

Acquisition of Grammatical Morphemes in English as a Foreign Language Learners

Introduction

This study was designed to investigate the acquisition order of several English inflectional grammatical morphemes by French-speaking secondary school students learning English as a Foreign Language (EFL) in France. Several studies of students learning English as a Second Language (ESL) in the United States have indicated that certain grammatical morphemes are acquired before others, regardless of age, first language (L1), length of ESL instruction or amount of exposure to English. Researchers believe this evidence suggests that ESL Learners acquire these grammatical morphemes in relatively the same order (Dulay & Burt, 1974; Bailey et al., 1974; Larsen-Freeman, 1976).

However, the majority of these studies have been done on learners of English in the United States, where English is the dominant language. Few studies have addressed the issue of learning location or environment, i.e. learners of English in a country where English is not the dominant language. Due to the fundamental difference between the two learning methods, this study aims to establish any similarities or differences in acquisition order among ESL and EFL students.

Furthermore, this study will address the issue of Interlanguage (IL – see below) interference and the extent to which it affects the acquisition order of EFL learners. Four morphemes from Dulay and Burt's original acquisition order list (1974) were investigated: plural –s, progressive –ing, third person singular present tense –s, and possessive –'s. Two of these morphemes (plural -s and present tense -s) are functionally similar to their French counterparts, and the other two have no direct equivalent in French

(progressive -ing and possessive -'s). Researchers of previous ESL studies have concluded that L1 has little effect on the acquisition order of English morphemes. This study examines whether this seems to be true for EFL learners by considering the morphemes that do and do not exist in French, and therefore, investigating the morphemes that should exhibit positive and negative transfer (see below) of grammatical properties between the two languages.

This study employed a cross-sectional research design involving 14 French students learning English as a Foreign Language as part of their secondary school curriculum. The students were between the ages of 13 and 14 and had been learning English for three years through regular instruction in their courses. Explicit instruction of the grammatical morphemes had been included in the curriculum, but was not included in the current academic year. Oral and written data were collected in February and March 2007, respectively, using a series of pictures and fill-in-the-blank tests. Students were simply instructed to describe the pictures and the target morphemes were not included in the instructions.

Research Questions

This study aims to answer the following questions: Is the acquisition order of English morphemes by EFL learners similar to the acquisition order by ESL learners? Does interlanguage interference help or hinder the acquisition of these grammatical morphemes? What are the implications for the teaching grammatical morphemes, or grammar in general, in the foreign language classroom?

Literature Review

The literature review begins with definitions and explanations of terms related to this study, such as grammatical morpheme, English as a Second Language, English as a Foreign Language and Interlanguage. I will then provide a summary of previous first and second language grammatical morpheme acquisition order studies, as well as criticisms of the studies and more current related research.

Definition of Grammatical Morphemes

A morpheme is the smallest unit of language that conveys a meaning or that has a role in grammatical structure (Cook, 1993). It can be an affix or it can exist as a free-standing word. An inflectional grammatical morpheme is added to the word for purely grammatical reasons, rather than lexical reasons, such as to display verb tenses or noun plurals. Eight inflectional grammatical morphemes exist in the English language, all of which are suffixes: third person singular present tense (-s), past tense (-ed), present progressive tense (-ing), past participle (-en), plural (-s), possessive (-'s), comparative (-er), and superlative (-est).

English as a Second Language versus English as a Foreign Language

The bulk of the research done on grammatical morpheme acquisition orders has involved mostly English as a Second Language (ESL) learners in the United States. Relatively few studies have included English as a Foreign Language (EFL) learners (Makino, 1980; Lightbown, 1983; Ekiert, 2004). The difference between the two lies in the cultural environment of the learner. If a student is learning in a country where English

is spoken as a first language, then he is considered to be learning English as a Second Language. If a student is learning in his own country where English is not spoken as a native language, then he is considered to be learning English as a Foreign Language (H. Brown, 2000).

ESL learners have many more opportunities to use English outside of the classroom and they are exposed to the language in everyday activities. EFL learners are limited in their exposure to the language, and they rarely use English outside of the classroom. Because of this distinction between the two learning styles and the lack of research on EFL learners in the current literature, this study will examine the acquisition order of grammatical morphemes of EFL students in France.

Interlanguage

Selinker (1972) defines 'Interlanguage' as neither the first language (L1) nor second language (L2) of a language learner, but rather the third, intermediate language that a second language learner constructs. It is not merely a combination of the L1 and L2, but a separate and dynamic language system between L1 and L2 in the learner's mind. This interlanguage continually changes as the learner progresses in the L2, and it is affected by both the L1 and L2.

The extent to which L1 affects the acquisition of L2 is described in terms of positive and negative transfer. If a grammatical feature is functionally similar in the L1 and L2, such as -s suffix for plural nouns, then the learner is more likely to transfer the rule from L1 to L2. This is considered a positive transfer. If grammatical features are different between the L1 and L2, the learner is more likely to negatively transfer the rule

and more errors will be made. These two types of transfer are called ‘interference’ in language acquisition.

Further studies on error analysis concluded that L1 transfer could not account for all errors in second language production. Errors do occur in a systematic way, but they cannot be predicted alone with L1 transfer. This provides further support for an interlanguage that is separate from, yet somewhere between, the L1 and L2. For example, overgeneralization of a rule, such as applying the regular past tense -ed to irregular verbs, is a common error in first language acquisition as well as in second language acquisition of English. Therefore, the error is not solely based on a learner's L1.

Due to the limited exposure to English, interlanguage interference should occur more often with students in France in this study than with students in the United States in previous studies.

French Grammatical Morphemes

In addition to the ESL versus EFL distinction, another aspect of this study will address the Interlanguage interference of French grammatical morphemes. EFL learners have fewer opportunities to use English outside of their courses, so their acquisition of the language is generally slower and includes more errors. Of the four morphemes with which this study is concerned, two are functionally similar to their French counterparts and two have no direct equivalent in French.

French, just like English, makes a morphological distinction between singular and plural, although not in pronunciation, but in spelling/writing. The plural morpheme -s is added to end of the noun in both languages. In addition, the singular definite article in

French, *le* for masculine nouns and *la* for feminine nouns, both become *les* in the plural form. Similar to the -s suffix on the noun, the -s suffix on the definite article is not pronounced.

- | | | | |
|-----|-------------------------|-----------------------|--------------------------|
| (1) | the girls | the cats | the doors |
| | <i>les filles</i> [fij] | <i>les chats</i> [ʃa] | <i>les portes</i> [pɔʁt] |

A third person singular form in the present tense also exists in French, though it is never an -s, but rather -e, -t, or nothing. Again, this morpheme is only written and not pronounced. The obligatory use of the pronoun clarifies who the subject is, i.e. *il* for masculine subjects and *elle* for feminine subjects.

- | | | | |
|-----|---------------------|------------------------|----------------------|
| (2) | he loves | she sleeps | he loses |
| | <i>il aime</i> [ɛm] | <i>elle dort</i> [dɔʁ] | <i>il perd</i> [pɛʁ] |

French does not make a morphological distinction between simple present and present progressive, as the present tense of verbs can be translated in three ways:

- | | | | |
|-----|-----------------|-----------------|-----------------|
| (3) | I speak | I am speaking | I do speak |
| | <i>je parle</i> | <i>je parle</i> | <i>je parle</i> |

The closest approximate to the present progressive is another verbal expression, *être en train de + infinitive*, but the translation is more similar to *to be busy V+ing* or *to be in the middle of V+ing*.

Furthermore, possessive -'s does not exist in French as a distinct inflectional morpheme either. Rather, the construction *the N of N* is used.

- | | | | |
|-----|---------------------------|---------------------------------|---------------------------|
| (4) | John's hat | the girl's shoe | the dog's fur |
| | <i>le chapeau de John</i> | <i>la chaussure de la fille</i> | <i>les poils du chien</i> |

First language studies in Grammatical Morpheme Acquisition

The first studies on grammatical morpheme acquisition were carried out by Brown (1973) and de Villiers and de Villiers (1973), regarding the order in which children, whose first language was English, learn certain grammatical morphemes and function words. Brown's study included three children in a longitudinal study, whereas the de Villiers and de Villiers' study included 24 children in a cross-sectional study. Brown concluded that, although the children learned the morphemes at different rates and ages, the order in which they learned them was relatively the same. The order of acquisition was very similar in the de Villiers and de Villiers' study as well.

The following is a simplified list of Brown's order of acquisition for children learning English as a native language in the United States:

1. Present progressive – ing
2. Plural – s
3. Irregular past tense
4. Possessive – 's
5. Copula <i>be</i>
6. Articles <i>a/an</i> and <i>the</i>
7. Third person singular present tense – s
8. Auxiliary <i>be</i>

Figure 1. Order of Grammatical Morpheme Acquisition for L1 Learners of English (Brown, 1973).

Second language studies in Grammatical Morpheme Acquisition

The first studies to involve grammatical morpheme acquisition in the realm of Second Language Acquisition were undertaken by Dulay and Burt (1973; 1974). They decided to use Brown's original study and extrapolate it to children learning English as a second language (ESL) rather than as a native language. Their first study included nearly

300 native speakers of Spanish and their second study included 250 native speakers of Spanish and Chinese. Their findings indicated that there was evidence of an order of morpheme acquisition for children learning English as a second language, but that it differed from the order for children learning English as a first language.

Statistically, the children exhibited similar orders using the Bilingual Syntax Measure (BSM), which Dulay and Burt created for their first study. The BSM employs a series of pictures and questions to elicit responses orally. The errors the children made were placed into one of three categories: developmental, interference, and unique. The majority of errors fell in the developmental category, leading Dulay and Burt to hypothesize that second language acquisition is similar to first language acquisition.

The study involving native speakers of Spanish and Chinese (1974) also provided evidence that first language made little difference in the acquisition of English grammatical morphemes, as the orders were relatively the same for both groups of children.

The following is Dulay and Burt's order of acquisition for children learning English as a Second Language in the United States:

1. Plural – s
2. Present progressive – ing
3. Copula <i>be</i>
4. Auxiliary <i>be</i>
5. Articles <i>a/an</i> and <i>the</i>
6. Irregular past tense
7. Regular past tense – ed
8. Third person singular present tense – s
9. Possessive – 's

Figure 2. Order of Grammatical Morpheme Acquisition for L2 Learners of English (Dulay & Burt, 1974).

Using only the morphemes included in Figure 2, I chose four inflectional grammatical morphemes to investigate in the study: 1. Plural -s, 2. Present progressive -ing, 8. Third person singular present tense -s, and 9. Possessive -'s. According to Dulay and Burt, numbers 1 and 2 are acquired "first," while numbers 8 and 9 are acquired "late." Furthermore, numbers 1 and 8 are functionally similar to their French counterparts, while numbers 2 and 9 do not exist in French as distinct inflectional morphemes. By choosing these particular inflectional grammatical morphemes at either ends of the order of acquisition, I can determine if the order of acquisition for EFL students is roughly the same as for ESL students as well as investigate the extent to which IL interference occurs or does not occur.

The Effect of Age

Other studies involving morpheme acquisition in ESL learners studied adults rather than children. Bailey, Madden, and Krashen studied the oral responses of 73 adult learners of English using the BSM (Bailey et al., 1974). These learners were all receiving formal instruction in intensive English programs. The researchers concluded that adult learners exhibit a similar pattern of order of acquisition as children, and recommended further studies regarding the effect of instruction on morpheme acquisition.

Larsen-Freeman's study (1976) also employed the BSM with 24 adults from various language backgrounds. A similar order to Dulay and Burt's was found with oral responses; however, with written responses, the order was radically different. Larsen-Freeman's explanation maintains that manipulating forms in written English is fundamentally different than in oral expression. Other researchers have indicated that the

accuracy of oral and written production should not be judged on the same criteria, which is a major criticism of the morpheme order studies that I will return to later. Nevertheless, Larsen-Freeman's study provided support for the notion that age has little effect on the acquisition order, similar to the notion that first language has little effect.

Additionally, in this study Larsen-Freeman addresses the issue of the various terms used to describe the so-called “acquisition order.” She suggests that “accuracy order” may be a more exact term to describe the morpheme studies as the accurate use and production of morphemes is determined. Only performance, and not competence, in a language can be measured. Furthermore, “it is not necessarily true that things that are easy to use are learned first and vice versa, even if it in many cases it is true. An order of acquisition cannot be based solely on an order of difficulty.” (Cook, 1991, p. 15) Nor can an order of acquisition be based on an order of accurate production of morphemes.

The Effect of English Instruction

Other studies have exhibited evidence that English instruction has little effect on the order in which morphemes are accurately produced. Perkins and Larsen-Freeman (1975) studied 12 native speakers of Spanish who were receiving formal English instruction at the university level. Comparisons of the subjects’ morpheme accuracy orders before and after testing indicated that there was little change.

Fathman (1975) obtained similar results in his study of the oral production of 260 children with various L1s. Further support of this hypothesis is found in Lightbown’s study (1983) of French-speaking children in Quebec who received instruction in school, but had little exposure to English outside of the classroom. Despite intensive drilling of

certain morphemes, the children did not change their accuracy orders in a significant manner.

On the contrary, Long's study (1983) provides support for the hypothesis that instruction makes a difference in acquisition. His study included children and adults at several levels of English ability. He suggests that instruction is beneficial to English morpheme acquisition, and he also mentions that the previous morpheme acquisition studies only focused on the order of acquisition and not specifically instruction. Further research is needed to address this issue, but certain researchers, such as Krashen (1977), firmly believe that instruction cannot make a difference in acquisition.

The Natural Order Hypothesis, proposed by Krashen (1977), supports the idea that grammatical morpheme acquisition is predictable, whether for first language learners or second language learners. Krashen does agree that the orders are different for first language and second language acquisition, but there are similarities between the two. In addition, Krashen modified Dulay and Burt's original order to group certain morphemes together. This hierarchical organization does not offer explanations for the order of acquisition within groups, but it does state that the order will progress from group to group.

Group 1	<i>Plural –s</i> <i>Progressive –ing</i> <i>Copula be</i>
Group 2	<i>Auxiliary be</i> <i>Articles</i>
Group 3	<i>Irregular Past tense</i>
Group 4	<i>Regular past tense</i> <i>3rd per. Sing. Present –s</i> <i>Possessive –'s</i>

Figure 3. Order of Grammatical Morpheme Acquisition for L2 Learners of English, revised by Krashen (1977).

Teachability Hypothesis

Despite of the large number of studies on grammatical morpheme acquisition, few researchers have addressed the question as to why certain morphemes are acquired before others. As Cook has pointed out, “without an explanation it can have only limited relevance to teaching.” (1991, p. 14) However, Pienemann (2002) attempts to explain this phenomenon in the framework of his "teachability hypothesis." He maintains that grammatical morphemes are acquired in the order of least complex to most complex, but the complexity of each item is determined by its demands on short-term memory and not on grammatical function or frequency. For items that have been shown to be acquired late, the speaker must hold more information in his short-term memory before choosing the correct form, which causes difficulties in the actual production of the language.

Pienemann believes that learners can only progress from one stage to the next, without skipping any stages. He argues that learners are only able to acquire items that are one stage ahead of their current processing ability. He also contends that the grammatical morphemes should be taught in this order to reflect the natural developmental sequences of acquisition.

In contrast, Krashen (1987) maintains that the grammatical morphemes should not be taught in the order that they are naturally acquired. He makes a clear distinction between acquisition and learning, asserting that the former is always a subconscious mental process while the latter is always conscious. Acquisition of a second language is nearly identical to acquisition of a first language. The learner is not aware of the grammatical rules already acquired or even the fact that he is acquiring a language. The learner simply knows he is using the language for communication. Learning, on the other

hand, is knowledge (or memorization) of the grammatical rules of a language and when these rules are violated.

Krashen's Monitor Hypothesis "posits that acquisition and learning are used in very specific ways" (1987, p. 15). The sole function of learning is a Monitor, or editor, and this conscious learning only plays a small role in second language performance. Therefore, learning grammar explicitly, rather than acquiring language implicitly, will have little effect on the acquisition order. Additionally, regardless of the order in which grammatical morphemes are taught in classrooms, they will be acquired in the predictable order because only learning and not acquisition can result from classroom instruction.

Criticism of Morpheme Order Studies

Criticism of the morpheme order studies of the 1970's have yielded other studies that do not support the grammatical morpheme acquisition order. Rosansky (1976) did not agree that accuracy orders obtained from cross-sectional studies could accurately determine acquisition orders determined from longitudinal studies. Her study compared the acquisition order of one learner with the same learner's accuracy orders over time, which were significantly different.

Hakuta's longitudinal study (1974) of a Japanese child learning English also did not support Dulay and Burt's acquisition order. Because the child had greater difficulty in learning plurals and articles, which do not have exact counterparts in Japanese, Hakuta proposed that first language interference can have a greater effect than previous researchers have suggested. Fathman (1975) found similar results in a study of Korean and Spanish learners.

Other researchers have pointed out that almost all research on grammatical morpheme acquisition has been done on learners of English. Very few studies have undertaken morpheme acquisition in another language. Furthermore, morpheme studies have little relevance regarding languages that exhibit very few morphological components, such as Chinese.

Related Research

More current research has tested the acquisition order proposed by Dulay and Burt. These studies have included native speakers of languages originating in Asia and Europe: Japanese (Makino, 1980), Mandarin (Wang, 2000), Korean (Schuwerk, 2004) as well as French (Lightbown, 1983), Serbo-Croatian (Billings, 1999) and Polish (Ekiert, 2004). The studies range from longitudinal to cross-sectional and include oral and written assessment.

Makino (1980) decided to test the acquisition order hypothesis by adjusting two factors: adolescents instead of children or adults, and EFL instead of ESL. He tested 777 Japanese high school students who were learning English in Japan with fill-in-the blank tests. The sequence of acquisition of the morphemes largely correlated to Dulay and Burt's order, leading Makino to conclude that location as well as learning English as a Foreign Language instead of as a Second Language may not make much difference.

Wang's case study (2000) of a Mandarin-speaking 16 year-old girl, Lan, is a longitudinal study over 13 months of the oral production of eight grammatical morphemes. However, Wang admits that Lan received more English input than regular students because of her privileged background, so the research findings may not be generalized to all Mandarin-speaking learners of English. In addition, Wang did find

interlanguage interference due to grammatical morphemes that do not exist in Mandarin, but this L1 interference did not seem to dominate Lan's overall acquisition. Nevertheless, Wang found that Lan's order was very similar to Dulay and Burt's order.

Schuwerk's study (2004) of native Korean speakers enrolled in an Intensive English Program in the United States yielded results in support of an acquisition order. He collected written samples from eight students over a period of eight weeks regarding the definite and indefinite articles, third person present tense -s, and present progressive -ing. His results show greatest accuracy and improvement for -ing, but fluctuations in data for the other two morphemes tested. In addition, only the articles were explicitly taught in the classroom. Instruction of the articles did increase the students' awareness of the morpheme, but it did not necessarily increase their accurate use or production of them. Overall, Schuwerk's participants did show commonalities with the generally accepted morpheme acquisition order.

Lightbown's study (1983) of 175 French-speaking students in Canada also yielded positive results in support of the acquisition order. She also tested adolescents using pictures to elicit oral production of the morphemes. Her findings indicated that the order of acquisition for the children learning English in the classroom was very similar to those children who were receiving no formal instruction.

Billings' case study (1999) of a native speaker of Serbo-Croatian, aged 20, also provided support for the acquisition order. Both oral and written data were collected and analyzed, and Billings found that her subject's order of acquisition was similar to the order predicted by Dulay and Burt and that English instruction does not play a role in morpheme acquisition.

Finally, Ekiert's study (2004) on the acquisition of articles by ten Polish-speaking learners of ESL and EFL lead her to conclude that environment did not influence the acquisition order. The ESL and EFL learners performed relatively the same on written tests; however, there were several differences between the two types of learners. The EFL learners had a university education and had been studying English twice as long as the ESL learners. Ekiert notes had the variables been kept constant, the results might not have been the same.

Methodology

Participants

Fourteen native speakers of French participated in this study, undertaken in the Haute-Savoie area of France. The students were all between the ages of 13 and 14, in their final year at the middle school, and had been studying English for three years prior to the current school year. In addition to the three hours per week of regular English instruction, these students were enrolled in a "European section" program which included one more hour of English each week. None of the students had lived in or spent an extensive amount of time in an English-speaking country. These students were learning English as a Foreign Language, as they lived in a French-speaking country and rarely had the opportunity to use English outside of the classroom.

Materials

The testing materials consisted of sixteen fill-in-the-blank type questions, four for each morpheme considered in the study. The written directions on each test did not include the target morpheme, so as not to unintentionally help the student. For the plural morpheme test, the directions simply stated "Fill in the blank with the correct word." Four pictures of objects followed - books, fingers, balls, and clocks - as well as a phrase with a blank line below the picture, i.e. "There are 4 _____." Similarly, the possessive morpheme test included the same directions, although the phrases below the pictures were slightly different. For example, "This camera belongs to the woman. This is the _____ camera."

For the third person singular and present progressive morpheme tests, the directions were "Describe the activities in each picture." The pictures depicted everyday activities, such as reading, running, working, etc. The difference between the two tests was present in the phrases introducing each picture. On the third person singular morpheme test, the phrases began with frequency adverbs, e.g. every Monday, each day, etc., whereas on the present progressive morpheme test, the phrases began with indications of current time, e.g. right now, at this moment, etc.

Procedure

The students were tested twice during this study; once as a written test and once as an oral test. The written test occurred in February 2007 before the winter break of two weeks. The same test was then administered for the oral section in March 2007, four weeks later. Students were allowed to take as much time as they wanted or needed for both tests. The tests were given during regular class time, and they were strictly voluntary and anonymous. The written tests lasted an average of eight minutes, while the oral tests lasted an average of two minutes.

The differences in testing styles accounts for this disparity in average time taken to finish the tests. During the written tests, students could re-read their answers and make any corrections or change any answers. They did not have to answer the questions in any particular order and they did not have to write anything on the blank line if they did not know the answer. However, for the oral tests, students were instructed to read the questions in order. If they did not know the answer, they were told to guess or say nothing and go to the next question. Most students were able to correct themselves

directly after saying a wrong answer, but no student corrected himself at the end of the oral test.

Students were recorded using Audacity, a digital audio editor, on a laptop computer and their answers were later transcribed for interpretation. Being recorded when speaking generally raises the nervousness of the speaker, so this must be taken into account when analyzing the results of the tests.

Results

In the original study on morpheme acquisition, Dulay and Burt scored their students' results by assigning 1 point for a correct morpheme, 0.5 points for a malformed morpheme, and 0 points for an incorrect morpheme. This system was used to score the results of this study (Scoring System 1). However, I also chose to score the results a second time using an alternative system (Scoring System 2) in order to better interpret the results.

Due to the nature of fill-in-the-blank tests, the students needed to identify the correct vocabulary word and then apply the correct grammatical morpheme. In Scoring System 1, "no answers" were not included in the data, on the assumption that ignorance of the vocabulary word did not imply ignorance of the grammatical morpheme. This particular scoring system is concerned strictly with use of the morphemes; therefore, 1 point was awarded for the correct morpheme and correct word, 0.5 point was awarded for the correct morpheme and incorrect word, and no points were awarded for the incorrect morpheme, regardless of correct or incorrect word, as well as for "no answers."

On the other hand, Scoring System 2 is concerned with meaning in language acquisition rather than just form. Grammatical morphemes carry properties of the language's grammar (form), but knowledge of these forms does not imply knowledge of the actual use of the language. If a student can identify a correct morpheme, but not a correct word, the meaning is lost and communication does not succeed. Therefore, because meaning is desired as much as form, this scoring system awarded 1 point for a correct morpheme and a correct word and no points for an incorrect morpheme and a correct word or for an incorrect morpheme and an incorrect word or for "no answer."

The following two figures indicate the scores for both scoring systems for the four morphemes tested. On average, the students scored higher using the first system, which focuses on solely identifying the morpheme.

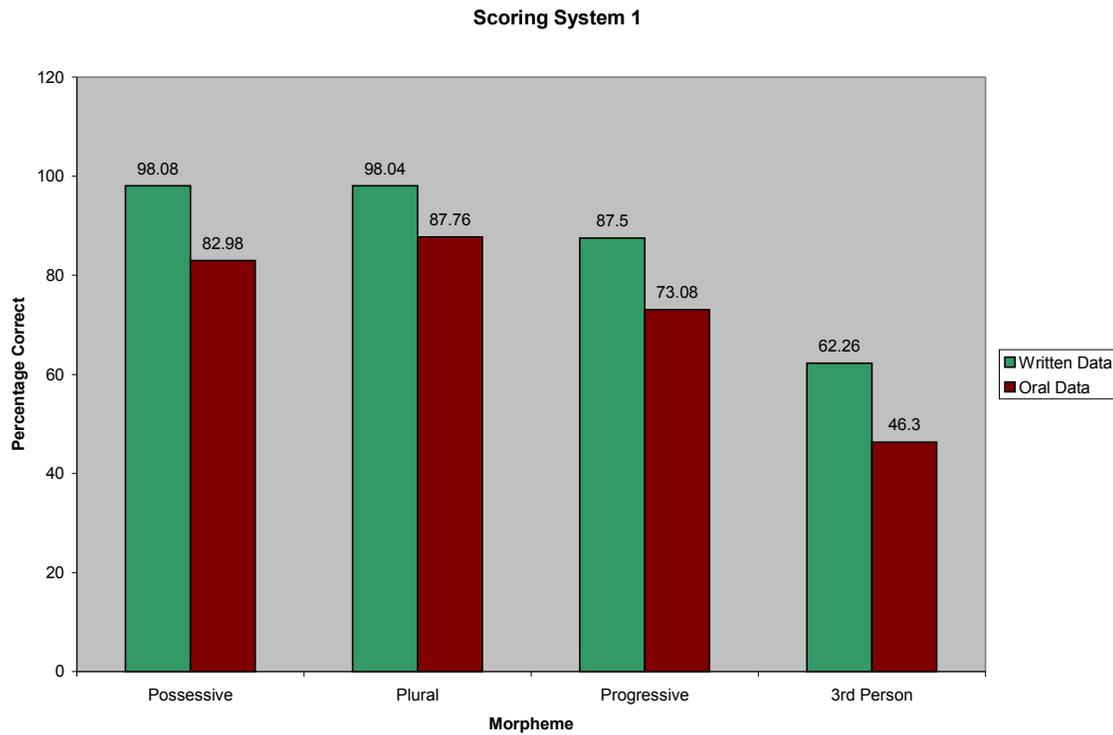


Figure 4. Percentage Correct for Written and Oral Data using Scoring System 1.

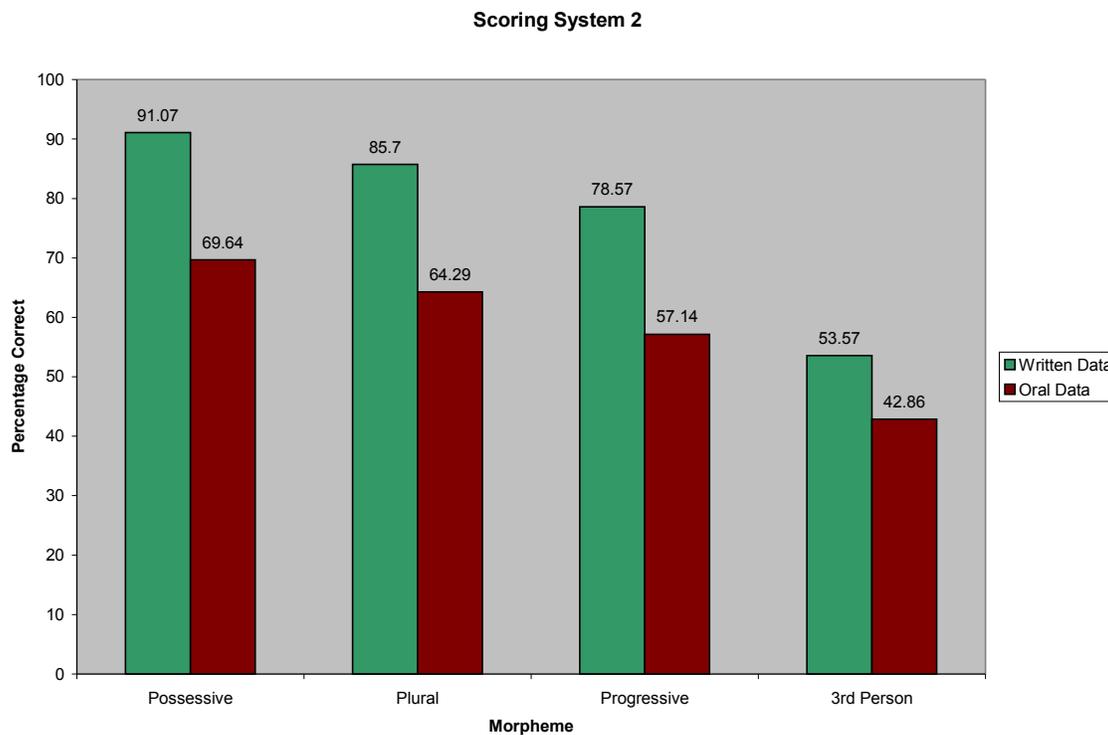


Figure 5. Percentage Correct for Written and Oral Data using Scoring System 2.

Comparison to Dulay and Burt's Order

When we average the results of both scoring systems, the order of acquisition for this study (for both written and oral data) is different from that of Dulay and Burt's. In the current study, the plural morpheme remained in the "first acquired" group, while the third person singular present tense morpheme remained in the "late acquired" group, same as in the Dulay and Burt study. On the contrary, the possessive morpheme and the present progressive morpheme have switched rankings in the current study, with the former moving to the "first acquired" group and the latter moving to the "late acquired" group. The numbers in parentheses indicate the morpheme's ranking in the original acquisition order of Dulay and Burt; i.e. 1 and 2 are "first acquired" and 8 and 9 are "late acquired."

Dulay & Burt (1974)	Current study
Plural -s (1)	Possessive -'s
Present Progressive -ing (2)	Plural -s
3 rd Person Singular -s (8)	Present Progressive -ing
Possessive -'s (9)	3 rd Person Singular -s

Figure 6. Comparison of Dulay and Burt's Order of Acquisition for ESL Learners and the results of this study.

Plural Morpheme (-s)

The correct answers for the plural morpheme test were *books*, *fingers*, *balls*, and *clocks* (though I also accepted *watches* for the last answer, as the picture could have been interpreted as either). On the written test, students performed exceptionally well with very few mistakes on identifying the morpheme. A few students wrote an incorrect word labeling the picture, such as *hands*, *balloons*, or *swatches*, but even in these cases, the plural morpheme was always correct.

On the oral test, again students performed well on identifying the plural morpheme, but they had more problems with providing the correct vocabulary word. One student resorted to saying the French word instead of the English, and several students mistakenly said *hands* instead of *fingers*. There were just as many "no answers" (five) for the oral test as for the written test.

Present Progressive Morpheme (-ing)

The correct answers for the present progressive morpheme test were *are playing*, *is writing*, *is watching*, and *are running*. The majority of students correctly identified the present participle as well as the correct form of *be* on the written tests. There are two cases of use of the wrong form of *be* and two students employed the simple present tense

rather than the present progressive. One student wrote *reading* instead of *writing* and another wrote *walking* instead of *running*, but all of the other answers contained the correct vocabulary word. There were no "no answers" in the written data.

On the oral tests, five students employed the simple present tense rather than the present progressive. Vocabulary mistakes included *reading* instead of *writing* and *looking* instead of *watching*. Similar to the written data, there are two cases of use of the wrong form of *be*. There were four "no answers" for the oral data.

Third Person Singular Present Tense Morpheme (-s)

The correct answers for the third person singular present tense morpheme test were *buys*, *works*, *speaks*, and *reads* (though I also accepted *chooses* in place of *buys* as the picture depicted a woman in a store looking at fruit, so either word makes sense in the context.) Overall, the scores on this particular morpheme were the lowest, in both scoring systems and both for written and oral data. Students were able to correctly use the 3rd person morpheme just over 50 % of the time on the written tests, and just under 50 % of the time on the oral tests. Errors included omission of the morpheme and wrong use of vocabulary.

Vocabulary mistakes for the written test included puts (for buys), writes (for works), talks (for speaks), looks and openes [sic] (for reads). There were three "no answers" for the written test. The oral data included several more vocabulary mistakes: looks, go, works (for buys); write and check (for work); drink, drank, talk, and talks (for speaks); and look and is (for reads). However, the oral data only included two "no answers."

Possessive Morpheme (-'s)

The correct answers for the possessive morpheme test were *woman's*, *man's*, *musician's*, and *building's*. Students scored remarkably well on the possessive morpheme test (above 90% for the written data). Overall, the students scored the highest on this test for the written data in both scoring systems, and highest for oral data for Scoring System 2 and second highest for Scoring System 1.

There were no vocabulary mistakes on the written tests, and four "no answers." Students scored slightly lower on the oral tests, with several more (nine) "no answers". In addition, three students answered the first question on the oral test with a grammatically correct possessive adjective, *her*, but then switched to the correct possessive morpheme for the remaining three questions. Other vocabulary mistakes included *photo* (for *woman's*), *boy* (for *man's*), and *next* (for *building's*).

Written versus Oral

The students scored higher on all of the written tests compared to the oral tests. Using Scoring System 1, which focuses on accurate use of the morpheme (form), students scored an average of 14 % higher on the written tests than on the oral tests. Using Scoring System 2, which focuses on communicative ability (meaning), students scored an average of 20 % higher on the written tests than on the oral tests.

These differences between the written and oral scores can be a result of the current teaching methods that emphasize written performance rather than oral performance in language classes. These differences can also be accounted for when considering the affective factors of taking a written test versus an oral test. The students were informed that these tests were strictly voluntary and had no bearing on their grade

for the class in order to minimize stress levels. Students were allowed as much time as they wanted to finish the tests and were not rushed into completing the tests early. In addition, during the written tests, students had the opportunity to re-read their answers and make any corrections.

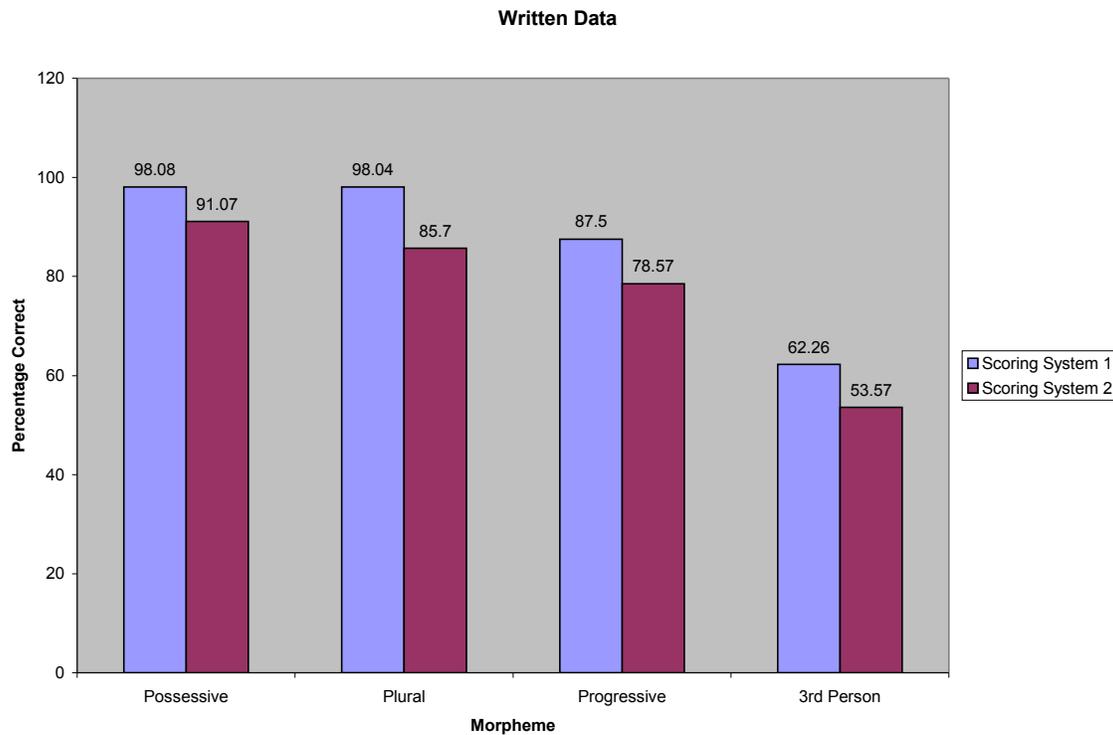


Figure 7. Percentage Correct for Written Data using Scoring Systems 1 and 2.

During the oral tests, few students attempted to make any corrections because they could not see the answers they had given, and therefore, did not remember or did not know which answers needed to be corrected. Furthermore, knowing that one's voice is being recorded increases anxiety and stress levels. The students did not have a regular habit of speaking in English because their class focused more on grammar and writing. Therefore, it is understandable that students would make more mistakes when participating in a recorded oral exam than when participating in a written exam.

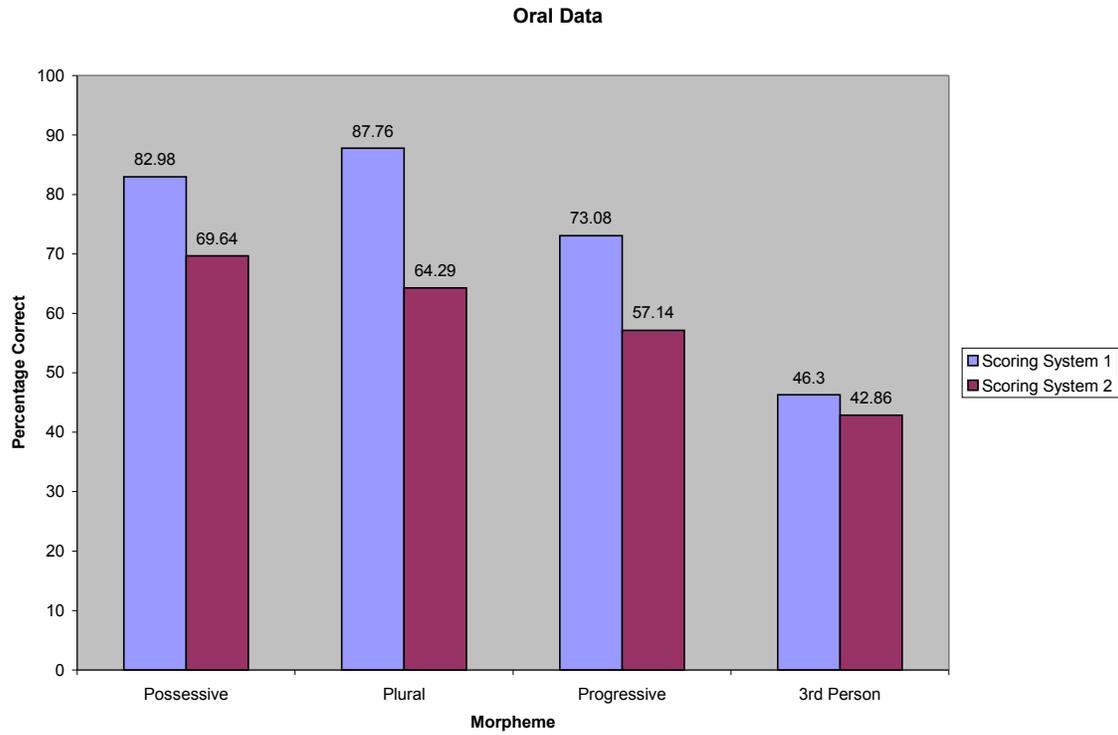


Figure 8. Percentage Correct for Oral Data using Scoring Systems 1 and 2.

Discussion

Accounting for Difference in Order

The results of this study indicate a difference in grammatical morpheme acquisition order in learners of English as a Foreign Language than previously reported by Dulay and Burt (1974). Rather than scoring last in the "late acquired" group of morphemes, the possessive morpheme scored at the top of the "first acquired" group of morphemes. This is essentially the complete opposite of what Dulay and Burt had predicted. However, the reason for this difference may involve the design of the test.

The possessive morpheme test consisted of fill-in-the-blank questions, similar to the other three tests. Nevertheless, the possessive test was slightly different in that it provided the necessary vocabulary to complete the phrases, i.e. "This briefcase belongs to the man. This is the _____ briefcase." Therefore, the students merely had to rewrite the noun (man) with the possessive morpheme ('s). In all of the questions, the definite article (the) was already provided.

Further observations of the students' use of the possessive morpheme indicated that some mistakes were made if they were required to create the phrase, rather than fill in a blank. Additionally, the most mistakes occurred when proper nouns instead of common nouns were used. Students tended to overgeneralize the rule of possessives, *the N1 of the N2* becomes *the N2's N1*, to include proper nouns. Therefore, they were able to correctly produce phrases such as (5), but nearly always incorrectly produced phrases such as (6).

- (5) *le livre du garçon*
 [the book of the boy]
 the boy's book

- (6) *le livre de Michel*
 [the book of Michael]
 *the Michael's book

These types of mistakes indicate that students are able to correctly produce the definite article and possessive -'s inflectional morpheme, but they do not know when to use the determiner with the possessive -'s inflectional morpheme (only with common, and not proper, nouns). In light of the fact that the current study does not take in account proper nouns when using the possessive morpheme, and that the fill-in-the-blank design of the test most likely helped the students to succeed more often than usual, we can disregard the ranking of the possessive morpheme. Therefore, the remaining morphemes - plural, progressive and third person singular - rank consistently with Dulay and Burt's original order of acquisition.

Interlanguage Interference

Interlanguage interference did occur to some extent among the students. Positive transfer occurred with the plural and progressive morphemes, even though the latter does not exist in French. A reason for the positive transfer of the progressive morpheme could be attributed to the fact that because it is so unusual and different compared to what exists in French, it becomes more memorable for the students. This positive transfer despite a lack of existence of the morpheme in French can also be seen with the possessive morpheme. Although -'s never occurs in French, students were able to produce it rather often, as long as common nouns were involved.

Negative transfer of an inflectional morpheme occurred in acquisition of the third person singular morpheme. In spite of the students' abilities to correctly produce, in

This negative transfer of grammatical properties between the two languages exhibited by the students in this study indicates that interlanguage interference does occur, though the study cannot accurately reflect the extent to which it occurs. The results of this study cannot be definitively used to determine if interference occurs more or less often than researchers had previously thought.

English as a Second Language versus English as a Foreign Language

This study only included students who were learning English as a Foreign Language, whereas most other studies in grammatical morpheme acquisition included students who were learning English as a Second Language. Nevertheless, this difference seemed to have little bearing on the acquisition order. Disregarding the possessive morpheme in the current study, the EFL students scored relatively the same as ESL students in the other studies. More comparative studies, such as Ekiert's study (2004), are needed to investigate this question more thoroughly, but the results do indicate that EFL and ESL learners exhibit the same acquisition orders.

Implications for Teaching

Teaching grammatical morphemes in a certain order, such as in the order in which Dulay and Burt predicted, has been debated for several decades. The idea that students will learn the morphemes in the order that they are taught has been refuted by Krashen (1987). Returning to his distinction between *acquisition* (unconscious) and *learning* (conscious), he maintains that students of English will naturally *acquire* the morphemes in a certain order, but that they cannot *learn* the morphemes in this order. Furthermore, Dulay and Burt's acquisition order only presents the order in which the morphemes are

acquired (i.e. an observation of the use), not the order in which the morphemes are frequently used in the language (i.e. the actual use).

The question of teaching morphemes in a certain order should be broadened to include other factors. Should teachers focus on the morphemes on which students make the most mistakes? Should teachers focus on the most frequently used morphemes, and disregard acquisition order altogether? Or should teachers focus less on grammatical morphemes and more on communicative ability?

Form versus Meaning

The results of this study show that students performed better on providing the correct grammatical morpheme than on providing the correct vocabulary words. Scoring System 1 focused on form (correct morpheme), while Scoring System 2 focused on meaning (correct vocabulary word). In both cases, written and oral, students were better able to identify grammatical properties than to communicate effectively in the language.

	Scoring System 1 (Form)		Scoring System 2 (Meaning)	
	<u>Written data</u>	<u>Oral data</u>	<u>Written data</u>	<u>Oral data</u>
Possessive	98.08	82.98	91.07	69.64
Plural	98.04	87.76	85.70	64.29
Progressive	87.50	73.08	78.57	57.14
3rd Person	62.26	46.30	53.57	42.86

Figure 9. Percentage differences between the two scoring systems.

This may be a reflection of current teaching methods that focus too much on teaching grammar for the purposes of reading and writing, and that neglect the vocabulary and verbal expression required for speaking and comprehending. A

comparison of the results for the written and oral tests also provides evidence for this, as the written scores are higher than the oral scores.

Limitations of the Study

This study could be improved with the participation of more students and therefore, the possibility of more data to be interpreted. In order to address several issues of grammatical morpheme acquisition, a more comprehensive study including students of different age groups, from several L1 backgrounds, and with different amounts of exposure to and instruction in English should be undertaken. Additionally, more studies should be done that compare ESL and EFL learners, rather than studying them separately.

Time limitations prevented me from undertaking a longitudinal study rather than cross-sectional studies one month apart. As indicated by Rosansky (1976), students can exhibit different acquisition orders whether they are studied longitudinally or cross-sectionally.

The length of the tests could be increased to include more questions, and the design changed to include more than just fill-in-the-blank questions. Collection of written journals and recording of spontaneous conversations could provide more detail and data. This could offer more insight into the reasons why the possessive morpheme scored so highly in this study as compared to other studies.

Final Conclusions

This study clearly shows that there is indeed an acquisition order when learning English grammatical morphemes by EFL Learners. Returning to the original research questions, this study also provides evidence that the acquisition order of grammatical morphemes by English as a Foreign Language learners is similar to the order of English as a Second Language learners. Disregarding the scoring anomaly of the possessive morpheme in this study, the order of the remaining three morphemes is the same as Dulay and Burt's order.

In addition, this study exhibits support for Interlanguage interference, and that it does play a role in grammatical morpheme acquisition. Nevertheless, the interference seems to provide positive transfer as much as negative transfer, regardless of whether the morpheme exists in L1, but not L2, and vice versa. The results of this study cannot provide a thorough answer as to whether interlanguage interference plays a larger role than researchers have previously thought.

Lastly, grammatical morpheme acquisition may have implications for teaching English as a Second or Foreign Language. The students in this study seemed to have a grasp on the morphemes more so than on vocabulary and therefore, on how to communicate effectively in the language. Knowledge and use of a grammatical morphemes does not imply competence in the language. If the goal of language learning includes mere grammar and form, then the students, and by extension, the teaching methods used, have succeeded. However, if the goal of language learning is communicative ability, then the students still have many obstacles to overcome in their acquisition of the language.

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