ACCURACY ORDER OF GRAMMATICAL MORPHEMES OF MIZO ESL LEARNERS

Dr. GLORIA LALDINMAWII SAILO
Assistant Professor, Mizoram Christian College, Aizawl
Email id: gloria.sailo@gmail.com
doi: 10.33329/elt.9.3.1

ABSTRACT

Ever since Dulay and Burt (1974), it is believed that children learning English as a Second Language, irrespective of their learning context, follow a fixed order of acquisition of English grammatical morphemes. However, works like Luk and Shirai (2009) have shown that the effects of L1 in language learning is very strong and despite the numerous claims for the ‘natural’ order of L2 acquisition of English grammatical morphemes, they are no exception to L1 influence. Keeping in mind the contentions of the previous studies done in the area of acquisition order of English grammatical morphemes, this paper examines the accuracy order of five English grammatical morphemes (plural –s, irregular past, regular past and articles) of L1 Mizo learners of English as a Second Language. A formula for Target Like Use (TLU) score taken from Pica (1983) is used for analysis of twenty-seven scripts derived from twenty-seven participants. The result of the study indicates that there is a possible L1 influence in the L2 acquisition order of English grammatical morphemes; however, a larger cross-linguistic based study can be done for generalization of the results.

Keywords: Second Language acquisition, grammatical morphemes

1. Introduction

One of the most important empirical findings of the 1970s, as far as second language research is concerned, were probably the results of the Morpheme Studies. Ever since Dulay and Burt (1974), it is believed that children learning English as a Second Language (ESL), irrespective of their context of learning (classroom, naturalistic, mixed) follow a fixed order of acquisition of English grammatical morphemes. The results of the morpheme acquisition researches provided a strong indication that “universal cognitive mechanisms are the basis for the child's organization of the target language, and it is the L2 system rather than the L1 system that guides the acquisition process” (Dulay and Burt: 1974). “The existence of such an order suggested that Second Language Learners are guided by internal principles that are largely independent of their first language; this was a serious blow for any proponents of Contrastive Analysis” (Mitchells and Myles: 2004).

However, majority of the research done on grammatical morpheme acquisition which supports the fixed order have been done in English dominant country or countries where English dominates over other languages and very few studies addressed learners of English in countries where English is not the dominant language (Wagner et al.: 2005). Moreover, Luk and Shirai (2009) have argued that the acquisition of the grammatical morpheme may vary depending upon the learners’ First Language (L1) and that L1 influence is pervasive in all
areas of acquisition and despite the numerous claims for the ‘natural’ order of L2 acquisition of English grammatical morphemes, they are no exception to L1 influence.

Murakami (2010), in favour of Luk and Shirai (2009), also argued that one may have a “strong doubt on the universality of accuracy order, and it is very likely that SLA textbooks underestimate the effect of L1 in their discussion of morpheme studies and need to rethink the conventional wisdom” (Murakami:2010).

In line of the previous studies done in the area of acquisition order of English grammatical morpheme, this paper intends to study the accuracy order of five English grammatical morphemes (plural –s, irregular past, regular past and articles) by L1 Mizo learners of English as a Second Language and see if the pattern deviates from the fixed order of acquisition proposed by earlier morpheme studies. It will also address interlanguage issue and the extent to which L1 may affect the order of acquisition of English grammatical morphemes. As stated by Luk and Shirai (2009) “the acquisition order of grammatical morphemes is highly affected by the learner’s L1 such that it is possible to predict, to some extent, what is difficult and what is easy for language learners based on their L1s”. Similarly, this paper wanted to see the pattern of accuracy order of English grammatical morphemes in L1 Mizo learners as accuracy measure could somehow predict the acquisition order.

2. Review of literature

The basic premise underlying morpheme acquisition studies is that there is a consistent natural order which L1/L2 learners follow in acquisition of the grammatical morphemes. Chomsky claimed that children have an innate faculty that guides them in their learning of languages. He argued that there is “creativity of language” and children do not learn and reproduce a large set of sentences but rather internalize the rules. Chomsky’s work was a great stimulus to investigations of the acquisition of language in young children, by researchers such as Brown (1973) - whose work will be discussed later in the following sections.

2.1 Interlanguage hypothesis

The term interlanguage was coined by Selinker in 1972. He defines that it is a separate dynamic language system between L1 and L2 in the learners’ mind and this interlanguage continuum changes as the learner progresses in L2. Early statements of the interlanguage hypothesis tended to assume that the continuum was mainly a restructuring one but when the role of L1 was questioned, this view was not favoured and interlanguage was seen as a recreation continuum. There are empirical evidences which supported the claim of interlanguage continuum which provides evidence in favour of ‘creative constructions’ by examining the claims that SLA follows a ‘natural route’ of development.

2.2 First Language studies in English grammatical morpheme acquisition

Roger Brown’s (1973) study on morpheme acquisition is considered to be a pioneering work on morpheme acquisition. He did a longitudinal study on three children namely Sarah, Adam and Eve by recording their spontaneous speech. Although they were of different ages, Brown equated them from their length of utterances: mean length and upper bound. Brown (1973) explains that the interesting thing about the acquisition of language is that children are able to process language through the internalised rules that is present in their system. He mentions that, children in their earlier stages tend to omit “functors” and preserve “content” words. However, as they progress through the stages, they are able to produce more grammatically complex sentences. In the same way Jean Berko (1958) set out a test to explore the child’s ability to apply morphological rules to new words. This test was within the framework of the child’s vocabulary and it was found that children had something more than the individual words in their vocabulary; i.e., they had rules of extension that enabled them to deal with new words.
Brown (1973) in his study came up with 14 grammatical morphemes in English and the order in which children acquire them. He did his research within the framework of L1 acquisition and found that children irrespective of other factors acquire English grammatical morphemes in the same order. He listed the acquisition of the morphemes which is presented in a simplified way in the following table:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Present progressive –ing</td>
</tr>
<tr>
<td>2.</td>
<td>Prepositions</td>
</tr>
<tr>
<td>3.</td>
<td>Plural –s</td>
</tr>
<tr>
<td>4.</td>
<td>Past irregular</td>
</tr>
<tr>
<td>5.</td>
<td>Possessives ’s</td>
</tr>
<tr>
<td>6.</td>
<td>Copula be</td>
</tr>
<tr>
<td>7.</td>
<td>Articles a, an, the</td>
</tr>
<tr>
<td>8.</td>
<td>Regular past –ed</td>
</tr>
<tr>
<td>9.</td>
<td>Third person singular present tense –s</td>
</tr>
<tr>
<td>10.</td>
<td>Auxiliary be</td>
</tr>
</tbody>
</table>

*Figure 1: Order of Grammatical Morpheme Acquisition for L1 learners of English (Brown: 1973)*

Brown’s (1973) work is influential for Second Language acquisition research on English grammatical morphemes.

### 2.3 Second Language studies in grammatical morpheme acquisition

A number of studies commonly referred to as the *morpheme studies*, were carried out to investigate the order of acquisition of a range of grammatical functors in the speech of L2 learners. These researches were motivated by the hypothesis that there was an invariant order in SLA which was the result of universal processing strategies similar to those observed in L1 acquisition. The data in these studies were elicited from L2 learners of English, the data consisted of both oral and written data which were elicited using Bilingual Syntax measure. The measure contains series of pictures which the subjects had to describe. This was followed by identification of *obligatory contexts* for the target morphemes. Each morpheme was scored according to whether it was used correctly in each context or not; and accuracy score of its total use by the learners in the study was calculated. After the accuracy scores for all the items were determined, it was possible to rank the morphemes in an *accuracy order* which was equated with an *acquisition order*.

Dulay and Burt’s studies (1973, 1974) were one of the earliest studies in this area and since their study, it has been accepted that L2 acquisition of English grammatical morphemes follows the ‘natural order’ and L1 has little influence over the order of acquisition.

Krashen grouped morphemes that tend to have similar accuracy ranks and proposed the order of acquisition as given below in Figure 2:
Murakami (2010) based his study on Luk and Shirai’s (2009) argument that the L2 acquisition order of English grammatical morphemes may differ depending on learners’ L1 and targeted over 3,000 essays across seven L1 groups in the Cambridge Learner Corpus. The study computed the accuracy order of six morphemes in each L1 group and found that groups whose L1 do not obligatory mark the morpheme tend to have a lower accuracy order with respect to the morpheme compared to those whose L1 mark it, and concluded that L1 influence is pervasive in all areas of L2 acquisition. This study claimed that “the evidence provided in this study should be more than sufficient to cast a strong doubt on the universality of accuracy order” (Murakami: 2009).

2.4 Overview

It is acclaimed that the order of acquisition of L1 English grammatical morphemes are similar across children of the language. In the same way, research has proved that children of different L1 acquire these morphemes in the same universal order which confirms the hypothesis that there is an invariant order in SLA which was the result of universal processing strategies similar to those observed in L1 acquisition. However, recent researches on the acquisition order of several English grammatical morphemes by different L1 speakers have casted doubt on the universality of acquisition and suggest that the field should explore “the properties of L1 which affect acquisition and accuracy of grammatical morphemes”. (Murakami: 2010).

3. Details of the study

On the basis of the above given related researches, the present study intends to find if there is any similarity in the pattern or order of acquisition of English grammatical morphemes on L1 Mizo speakers of English.

3.1 Research Question

This study aims to find out the following research questions:

- Does the pattern of accuracy order of English grammatical morphemes of Mizo ESL learners found in this study resemble the universal order of acquisition?
- Does the accuracy pattern of the grammatical morphemes found in this study show any influence of L1?

3.2 Scoring method

Studies in production of English grammatical morpheme have provided a useful insight in language acquisition studies. However, there has been various questions on how the given data could be best analysed to represent the actual use of morphemes. Pica (1983) mentions that “application of two alternative methods of morpheme quantification- one by supplience in obligatory contexts, the other by target like use- resulted in substantially different percentages of accuracy for subjects’ production of the morphemes progressive –ing, progressive auxiliary, and past irregular.” In target like use analysis, morphemes are scored for correct use in obligatory contexts. The correct supplience in obligatory contexts becomes the numerator of a ratio which includes in its denominator the sum of both the number of obligatory contexts and supplience in non-obligatory contexts. The formula for Target like use (TLU) is represented in Equation 1 as given below:

$$\text{TLU} = \frac{\text{Number of correct uses in obligatory contexts}}{\text{Number of obligatory contexts} + \text{Number of non-obligatory contexts}}$$
According to Pica (1983), TLU reveals how well a subject has learned to control production of that morpheme and it reveals the learners’ knowledge on where it is required and where it is not required. Further, Pica (1983) also states that, TLU is able to capture the overuse and misuse in morpheme production patterns for progressive –ing, progressive auxiliary, and past irregular. For the above stated reasons, TLU is selected as a measure of accuracy in this study.

3.3 Participants

The participants are twenty-seven Mizo ESL learners who belong to sixth grade in a government school in Aizawl, Mizoram. They belong to the age group of 11 to 12 years. They have some of little exposure to English for six years or more. Their first language is Mizo and they have been studying English as a second language for around six years and more.

3.4 Target morphemes

The target morphemes in the study are plural –s, irregular past, regular past tense and auxiliary be and articles. Articles included both definite (the) and indefinite forms (a, an) and, plural –s included both –s and –es.

3.5 Data elicitation method

Taking into account Murakami’s (2010) work on grammatical morphemes using the Cambridge Learner Corpus (CLC) which contains written essays, the present study also looked into written productions of the learners to measure accuracy. Since the target morphemes are irregular past, regular past and auxiliary which denotes tense, the subjects were asked to write an essay on how they spent their last Christmas in order to see how accurately these morphemes are used in the data. Since articles and plural –s would also contribute to the order of acquisition, this study targeted the morphemes which denotes tense like irregular past, regular past, auxiliary be and, plural –s and article (a, an, the).

4. Data Analysis

As previously mentioned, twenty-seven essays written by twenty-seven participants were selected for the study and TLU was used as a measure of accuracy. The TLU was measured by the following formulae as taken from Pica (1983):

\[
TLU = \frac{n \text{ correct suppliance in obligatory contexts}}{(n \text{ obligatory contexts})} + \frac{n \text{ suppliance in non-obligatory contexts}}{(n \text{ suppliance in non-obligatory contexts})}
\]

A TLU score was calculated for each participant for each of the targeted morphemes.

4.1 Findings

The following table is a sample of how the participant’s scripts was analysed.
i) Analysis of Participant 1’s script:

<table>
<thead>
<tr>
<th>Morpheme</th>
<th>Number of correct suppliance</th>
<th>Number of obligatory contexts</th>
<th>Number of suppliance in non-obligatory context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plural –s</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Auxiliary be</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Article</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Irregular past tense</td>
<td>4</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

ii) TLU was calculated for each morpheme and the score is as follows:

<table>
<thead>
<tr>
<th>Morpheme</th>
<th>Plural –s</th>
<th>Auxiliary be</th>
<th>Article</th>
<th>Irregular past</th>
<th>Regular past</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (of 27 participants)</td>
<td>19.95</td>
<td>12.15</td>
<td>19.8</td>
<td>13.2</td>
<td>3.9</td>
</tr>
</tbody>
</table>

4.2 Result

This section will try to answer the research questions posed at the beginning of the study.

i) Research question 1:

Does the pattern of accuracy order of English grammatical morphemes of Mizo ESL learners found in this study resemble the universal order of acquisition?

Findings 1: From the data, we find that the pattern of accuracy of the subjects in this study is as follows:

Plural –s > Article > Irregular past tense > Auxiliary > Regular past

This finding indicates that the pattern of accuracy order of English grammatical morphemes of Mizo ESL learners found in this study does not resemble the universal order of acquisition given by Krashen’s model (1977). There is a slight difference in the accuracy order found in the order of Auxiliary and Irregular past tense.

ii) Research question 2: Does the accuracy pattern of the grammatical morphemes found in this study show any influence of L1?

Findings 2: It is possible that the learners have difficulty in Auxiliaries due to their L1 influence. However, with such a small sample of participants, it is not possible to generalise the findings for all Mizo ESL learners. Thus, this study can be concluded as a pilot or preliminary study which can further be taken up on a larger scale with the involvement of more participants. With a larger study, it would be interesting to explore the properties of L1 which may have an effect on the acquisition order of English grammatical morphemes of the Mizo ESL learners. Such kinds of studies will have a very good impact for the design of English textbooks for schools and it will also have implications for teaching of English as a Second Language (ESL) especially for L1 Mizo students both in schools and colleges.

4.3 Conclusion

This study examined the accuracy order of twenty-seven Mizo ESL learners by examining their essay scripts. The study aimed to see if the pattern of accuracy order of English grammatical morphemes of the participants of this study resembles the universal order of acquisition and if there is any possibility of L1 influence...
in the accuracy order. The findings of this study concludes that there is a slight difference in the accuracy order of the participants when compared with the natural order of acquisition. There is also a possibility of L1 influence. However, a larger scale study is needed to generalise the findings for all Mizo ESL learners.

References:


https://www.academia.edu/2584364/Cross-linguistic_influence_on_the_accuracy_order_of_L2_English_grammatical_morphemes

