The Natural Order Hypothesis:

Evidence from Saudi EFL Learners

By

Joman Hassan Shami

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Masters of Arts (Linguistics)

Spring 2003/ 1423 H
This thesis discusses the two different ways of developing the second language learner's competence, acquisition and learning. This distinction was proposed by Krashen in (1985) in his development of a model of second language learning. Acquisition is a subconscious process which resembles the way children acquire their first language. Learning is a conscious process that deals with what we know about the language and its rules. Acquired Competence is responsible for the fluency of production while Learned Competence acts as a monitor or editor to language production. The thesis analyses the findings of two elicitation tasks that were conducted to test Acquired vs. Learned Competences with EFL learners. The testing paradigm was the Natural Order Hypothesis which focuses on the acquisition of ten grammatical morphemes (e.g. –s plural, auxiliary, reg. past, irreg. past, etc.). The first elicitation task is a replica of Larsen-Freeman (1975) using a discrete point grammar test that is believed to reflect Learned Competence while The second task replicates Bailey, Madden and Krashen (1974) study using a natural data elicitation task (BSM) which reflects Acquired Competence. The subjects of the present study are thirty (30) EFL freshmen college female students studying at King Abdulaziz University. These subjects received formal instruction of English for six years throughout their pre-college education. Under the discrete point grammar test, the subjects showed an 'unnatural' order that was different from the one reported by Larsen-Freeman (1975) for ESL learners. It was found that this 'unnatural' order was instruction sensitive. Transfer from L1, and structural complexity were also noted as other reasons for this order. The present EFL subjects, however, showed an order that conformed to the natural order reported in many ESL studies when using the natural data elicitation task (BSM). If the Natural Order reflects the Acquired Competence, then, these EFL learners, who rely on formal instruction, and show a natural order, can only be assumed to have Acquired Competence. If that's the case, then this finding refutes Krashen's strong claim that "LEARNING DOESN'T BECOME ACQUISITION".
من خلاصة


تناقش هذه الرسالة الطرفيين المختلفين لتطوير القدرة اللغوية لدلاذ اللغة الإنجليزية كلغة ثانية - الاكتساب والتعليم. هذا الفرق طرح للمرة الأولى بواسطة كراشان (1975). عند تطوير نموذج للتعليم اللغة الثانوية. الاكتساب عبارة عن عملية غير ناعية تمثل طريقة اكتساب الأطفال للغتهم الأولى. أما التعلم فهو عملية واعية تعتمد على تعرفة على اللغة والقواعد. القدرة اللغوية المكتسبة مسؤولة عن الطاقة في الإنتاج اللغوي بينما القدرة اللغوية العملية تُعَد كمثاباً أو مخبر للاتصال اللغوي. يحمل البحث نتائج استخدام طريقيين للاستنتاج لاختبار القدرة اللغوية المكتسبة والمعالجة لدلاز اللغة الإنجليزية كلغة أجنبية. تعتمد صيغة الاختبار على فرضية الترتيب الطبيعي التي تركز على اكتساب عشر وحدات نووية صرفة. 

الجمع، المعلم المساعد، الماضي العادي، الماضي الشاذ. إلخ. الوسيلة الأولى للاستنتاج اللغوي عبر تتألف من سمة منقولة عن لاسين فريمان (1965) باستخدام اختبار تحوي لوحدات مميزة، والذى يعتقد أنه يمكن صورة من القدرة اللغوية الملتحمة. أما الوسيلة الثانية فهي سمة منقولة عن دراسة بابلي، مادن، وكرشان (1974). باستخدام وسيلة استنتاج لجمع المادة الطبيعية و التي تعكس صورة من القدرة اللغوية المكتسبة.

عينة الدراسة الحالية هي مجموعة (300) دارسة لغة الإنجليزية كلغة أجنبية من طلاب جامعات الملك عبدالعزيز، و قد تم تدريس اللغة الإنجليزية فؤلاء الطلاب لمدة ست سنوات خلال دراستهم ما قبل الجامعية. كنتيجة لوصول الاستنتاج اللغوي الأول (الاختبار النحوي)، أظهرت الدراسة أن هؤلاء الطلاب أظهرن ترتيبًا غير طبيعي عند تعليم الوحدات النحوية الصرفة، و يختلف هذا الترتيب عن ذلك المذكور في دراسة لارسن (1975) لدلازات اللغة الإنجليزية كلغة ثانية. و مما وجد في الدراسة أن هذا الترتيب غير طبيعي مرتبط باللغة المنتفعة لؤلاء الطلاب. كما لوحظ أن النقل من اللغة الأولى والصورية البيانية قد تكون أسابيع أخرى للترتيب الملاحظ. لكن هؤلاء الدلازات لغة الإنجليزية كلغة أجنبية أظهرن ترتيبًا متوافقًا مع الترتيب الطبيعي الموضح في العديد من الدراسات التي أجريت على دلازات للغة الإنجليزية كلغة ثانية عند استخدام وسيلة استنتاج علمية. و كنتيجة إذا كان الترتيب الطبيعي لتعليم الوحدات النحوية والصرفية يعكس القدرة اللغوية المكتسبة فمن المفترض أن هؤلاء الدلازات للغة الإنجليزية كلغة أجنبية و المعتقدات على اللغة المدرسية وأظهرن ترتيبًا طبيعيًا يعكس قدرة لغوية مكتسبة. و إذا كانت هذه هي الحالة، فإن هذه النتيجة تناقض

الافتراض القوي لكراشان الذي يقول أن تعليم اللغة لا يصبح اكتسابًا.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>IV</td>
</tr>
<tr>
<td>Abstract (Arabic)</td>
<td>V</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>VI</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>VII</td>
</tr>
<tr>
<td>List of Figures</td>
<td>XI</td>
</tr>
<tr>
<td>List of Tables</td>
<td>XIII</td>
</tr>
<tr>
<td><strong>Chapter One</strong></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td><strong>Chapter Two</strong></td>
<td>9</td>
</tr>
<tr>
<td>Review of Literature</td>
<td>9</td>
</tr>
<tr>
<td>2.1 First Language Acquisition Studies</td>
<td>17</td>
</tr>
<tr>
<td>2.2 Second Language Acquisition Studies</td>
<td>18</td>
</tr>
<tr>
<td>1.2.1. Child Studies</td>
<td>18</td>
</tr>
<tr>
<td>1.2.2. Adult Studies</td>
<td>20</td>
</tr>
<tr>
<td>2.3 Foreign Language Learning Studies</td>
<td>22</td>
</tr>
<tr>
<td>2.4 The Elicitation Tasks</td>
<td>24</td>
</tr>
<tr>
<td>2.5 Effect of Formal Instruction</td>
<td>25</td>
</tr>
<tr>
<td><strong>Chapter Three</strong></td>
<td>29</td>
</tr>
<tr>
<td>Methodology</td>
<td>29</td>
</tr>
<tr>
<td>3.1 Subjects</td>
<td>29</td>
</tr>
<tr>
<td>3.1.1. Selection Criteria</td>
<td>29</td>
</tr>
<tr>
<td>3.1.1.a. The Grammar Test</td>
<td>30</td>
</tr>
<tr>
<td>3.1.1.b. The Questionnaire</td>
<td>31</td>
</tr>
</tbody>
</table>
3.2 The Elicitation Tasks

3.2.1. Elicitation Task 1

3.2.2. Elicitation Task 2

3.3 The Grammatical Morphemes

3.3.1. Auxiliary

3.3.2. Progressive

3.3.3. Plural

3.3.3.a. Short Plural

3.3.3.b. Long Plural

3.3.4. Third Person Singular Present

3.3.5. Regular Past

3.3.6. Irregular Past

3.3.7. Possessive

3.3.8. Copula

3.3.9. Article

Chapter Four

Elicitation Tasks and Results

4.1 Subject Selection Procedure

4.2 The Elicitation Tasks

4.2.1. Elicitation Task 1

4.2.1.1. Performance on Auxiliary

4.2.1.2. Performance on Progressive

4.2.1.3. Performance on Long Plural

4.2.1.4. Performance on Short Plural

4.2.1.5. Performance on Third Person Singular

4.2.1.6. Performance on Regular Past
4.2.1.7. Performance on Irregular Past 72
4.2.1.8. Performance on Possessive 74
4.2.1.9. Performance on Copula 77
4.2.1.10. Performance on Article 80

4.2.2. Elicitation Task 2 85
4.2.2.1. Performance on Article 88
4.2.2.2. Performance on Progressive 90
4.2.2.3. Performance on Plural 92
4.2.2.4. Performance on Copula 94
4.2.2.5. Performance on Auxiliary 97
4.2.2.6. Performance on Irregular Past 99
4.2.2.7. Performance on Possessive 101
4.2.2.8. Performance on Third Person Singular 103

Chapter Five 110

Discussion 110

5.1 Comparison of the Accuracy Order of Larsen-Freeman (1975) and Elicitation Task 1 (ESL vs. EFL) 110

5.2 Comparison of the Accuracy Order of Bailey, Madden and Krashen (1974) and Elicitation Task 2 (ESL vs. EFL) 114

5.3 Comparison of the Accuracy Order of Elicitation Task 1 and Elicitation Tasks 2 117

5.3.1. Comparison of Article 119
5.3.2. Comparison of Copula 121
5.3.3. Comparison of Progressive 122
5.3.4. Comparison of Auxiliary 123
5.3.5. Comparison of Possessive 125
5.3.6. Comparison of Irregular Past 127
5.3.7. Comparison of Third Person Singular 128

5.4 Comparison of the Proficiency and the Performance of Subjects in Elicitation
Task 1 and Elicitation Task 2 (Conscious vs. Acquired Competence) 131

Chapter Six 134

Conclusion 134
References 139

Appendices 145

Appendix A- The Grammar Test 145
Appendix B- The Questionnaire 147
Appendix C- Larsen-Freeman's Writing Test with Answers 149
Appendix D- Bilingual Syntax Measure (Response Booklet) 151
Appendix E- Some Subjects' Errors in Elicitation Task 1 157

Resume 159
In Chomsky's Universal Grammar (UG), Chomsky (1959) distinguished between 'Competence' and 'Performance'. This distinction was very influential in the field of First Language Acquisition (FLA). 'Competence' is defined as the subconscious rules that a learner actually knows about his/her language. 'Performance', on the other hand, is defined as what a learner actually says or writes. Since Competence is subconscious and not easily accessible, researchers have used indirect means of investigating competence. Practitioners within applied linguistics, such as teachers, however, are more concerned with the subject's performance rather than competence (Spada et al., 2002).

Over the years, First Language Acquisition research had a great influence on the development of Second Language Acquisition (SLA) research. As a result, SLA research adopted certain Chomskyan ideas. The main concept taken up is that children have independent grammars that are not simply degraded versions of adult grammar.

L2 learners’ ‘errors’ became an evidence for the cognitive processes underlying the learners’ behavior, parallel to the position adopted in the investigation of child L1 acquisition (Corder, 1967). Selinker (1972) hypothesized that the L2 learner’s linguistic behavior is determined in part by a language system, an ‘interlanguage system’, which differs from both the learner’s L1 and the adult native system of the L2. Many terms were used to refer to this system, such as 'approximate system' (Nemser, 1971) and 'transitional competence' (Corder, 1967). These early interlanguage studies have shifted the focus of researchers in the field of Second Language to the ‘performance’ in order to recognize the 'competence'.

In order to explain the universality as well as the variability observed in the performance of second language learners, Krashen (1982) proposed the Monitor Model. It
shares a number of notions with UG but its focus is second language acquisition rather than first language acquisition. The model relies on the assumption that humans acquire language without teaching or corrections of error. The Monitor model consists of five hypotheses.

(1) The Acquisition-Learning Hypothesis

Krashen (1985) suggested that adults have two different ways of developing competence in second languages: Acquisition and learning. ‘Acquisition’ is a subconscious process identical in all important ways to the process children make use of in acquiring their first language, ... [and] ‘learning’..., [which is] a conscious process that results in 'knowing about' [the rules of] language” (p. 1).

Krashen (1983) believed that the learning/acquisition can result in a Learned Competence (LC) and/or an Acquired Competence (AC). Learned Competence functions as an editor, while Acquired Competence is responsible for fluent production of language. Krashen also claimed that learning does not become acquisition.

(2) The Natural Order Hypothesis

The Natural Order Hypothesis is described by Krashen (1985) as follows:

…that we acquire the rules of language in a predictable order, some rules tending to come early and others late. The order does not appear to be determined solely by formal simplicity and there is evidence that it is independent of the order in which rules are taught in language classes.

(p. 1)

(3) The Input Hypothesis

This hypothesis relates to acquisition, not to learning. Krashen (1985) claimed that the best way to acquire language is by understanding input that is a little beyond the present level of competence. Consequently, Krashen believed that ‘comprehensible input’ (that is, i + 1) should be provided.
(4) The Monitor Hypothesis

As mentioned earlier, adult second language learners have two means for internalizing the target language. The first is ‘acquisition’ which is a subconscious and intuitive process of constructing the system of a language. The second is a conscious learning process in which learners concentrate on form, figure out rules and are generally aware of their own process. The ‘monitor’ is an aspect of this second process. It edits and makes corrections as they are consciously perceived.

(5) The Affective Filter Hypothesis

The learner's emotional state, according to Krashen (1985), is just like an adjustable filter which freely passes or hinders input necessary to acquisition. In other words, input must be achieved in low-anxiety contexts since acquirers with a low affective filter receive more input and interact with confidence.

This model was originally criticized by many researchers and methodologists claiming that all five hypotheses are not testable. On the other hand, there is a continuous interest in Krashen's Monitor Model since many of its five hypotheses have proved their validity in the classroom.

Since the similarities and differences between the acquisition of one’s first language and second language were drawn in the 1970s, the field became enriched with research in both areas. The purpose of these studies was to find out the similarities and differences between second language Acquisition and first language acquisition. Many of the findings of first language acquisition were carried on, analyzed, and tested using ESL learners, adults as well as children. One of the areas that received much attention is the area of morpheme acquisition.
The research in this area began with Roger Brown’s famous study (1973) outlining the order of acquiring fourteen grammatical morphemes\(^1\) such as article and past tense by children acquiring English as their First Language (Goldschneider, 2001). Following, De Villiers and De Villiers (1973) verified this order of First language acquirers by their cross-sectional study.

This idea of order of acquisition of grammatical morphemes by young children acquiring their mother tongue appealed to researchers working in the field of Second Language Learning. Dulay and Burt (1973) tried to find an answer to the question “Is there a common sequence with which children acquiring English as a second language learn certain structures?” (p. 252). They conducted two studies: the first was on a group of (151) Spanish-speaking children aged (6-8) studying English in the USA. The second was on a group (115) Chinese and Spanish speaking children. They collected their data by means of the Bilingual Syntax Measure (BSM), which comes as constructed conversation in which the researcher elicits the structures under investigation. Dulay and Burt reported an order for acquiring eight grammatical morphemes that was similar among second language learners regardless of their L1. The order observed was plural {-s}, progressive {-ing}, copula {be}, auxiliary {be}, articles {a / the}, irregular past tense, third person {-s}, possessive {-s}.

Immediately after Dulay and Burt published their findings regarding the consistent sequence of acquisition for ESL children, the logical question that followed was: is there a common order of difficulty among ESL adults and is it similar to the one found for ESL children? Bailey, Madden and Krashen (1974) tested 73 adult ESL learners with twelve different L1s. When comparing their results to Dulay and Burt’s, it was found out that the

\(^1\) ‘Grammatical morphemes’ is a term that has been traditionally used in the literature following Brown (1973) to refer to a group of grammatical units (including noun and verb inflections, articles, copula, and auxiliary). The term 'grammatical functors' was also used. In the present study, however, both terms will be used interchangeably.
relative accuracy in adults is quite similar to the relative accuracies shown by children learning English as a second language for the same morphemes.

In 1975, Larsen-Freeman extended the morpheme studies by using five tasks to collect data: the BSM, a picture cued sentence repetition test, a listening comprehension test, a modified reading cloze passage and a writing test. Her results showed that the orders obtained in the BSM, listening and the repetition tasks correlated significantly with the one reported by Dulay and Burt. Larsen-Freeman, however, found some differences in the results of her reading and writing tasks and the order reported in the previous studies as some structures rose in the rank order.

Krashen (1977), after reviewing over a dozen of ESL morpheme studies available at the time, proposed a ‘Natural Order’ supported by the longitudinal, i.e. studying one or more subjects over a period of time and observe the development, and cross-sectional, i.e. studying a large number of subjects at one point of time and comparing their performances, Second Language studies. The natural order is divided into four stages of acquisition and includes nine morphemes this order depends on learners’ suppliance in obligatory context.

The first stage in Krashen’s proposed ‘natural order’ is the acquisition of –ing morpheme, plural and copula. Then, auxiliary and article are acquired in stage two. Irregular past is acquired in the next stage, stage three and the last stage contains regular past, third person singular and the possessive. Krashen (1977) makes no claims regarding the ordering of items within each stage (p. 149).

Many other researchers tested this order in a foreign language context using different tasks, like fill in the blank and free compositions. These studies and other studies seem to

---

2 Obligatory Occasion also referred to as Obligatory Context (OC) refers to the context “linguistic, non-linguistic, linguistic prior, or linguistic subsequent” that requires the use of a certain morpheme (Burt et al. Bilingual Syntax Measure 15).
suggest that there is a common sequence of difficulty for ESL learners, children or adults. In addition, this sequence seems to hold in ESL as well as EFL contexts.

However, in 1975, Larsen-freeman’s writing test challenged this general idea. The results of her test showed a discrepancy in the proposed sequence of acquisition for ESL subjects with some structure rising in rank order like plural {–s} and third person singular {–s} (Larsen-Freeman, 1999).

The ‘unnatural order’ that Larsen-Freeman (1975) reported was attributed by Krashen to the methodology of eliciting the data. Larsen-Freeman asked her subjects to inflect the words given to complete a story. Krashen (1981) claimed that the use of such a test, which is known as ‘discrete point test’, triggers the use of the LC, or the monitor. This is because in such a test, the learner focuses on the form rather than on communication, which was used in the previous studies (p. 54).

The distinction between acquisition and learning, proposed by Krashen (1982), drew the attention of researchers to the effect of formal instruction. Acquisition, on the one hand, reflects the acquired competence of the language learners, i.e. the learners’ acquisition of language for the purpose of communication. On the other hand, learning reflects another competence, Learned Competence, which reflects the second language learner’s ability to talk about the rules of the language. Krashen claims that learning does not become acquisition. The importance of the effect of formal instruction, in the present study, is related directly to the fact that the subjects are EFL learners who had no access to acquisition of English, but rather have only learned it the classroom. Therefore, according to Krashen’s claim, they are in command of a Learned Competence but not an acquired one. This Learned Competence is related to formal instruction of English that these subjects receive.

Even though formal instruction is claimed not to have an effect on the order of learning the grammatical morphemes, according to the studies mentioned for EFL learners
that reported disturbed orders, formal instruction seems to have an effect on the order obtained as it causes some structures to rise in the rank order. Furthermore, Krashen (1981) claimed:

"Generally, foreign language students have less access to language acquisition and rely more on learning. It would not be at all surprising if foreign language students show a greater learning effect, manifested by more “unnatural orders”. Adult EFL students in other countries might provide the crucial data here."

(p. 55)

Therefore, the current study will test several claims by replicating two studies that raised a lot of debate in the literature. The first is Larsen-Freeman’s (1975) writing task, which is a discrete point grammar test, to get the sequence of the ten grammatical morphemes (auxiliary, progressive, plural, third person singular, regular past, irregular past, possessive, copula, article). The second study is Bailey, Madden, and Krashen’s study (1974), which is the first study testing the natural order with ESL adults using the BSM.

The subjects of this study are 30 students aged from 17-19 years. They are freshmen science students at King Abdulaziz University in Jeddah, Saudi Arabia. These subjects had formal instruction of English for six years as part of the national curriculum. The average number of hours of instruction in English in high school is four and a half hours per week.

The main hypotheses of this study are:

1. Saudi EFL learners will only have access to Conscious Grammar and will show a similar order to Larsen-Freeman (1975).
2. Saudi EFL learners will show a different order from the natural order reported by Bailey, Madden and Krashen (1974).

3. Saudi EFL learners will show only one order that is similar to Larsen-Freeman (1975).

4. Saudi EFL learners' 'unnatural' order will not conform to the Natural Order proposed by Krashen (1977).

Findings of the study will reveal whether:

1- Adult EFL learners have access to two different grammars –Conscious and Acquired.

2- The grammar obtained (Conscious/ Acquired) is a function of the elicitation task used.

3- Saudi Adult learners exhibit the same order of learning the grammatical morphemes as Krashen’s 1977.

4- EFL learners differ from ESL learners in the order of learning the grammatical morphemes.

5- L1 (namely Arabic) has an effect on the order obtained.

I will discuss these topics by evaluating the previous studies in Chapter 2 (L1/ L2 morpheme studies). In Chapter 3, the methods and procedures of this study are outlined. The results and a detailed discussion of the morphemes will be presented in Chapters 4 and 5. Chapter 6, the concluding chapter, will summarize the findings of this study.