vocabulary is in language learning.

Seeing this, there have been many research conducted regarding vocabulary mastery. Those researches have contributed very much on the improvement of vocabulary learning. Some useful researches are the research on the strategies for learning vocabulary. The research revealed the best strategies to be used in learning vocabulary. Memory strategy is one of the strategies suggested by Oxford for learning vocabulary.

Despite many research conducted by some experts and linguists, vocabulary mastery still need to be concerned more in order for a better vocabulary mastery and improvement for language learners. Without ignoring the method and strategies used in teaching and learning vocabulary, it should be worth viewing other part that might be connected to the vocabulary mastery. One aspect could be viewed from morphological awareness as it is connected to words.

Students are assumed to be able to develop their vocabulary by having some basics knowledge of morphology. For example, a student can make a generalization of a morpheme of one word to other word in order to form or recognize a new word they encounter. Without have to look up the new word in a dictionary, a morphological generalization can be one of the ways to recognize and even form a new word.

This research aims to investigate the XI grade students of SMK Kemilau Bangsa Batam based on the phenomena found by the researcher in pre-observation to the school. Based on the writer's interview with one of the English teacher of the school, the students are found to be very weak at vocabulary mastery. The teacher claimed that he had a very hard time teaching English at grade XI students of SMK Kemilau Bangsa because almost all of the students do not have a sufficient size of vocabulary. Besides, the students could not make the word generalization from the same morpheme to learn a new word. For example, when they find the word which has suffix –er to mean the person or the thing that does the action, as in 'worker', the students could not generalize it in other words that have the same suffix as in 'player'. This means that their vocabulary size has relation to their morphological awareness.

Morphological awareness means the awareness of the access to the meaning and structure of morphemes in relation to words. The more the students are aware of these aspects, the better their improvement in their vocabulary mastery. This is in relation to what Oxford learning strategy that memorizing vocabulary can be easier with the help of linguistics knowledge of the morpheme. This means the morphological aspects of vocabulary learning.

### METHODOLOGY

The design of this research is quantitative descriptive research which attempt to describe a correlation description between morphological awareness and vocabulary mastery. Quantitative research designs can be either descriptive (subjects usually measured once) or experimental (subjects measured before and after a treatment). A descriptive study establishes only associations between variables. An experiment establishes is causality. The researcher attempts to see the relationship between students' morphological awareness and their vocabulary mastery. The variables of this research will be morphological awareness as variable A and the vocabulary mastery as variable B. The attempt is to define the correlation between A and B whether there is a strong positive correlation or not.

# RESULT

The result showed that the coefficient correlation between students' morphological awareness and their vocabulary mastery was 0.729 at the significant level of 0.01. The coefficient correlation is higher than the critical value of r table (0.729>0.449). Therefore, the null hypothesis was rejected and the research hypothesis was accepted. The result of this research showed that there was positive correlation between students' morphological awareness and their reading comprehension with coefficient correlation 0.729. The number 0.729 was taken from the result of data analysis using SPSS 20, which means that the two variables were proceed using Pearson Product Moment Correlation formula and was showing certain numeric result with r table or *critical value* table as the guidance to see whether they were correlated or not. If the result is more than the r table, so it means that positive correlation has proven. Then if the result is lower, it means that there is no correlation between variables. The position of r table for this research analysis was 0.449, and 0.729 is higher than it.

The positive correlation between morphological awareness and vocabulary mastery means that morphological awareness can give the influence to vocabulary mastery in order to be improved and strengthen. For example, students with codes AWN and HA got score each 90 and 92.5 in morphological awareness test and got each 93.3 in vocabulary test. These students were gained best score in both of the test. On the other hand the student with codes ECS and JY got lowest score in both of the test (both 55 in morphological awareness test and each 56.7 and 60 in vocabulary mastery test). The example showed that the higher students' morphological awareness scores, the higher their vocabulary mastery scores. In line with that, the second example showed the lower students' morphological awareness scores, the

lower their vocabulary mastery scores.

## DISCUSSION

From the result of morphological awareness test, it is revealed that the mean score is 75.8, the highest score is 92.5 and the lowest score is 55. Based on the results, the students performed well in both of Morpheme Identification Awareness and Morphological Structure Awareness. In the results of Morpheme Identification Awareness, which measured students' ability to analyze and to break down complex word into smaller meaning, the students could use their knowledge of word formation rule. They were able to separate affixes of complex words. Therefore, they could unlock the meaning of newly encountered complex word. They could choose appropriate complex words to complete the sentences by breaking them into their constituent of morphemes (word meaning parts).

For, instance, the word "*incorrect*" can be recognized and comprised of two meaning units, the base "*correct* means *true*", and the prefix "*in-*" which convey the meaning of "*not* or *opposite from*". Thus, word "*incorrect*" means "*not true*". The students could segment different meaningful chunks that constitute a word. This condition is supported by Carlisle (1995) who emphasizes that Morpheme identification can be seen as problem solving strategy that can be used to understand a large number of derived words.

From the perspective of cross linguistic variation, the learners might transfer their knowledge of morphological structure of Bahasa Indonesia to English morphology. The affixes of Bahasa Indonesia and English are separable from root even though Bahasa Indonesia morphology is considered simpler than English because it does not mark tenses, gender or plural forms. Two groups of verbs in Bahasa Indonesia primarily occur with form of affixation (prefixes and/or suffixes). For instance, in Bahasa Indonesia the learners study about prefixes or suffixes (*imbuhan: men-cuci, mem-beri-kan, ke- makmur-an, etc.*). By using the ability to appreciate the separability of bases from affixes, the students encode unfamiliar English complex words in their meaningful morpheme, so they could infer the meaning to complete the sentence.

The students also performed well in Morphological Structure Awareness. This

section is concerned with productivity of morphological structure or bringing the smallest pieces (morpheme) together to form words. It is assumed that learners know what the pieces are to construct new meaning into words (Arnoff & Fudeman, 2005). In forming new compounds by stringing together to other words, the students showed better performance when the target words are in the same grammatical category such as noun + noun, such as *tea cup* and *milk glass*. However, most of the students could not answer correctly when they were asked to create *earrings*. This could be linked to the same features of the two target words, both are plural (ears and rings). The participants could not apply their syntactic knowledge about the importance of deleting -s ending from ears to form the compound earrings. The students obtained a good performance in applying -s and -es suffix as the marker for plurality (Appendix 14, items 31, 32, 33). They could answer the questions very well and more than 70% of the participants obtained the maximal score 100%. They also showed well performance in applying the -ing and -ed suffixes as the markers for present and past participle (items 34, 35, 36) with 81%, 60% and 66% correct answer respectively. These findings are consistent with Carlisle (1995), and Carlisle & Stone (2003) who said that morphological awareness refers to the learners' knowledge of morphemes and morphemic structure, allowing them to reflect and manipulate morphological structure of words.

However, they seemed to have problem in using *-es* for making "goes" as the change from "going". This problem might occurred because the "goes" form indicates the change form for the third singular subject. Most of the students find difficulties in changing the verb "going" to "goes" because verb "go" ending with vocal "o" so it must be added by suffixes *-es* to indicate present tense for the singular subject. Another test was reading comprehension test. About 32 students had done 30 items reading comprehension test. The results revealed that the average score is 76.8, while the highest score is 93.3 and the lowest is 56.7. The items contained of reading comprehension aspects such as determining main idea, finding specific information, reference, inference, and vocabulary.

From the result of vocabulary test, items represent receptive vocabulary were answered 80% true by the students. It showed that students were understood clearly how to identify receptive vocabulary. In line with that, the ability of students choosing the right answer of receptive vocabulary test obviously was shown the ability of understanding the overall words of the sentences. On the other hands, it can be seen from the students' answer of items which are standing for productive vocabulary test; about 40% students could not answer correctly. In this part students need to bring out their understanding of the specific part inside of the sentences.

For some of the items stand for vocabulary part also proven the different ability of each students to understand another name of a word or the word that has same meaning as the one they were faced with. In these items, only 17 out of 32 students answered correctly. Linan (2007) states that the role of vocabulary in reading is clearly understood: vocabulary knowledge, the understanding of word meanings and their use, contributes to vocabulary mastery and knowledge building. Based on the statement, can be concluded students with high understandings of words meaning and their use were predicted to answer the items correctly. From the result of calculation, it is found that the coefficient correlation between students' morphological awareness and their vocabulary mastery was 0.729 at the significant level of 0.01. The coefficient correlation is higher than the critical value of r table (0.729>0.449). It means that the result of this research showed that there was positive correlation between students' morphological awareness and their vocabulary mastery. In addition, the result of simple regression that has done by the researcher shows the coefficient determination was 0.515. It means that morphological awareness influenced 51.5% toward vocabulary mastery and 48.5% influenced by other factors.

In line with the results, Wysocki and Jenkins (1987) stated that morphological awareness depends on experience with printed words for tenement, but itself is also functional in the development of reading comprehension ability. Because it entails the ability to perform morphological analysis, morphological awareness has often been found to be contributor to word learning and vocabulary development in that learners can decompose unknown morphological rules to derive meanings of unknown words. And also based on Ku and Anderson (2003), and Nagy (2006) clearly stated that because of the inter-relations between morphological awareness and vocabulary knowledge on one hand, and vocabulary knowledge and vocabulary

mastery on the other hand, researchers often controlled for vocabulary knowledge when the unique contribution of morphological awareness to reading comprehension was examined. Since students are confront a very large amount of complex words in their vocabulary mastery and since complex words are analyzable into smaller meanings, it make sense if morphological awareness can be used as a strategy for unlocking meaning of newly encountered words in reading texts. In accordance to the interview with second grade teacher of SMK Kemilau Bangsa Batam, Mr. Edi in the pre-observation activity, he stated that he only teaches words formation or even words compounding in the very small amount among the formal material. There is no specialization in the current curriculum (Curriculum 2006) of teaching morphology to high school the students. This research showed the students' need to know more about morphology to increase their awareness of it, and in line with that can impact to the increasing of their vocabulary mastery which is take a big part in senior high school students' English learning. Besides of the relationship with vocabulary, morphological awareness also related to various language skills such as spelling and also vocabulary.

## CONCLUSIONS

Based on the findings above, there is a significant correlation between students' morphological awareness and their vocabulary mastery at eleventh grade of SMK Kemilau Bangsa Batam. The hypothesis testing showed that the coefficient correlation is very high, 0.729 at significant level of 0.01. The coefficient correlation is higher than the critical value of r table (0.729>0.449). Therefore, the null hypothesis (Ho) was rejected and the research hypothesis was accepted, which states that if the students obtained high score in morphological awareness, they tended to get high score in vocabulary mastery. The result of sample regression showed that the coefficient determination was 0.515. This implied that, morphological awareness contributes 51.5% to their vocabulary mastery and 48.5% was influenced by the other factors. It means that morphological awareness can be applied at vocabulary to improve their vocabulary mastery.

# REFERENCES

Arnoff, M., & Fudeman, K. 2005. What is Morphology? (3- 21). Malden: Blackwell.

- Carlisle, J. F. 1995. Morphological awareness and early reading achievement. In L.B. Feldman (Ed.), Morphological aspects of language processing (pp. 189–209). Hillsdale, NJ: Erlbaum.
- Carlisle, J. F., & Stone, C. A. 2003. Exploring the role of morphemes in word reading. Reading Research Quarterly, 40, 428–449.
- Ku, Y-M., & Anderson, R. C. 2003. Development of Morphological Awareness in Chinese and English. *Reading and Writing: An InterdisciplinaryJournal*, 16, 399-422.
- Kuo, L., & Anderson, R.C. 2006. Morphological awareness and learning to read: A cross-language perspective. *Educational Psychologist*, 41(3), 161-180
- Linan, S. T. 2007. Research-based Method of Reading Instruction for English Language Learners. London: Audiobook Publishing.
- Nagy, W. E., Berninger, V.W., & Abbott, R.C. 2006. Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middleschool students. *Journal of Educational Psychology*, 98, 134-147.
- Wysocki, K., & Jenkins, J. R. 1987. Deriving Word Meanings Through Morphological Generalization. *Reading Research Quarterly*, 22(1), 66-81.
- Wilkin D.A. 1978, *Linguistic in Language Teaching*, (London: Edward Arnold)