

## Levels of Affixation in the Acquisition of English Morphology: A Review of Selected Paper

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### ABSTRACT

In considering word formation in language development, there appear to be two central issues which can broadly be characterized as questions relating to (i) productivity, and (ii) constraints. This paper reviews one of the renowned articles which involving the theory of level-ordering that has three levels within the lexicon, children, recognize high-frequency words than low-frequency words written by Peter Gordon (1989), entitled "Levels of Affixation in the Acquisition of English Morphology." This study has three untimed lexical-decision experiments which were carried out with 5- through 9-year-olds of native speakers of English and found general support for a systematic relation between productivity and level assignment. The aim of this paper is to make sure the readers would understand what the article's researcher try to explain about the word-formation such as stem, the stem which add affixes of Level 1, stem which adds affixes of Level 2, and stem which add affixes of Level 3. Moreover, this article's references are accurate (valid) and well-argued. This article is highly recommended for word formation in language development because the researcher stated that children might have a significant part in this process. Therefore, this paper seen the word-formation will be rich in language development depends on how often people actively create words, for example, by combining stems and affixes in much the same way that they generate sentences.

### 1. Introduction

As good as Gordon's articles before here are one of the best articles of him. Gordon is from the University of Pittsburgh published a research article 12-page level ordering of word-formation titled "Levels of Affixation in the Acquisition of English Morphology." The article aims to know language development through the productivity and constraint of people actively create words. First, the researcher provides information about children have productive control of a number of word-formation devices from very early in their language learning careers. For example, Clark (1981, 1982) has documented that even 2-year-olds appear to use processes of derivational word-formation quite productively as evidenced by their overgeneralization errors.

Then, the researcher reviews the relation of productivity and constraints by using a question about why do we find Darwinianism acceptable, but not \*Darwinismian. There are also phonological properties that might determine analyticity, in turn affecting productivity. Processes such as stress shift and vowel change can have considerable consequences in making the relationship between the stem and derived from opaque (e.g., beast + bestial).

In particular, Gordon (1985), Tyler (1986), and Walsh (1984), have each proposed that ordering effects could be explained to some extent by the degree of productivity of the processes at different levels. This study illustrates the productivity of word formation by looking at the affixation of level ordering In the case of Level 1, Level 2 and 3 forms, the child should be better able to discover the relationship between the Level 2 and Level 3 forms and eventually induce a productive rule rather than Level 1 form.

### 2. Methodology

This article is carried out with quantitative methods that the words used in the lexical decision task were simple (non-affixed) words chosen from the Francis and Kucera (1982) word count. Experiment 1: Subjects. 36 children consisting of twelve 5-, 7-, and 9-year-olds were included. All were native speakers of English and attended a university research school. Materials and procedure. Stimulus materials thus consisted of 54 words with 9 in each of the frequency ranges from in 0 to In 5. To avoid presenting too many items, children were divided into three groups, each of which received a subset of three items from each of the frequency ranges plus a set of 18 no word distractors.

The researchers used cards for experiment 1. Words and distracters were written on 3" x 5" cards and placed in a pile on board. The board resembled a colourful game board with three rectangles outlined. The cards were placed in a lower-middle rectangle. Above this were two rectangles, one to the left and one to the right. One had YES and a check is written above it, and the other had NO and across. Children were told that the experimenter would read what was on the card and the child had to decide if it was a word or not. Words would go in the YES pile and non-words in the NO pile.

Experiment 2: Subjects. Ten 5-year-olds, eleven 7-year-olds, and twelve 9-year-olds who had participated in Experiment 1 were retested in Experiment 2 in the following week. Materials and procedure. The procedure was identical to Experiment 1. Children were simply reminded of the basic procedure. Materials and procedure. The procedure was identical to Experiment 1, except that there was no training. Children were simply reminded of the basic procedure. Subjects were divided into two groups, each receiving half of the items. Of the 18 distracters, nine were nonce stems each with one of the above affixes attached to it (e.g., *tostil-ness*). The other nine were function words with the same set of affixes attached (e.g., *than-ness*). Such distracters control for the possibility that children might simply respond positively to anything with a recognizable affix on it or any real word with an affix on it. All stimuli are listed in the Appendix.

Experiment 3: Subjects. 17 kindergartners (aged 4;10 to 6;2,  $M = 5;8$ ), 20 second-graders (aged 7;2 to 8;4,  $M = 7;8$ ), and 20 fourth-graders (aged 9;1 to 10;7,  $M = 9;7$ ) participated in the experiment. All children were native English speakers from a university research school. None had participated in experiments 1 or 2. Exhaustive searches of Francis and Kucera (1982) for Level 3 items with high (In 4 to 5) stem cluster frequency and low (In 0 to 1) item frequency revealed that they simply do not exist. Materials and design. Exhaustive searches of Francis and Kucera (1982) for Level 3 items with high (In 4 to 5) stem cluster frequency and low (In 0 to 1) item frequency revealed that they simply do not exist. Therefore, it was necessary to relax the frequency criteria for the level 3 stem cluster measure. New Level 3 items included words whose stem-cluster frequencies were between In 2.4 and In 4.3 (item frequencies were still within in 0 to 1). Initially, new items were chosen if the stems seemed to be words that children would probably know. All items were then submitted to a test that required that the stem appears in either Hall, Nagy, or Linn (1984) or Moe, Hopkins, and Rush (1982). These are word counts based on children's speech. Some of the Level 1 and 2 items were also replaced on this basis.

### 3. Findings and Discussion

The article reflects the content of the title, the content and the abstract reflect the contents and need an additional goal. We can see the findings of this article below.

Experiment 1: The acceptance rates by age and frequency, demonstrate a clear frequency effect for all three age groups (min  $F'(5,72) = 10.4$ ,  $p < .001$ ). Baseline rates for correct responding occurred at around in 0 and In 1 frequency ranges. The ceiling was around In 4 and In 5. Children's erroneous acceptance rates for nonwords. Children had significantly higher acceptance rates for real words (min  $F'(1, 77) = 56.3$ ,  $p < .001$ ), which was true even at the lowest frequency range (min  $F'(1, 35) = 13.4$ ,  $p < .001$ ). Developmentally, there was a significant effect of age (min  $F'(2, 88) = 7.6$ ,  $p < .001$ ). One can see that there were no developmental changes at the higher frequency ranges. Advances between 5 and 7 years appear to be primarily in the middle frequency ranges (In 2 and In 3), and between 7 and 9 years in the lower frequency ranges (In 0 and In 1). The establishment of a frequency effect with baseline and ceiling levels provides the necessary response characteristics for examining the nature of the representation of affixed forms in the next experiment.

Experiment 2: Results revealed a strong main effect for words versus non words (min  $F'(1,68) = 263.3$ ,  $p < .001$ ), showing a clear preference for children to accept real words and reject distracters. Unlike Experiment 1, there was no main effect for age by either a subject or item analysis. The effect of lexical levels was significant by subjects ( $F(1,29) = 13.9$ ,  $p < .001$ ), but marginally failed to reach significance by items ( $F(2,32) = 3.01$ ,  $p = .06$ ). In addition, the ordering of acceptance rates for levels was not completely as predicted by the model. Level 2 items were accepted more often than Level 3, although both were accepted more than Level 1 items.

Experiment 3: The data points in the time represent averaged acceptance rates for affixed forms, divided by the average acceptance rates for the stems of the same items (collected from children of the same grade but in the other condition.) The curves show the predicted order of acceptance with Level 1 forms considerably less well recognized than Level 2 and 3 forms. Analyses revealed significant effects of lexical level (min  $F'(2, 48) = 6.57$ ,  $p = .003$ ), and grade (min  $F'(2, 92) = 3.41$ ,  $p < .05$ ). While the level x grade interaction was significant in a subject analysis ( $F(1, 53) = 3.6$ ,  $p < .01$ ), the item analysis was not significant ( $p = .4$ ).

Abstract captures the number of readers of the information they should have skimmed, and the abstract of the article describes the theory of level-ordering that has three levels within the lexicon, including the description of word-formation. The

research methodology although not directly expressed in the article. There is no explanation about where the research conducted.

In the introduction, the researcher clearly explains all the information, For example, since -ian (Level 1) must apply before -ism (Level 2), it is predicted that Darwinianism is acceptable but not \*Darwinismian. Similarly, an irregular plural at Level 1 may occur inside a compound at Level 2 (e.g., teeth-marks). However, a regular plural at Level 3 may not (cf. \*claws-marks). Kiparsky (1982) has noted a large number of predictions of this type that are generated by level-ordering theory and appear to meet with a good degree of success. The theory thus appears to provide an elegant explanation for many constraints on word formation that might otherwise seem quite inexplicable.

In the methodology, the researcher seems to need to add more information about the type of research and technique of analysing data. It explains that the words used in the lexical decision task were simple (non-affixed) words chosen from the Francis and Kucera (1982) word count. Here the researcher gives clear information about materials and procedure in experiment 1, 2, and 3, how many participants were involved in the study, what participants will do in the study and how the researcher conducted his research.

In the findings and discussion, there are three experiments. All the experiments have good explanations and also get the point of what the researcher to find out. At the conclusion, the researcher should include conclusions from all the results of his research. Then, the researcher conveys a sentence that in the contents of his research paper there appears to be some influence of the high-frequency stem even in the case of Level 1 forms and certainly in the case of Level 2 forms. Level 3 forms appear to have response characteristics indistinguishable from those of the stem when various confounding factors are eliminated. This conclusion makes the reader understand.

It was very hard to find inflected words that had the right frequency characteristics in constructing the materials. That is, the researcher is almost impossible to find words with very high-frequency stem clusters, where each of the inflected forms is not also very high in frequency. One exception is when that inflexion attaches to a category that is not normally assigned to the stem.

The problem here is that the category change would require a zero-derivational process at Level 1 or 2, in addition to the inflectional (Level 3) process. Another problem with the original materials was that they contained some words whose frequency appeared to reflect the biases of the Francis and Kucera (1982) word count, as opposed to actual frequencies in children's language input.

Therefore, based on the researcher's argument that a further experiment was carried out in order to test the hypothesis more clearly. In addition, it was possible to eliminate words where the frequencies did not appear to reflect the language that children hear. In addition to eliminating words such as incomes, it was also possible to eliminate words like a loser, which are rare in the word count, but probably less rare in children's language input.

Since children's knowledge of the related stems of complex forms could no longer be predicted on the basis of the frequency effect, the acceptance rates for the stems had to be assessed directly.

It is here that the researcher runs into problems at both the theoretical and empirical levels. On the theoretical side, the model makes the wrong linguistic predictions is fairly crucial cases. It requires that Level 1 forms only occur within frozen lexicalized items. While this does prevent Level 1 forms from applying outside Level 2 or 3 forms, it also has the consequence of preventing Level 1 affixes from stacking outside other Level 1 affixes. This is clearly violated in words such as directional-ity which contains three Level 1 affixes.<sup>4</sup> In addition, the model predicts that Level 1 affixes should not be productively applied in novel cases. Yet there are Level 1 affixes that have very few restrictions on their application.

In the findings and result, the researcher found that the initial model for the acquisition of ordering constraints was fatally flawed for both linguistic and empirical reasons. By adding the notion of merger and domain of application, the revised model fits both with the empirical data and appears to make better predictions for judgements of acceptability of complex forms.

### 3.1 Strength

There is much strength of this article. First, this study provides processes of level 1 until level 3 that clearly describe the theory of level-ordering proposes that word-formation processes are assigned to one of three levels within the lexicon. Second, the language that the researcher uses in this article also clear. So, easy for readers to understand what the researcher tries to tell in his research. Third, the results of this study are important because they can help teachers and students to add their knowledge about levels of affixation. Fourth, this study gives more detailed results. Last, this article is also supported by many theories and previous research.

### 3.2 Weaknesses

There are some weaknesses in this article. First, there is no complete explanation of the levels of affixation. Second, It explained just about the theory without giving more examples for level 1 processes, level 2 processes, and level 3 processes. So, the

readers could not understand all the explanations. Last, there is no explanation about the type of research and technique of analysing data.

### 3.3 Overall Judgment

This study both contributes to students and especially teachers as teaching staff to have a better understand and provide a new way of innovation to make students more advanced by learning affixation.

### 4. Conclusion

This study tries its best to explore and giving a words on how Peter Gordon (1989), in his article "Levels of Affixation in the Acquisition of English Morphology." This study sees that the accurate (valid) and well argued. The article focusing on three untimed lexical-decision experiments which were carried out with 5- through 9-year-olds of native speakers of English and found general support for a systematic relation between productivity and level assignment.

Therefore, this article is highly recommended for word formation in language development because the researcher stated that children might have a significant part in this process. Moreover, this paper seen the word formation will be rich in language development depends on how often people actively create words, for example, by combining stems and affixes in much the same way that they generate sentences.

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