

Acquisition of English Prenominal and Postnominal Genitives

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Abstract

This study examined the acquisition of prenominal and postnominal genitives by Iranian EFL learners. Two variables were considered: possessive categories and language proficiency. We considered the influence of possessive categories such as lexical modifier, semantic relationship, and weight and syntactic complexity on genitive alternations by Iranian EFL learners. Also, we examined whether the learners' different levels of language proficiency have any effect on the acquisition of the prenominal and postnominal genitives. To do this, 120 male and female students at BA and MA levels with ages between 23 and 28 were employed. After administering a proficiency test, they were divided into two groups: high (58 students) and low (62 students). The results indicated that possessive categories including lexical modifier, semantic relationship and weight and syntactic complexity improved the students' acquisition. Also, there existed a positive correlation between the students' mastery level in English and the acquisition of prenominal and postnominal genitives.

Keywords: Genitive Case, Prenominal Genitive, Pronominal genitive, Postnominal genitive.

I. Introduction

Language speakers have the knowledge to perceive the component morphemes of a word since their mental grammar includes a mental lexicon of morphemes and the morphological rules for their combination (Hellar, 2002). There are a number of morphological and syntactic properties which differentiate subjects from complements. In English, subjects generally precede predicates and complements follow them. Moreover, subjects give various case properties to complements.

According to Lardiere (1998), case is a grammatical category specified by the syntactic or semantic function of a noun or pronoun, like many languages, English case markers are grammatical morphemes added to nouns to indicate whether the noun is subject, object, possessor or some other grammatical role. Also, he claims that case is a grammatical category in accordance with nouns and adjectives and also demonstratives, articles and other determiners. Also, he believes that cases are mostly marked by verbs, but not always. Within a sentence, case is narrowly associated with syntactic functions. Such as:

- Subject function is performed by a noun or NP in nominative.
- Direct Object function is conducted by a noun or NP in accusative.

Different case forms of typical pronoun and noun expressions include: nominative (as subject), accusative (as direct object), dative (as indirect object which is nearly lost or inactive in English language), locative (as location), vocative (as respect), and genitive (as possession). Kreyer (2003) states that the most commonly used term in describing the grammar of various languages is genitive case; genitive forms are used to mark ownership. In a broad sense, possessive form is a word or construction used to display a relationship of possession. Nouns or pronouns taking the form of a possessive are sometimes described as being in the possessive case; however, this usually denotes case with a broader range of function than just producing possessive forms. Therefore, it can be concluded that genitive case is part of a system in which relationships between noun and other parts of the sentence are signaled by inflection (Hinrichs & Szmrecsanyi, 2007).

Genitive case has three different types: 1) prenominal possessor used for animated entities (e.g. Peter's book) (Szmrecsanyi & Hinrichs, 2008). 2) pronominal possessors which are classified into two forms (a) possessive pronouns (mine, yours, his, hers, ours, yours, their) which are used nouns (Suda, 2007). (b) possessive adjectives (my, your, his, her, its, our, your, their) are inserted into sentences before noun as adjectives (Suda, 2007). 3) postnominal possessor used for entities that do not indicate any traits of personality (e.g. the roof of the house) (Kreyer, 2003).

II. Review of literature

Both in speech and writing, possession is a significant subject in grammar. Language learners bump into the usage of possession marker specially prenominal and postnominal genitives (so-called s-genitive and of-genitive, respectively). The English possessive marker 's is generally recognized as a clitic. Even though the term 'clitic' is used to identify a wide variety of elements, it can be said that it is an element which does not have the independence of a word (prosodically) (Scott, Denison & Börjars, 2007).

English nominal constructed with the morpheme -s as a so-called possessive marker may have an indefinitely large number of interpretations depending on the context of utterance. From a meaning-based viewpoint, possessive constructions are interesting largely due to the indeterminate number of interpretations to which they are subject. A simple nominal such as *Peter's shirt* might refer to the shirt owned by Peter, the shirt worn by Peter, the shirt Peter designed, the shirt he painted, or photographed, or has stolen.

Certainly the possessive morpheme is either extremely polysemous, or the encoded content it brings with it into the nominal is adequately abstract to be compatible with a very wide range of meanings (Aitken, 2009). According to Kreyer (2003), there exist many situations of overlap where both prenominal and postnominal genitives are appropriate option although in particular contexts the s-genitive ('N1's N2') can be substituted by the of-genitive ('the N2 of N1'), and vice versa. In these areas, both constructions are not a free variation since a number of possessive categories, linguistic as well as extra-linguistic specified an appropriate one (Altenberg, 1982).

Basically, prenominal possessive construction is a construction in which the possessor phrase precedes the head of the possessed phrase. In the s-possessive construction, the

possessor phrase is followed by the morpheme *s*, which is traditionally considered as a genitive case marker that is an inflectional suffix on the head noun of the possessor phrase (Strunk, 2004).

Stefanowitsch (2003) states that a modifier with the possessive clitic *-’s* that precedes the head noun can produce prenominal genitive and if the modifier is syntactically marked by the preposition "of" and also possessor phrase follows the head of the possessed phrase, it makes postnominal construction that is a possessive construction.

According to Biber (2003), tendency of written genres to be more closely similar to spoken registers cause variation in written styles; colloquialization indicates progressing genitive variations in writing which prefer to use spoken styles as well. The clear evidence for this alternation is accepting more conversational writing styles, newspapers and news magazines which have been using styles that more nearly parallel patterns in speech. However, certain publications such as academic and technical journals, which like to involve more formal, passage with intricate grammatical structures and larger, more particular vocabularies do not confirmed colloquialization (Biber, 2003). Biber (2003) claims that in particular written genres (e.g newspaper reportage) an informational explosion has created pressure to communicate information as economically as possible. The *s*-genitive is naturally encouraged in these compressed contexts (Szmrecsányi & Hinrichs, 2008).

In written English, the *of*-genitive has been the more frequent construction, while in speech, *s*-genitive are more frequent than *of*-genitive (Szmrecsányi & Hinrichs, 2008; Tagliamonte & Jarmasz, 2008). The *s*-genitive is comparatively frequent in both spoken English and contemporary journalistic English. The *s*-genitive is, on the whole, more frequent in spoken data than in written data (Hinrichs & Szmrecsanyi, 2007). Raab-Fischer (1995) claims that the *s*-genitive has become importantly more frequent in press language in the period between the 1960s and the 1990s, with respect to genitive frequencies, press language has over time become more similar to spoken varieties of English.

Hinrichs and Szmrecsányi (2007) state that there existed a high frequency of *s*-genitive between 1960 and 1990. They claim that in modern English, the tendency of *s*-genitive usage has kept on through modern English. The *of*-genitive form is often considered as having formal limitations (Rosenbach 2002; Tagliamonte & Jarmasz 2008). The relationship between formality and the *of*-genitive guides the hypotheses that women, who have been found in sociolinguistic studies to make use of formal structures more frequently than men, are more likely to utilize the *of*-genitive constructions and that people with higher education utilize more *of*-genitive (Shih, Grafmiller, Futrell & Bresnan, 2009).

1.3. Research Questions

The present study was an attempt to find answers to the following research questions:

- 1) Do possessive categories such as lexical class of the modifier, semantic relationship, weight and syntactic complexity affect the acquisition of prenominal and postnominal genitives by Iranian EFL learners ?
- 2) Does learners' language proficiency have a significant effect on the acquisition of prenominal and postnominal genitives ?

III. Method

a) Participants

The participants of this study included 120 males and females. They were Persian native speakers who were studying English at Islamic Azad University of Takestan, Shahreghods, Tehran Research and Science both at BA and MA levels. In order to assess the participants' language proficiency, a Michigan proficiency test was used. After the proficiency test, based on their scores, they were divided into two groups: low and high. Both groups had to take a multiple choice test related to prenominal and postnominal genitives. We aimed to see whether there existed any relationship between students' proficiency level and correct choice in the genitive test. From among 120 participants, 58 high and 62 low proficiency students were employed to fulfil the aim of this study.

b) Materials

The materials employed in this study fall into two types. First, Michigan ECCE practice tests by Jain Cook as a proficiency test. Actually, it contains 100 items: 40 items on grammar, 40 items on vocabulary, 20 items on reading comprehension (Appendix 1). Second, genitive test consists of 25 items: 9 items were related to lexical class of modifier (proper name, common noun, collective noun, higher animal noun, lower animal noun, personified noun, semi-collective noun, time & measure, non-personal), 10 items were related to semantic relationship (origin, attribute, time & space, disposal, objective, subjective, partitive, possessive, kinship, descriptive), 6 items were related to weight and syntactic complexity (N_2 +finite clause, N_2 +non-finite clause, N_2 +prepositional phrase, N_1 +finite clause, N_1 +non-finite clause, N_1 +prepositional phrase). These items were selected from English Grammar in Use book (N_1 =modifier, N_2 =head noun).

c) Procedures

A proficiency test (Michigan test) was first administered to measure participants' general English proficiency. Then, they were divided into two groups: high proficiency and low proficiency. At last, genitive test was presented which was associated with prenominal and postnominal constructions. Each item of this test was related to lexical class of modifier, semantic relationship, weight and syntactic complexity.

IV. Results and analysis

In order to analyze the data to investigate the research question one, first the participants' performances on the prenominal and postnominal genitives in three different possessive category types, i.e. lexical class of modifier, semantic relationship, and weight and syntactic complexity were assessed. Table 1 presents the descriptive statistics.

Table 1 *Descriptive statistics for Participants' Performances on Three Possessive Category Types*

<i>Possessive Category Types</i>	N	Range	Mean	Median	Mode	SD	Variance
Semantic relationship	120	1.00	.702	.800	.80	.199	.040
Lexical modifier	120	.78	.556	.555	.56	.170	.029
Weight & syntactic complexity	120	.83	.468	.500	.50	.199	.040

Figure 1 below provides a graphical representation of the results.

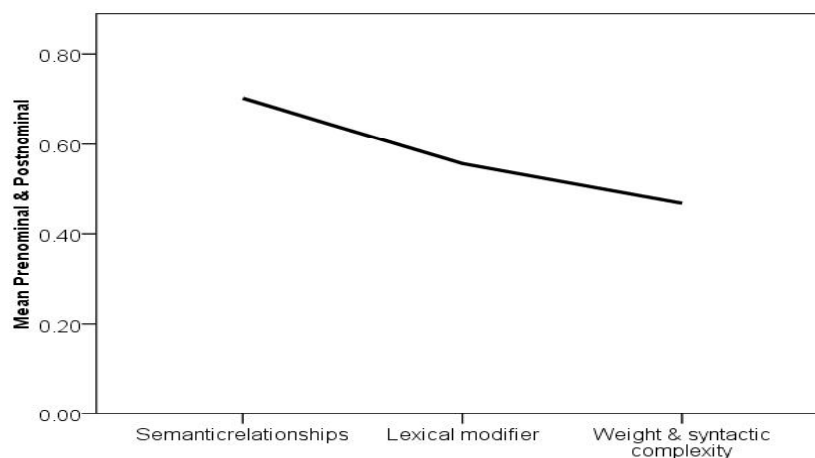


Figure 1. *Prenominal and Postnominal Results for Three Possessive Categories*

Repeated Measures ANOVA was used with possessive category types as the within-subject variable to compare the participants' performances on three possessive category types.

Table 2 *Multivariate Tests of Repeated Measures ANOVA for the Effects of Possessive Categories on Prenominal and Postnominal Genitives*

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
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Possessive Category Type	.575	43.666	2.000	118.000	.000	.425
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ANOVA detected a statistically significant effect for possessive category, which is the within-subject factor ($F_{(2, 118)} = 43.66; p = .000, p < .05$); as a result, we did not find a statistically significant difference between the possessive category types (lexical class of modifier, semantic relationship, and weight and syntactic complexity) in the acquisition of prenominal and postnominal genitives by Iranian EFL learners.

Also, the interaction between possessive category type and proficiency level was not significant ($F = .26; p = .76, p > .05$). Since we have obtained a statistically significant result from the previous analysis, this suggests that there is a difference somewhere among our factors. Post-hoc Pairwise Comparisons were run to compare each pair of possessive category types. Table 3 below displays the results.

Table 3 *Post-hoc Pairwise Comparisons for Three Possessive Categories*

Possessive types	Possess. Types	Mean Diff.	Std. Error	Sig.
1. Semantic relationship	2	.146*	.021	.000
	3	.234*	.026	.000
2. Lexical modifier	3	.088*	.022	.000
3. Weight & syntactic complexity	2	-.088*	.022	.000

The results of Post-hoc Pairwise comparisons showed significant differences ($p = .000$) for all possible pairs; Semantic relationship gained the largest value ($M = .70, SD = 19$), lexical modifier the second ($M = .55, SD = 17$), and weight and syntactic complexity the third ($M = .46, SD = 19$).

In order to put the participants into two low and high proficiency levels, the Michigan Proficiency Test was administered. Table 4 shows the descriptive statistics.

Table 4. *Descriptive Statistics for Michigan Test*

N	Range	Min.	Max.	Mean	Median	Mode	SD	Variance
120	22	62	84	73.31	73	73	6.383	40.732

Those ($N = 62$) students whose scores were equal to or lower than the mean were considered as low proficiency students, and those ($N = 58$) students who scored higher than the mean were assigned to high group. The participants' raw scores on Michigan proficiency test are shown in Table 5. The performances of possessive category types in two low and high language proficiency levels were assessed. Table 6 presents the related descriptive statistics.

Table 6 *Descriptive statistics for Participants' Performances on Three Possessive Categories and Two Proficiency Levels*

Possessive Category	Proficiency Level	Mean	SD	N
Semantic relationship	Low	.6500	.21033	62
	High	.7550	.17508	58
	Total	.7025	.19977	120
Lexical modifier	Low	.5167	.17094	62
	High	.5963	.16104	58
	Total	.5565	.17013	120
Weight & syntactic complexity	Low	.4333	.19456	62
	High	.5028	.20003	58
	Total	.4681	.19955	120

Figure 2 below provides a graphical representation of the results.

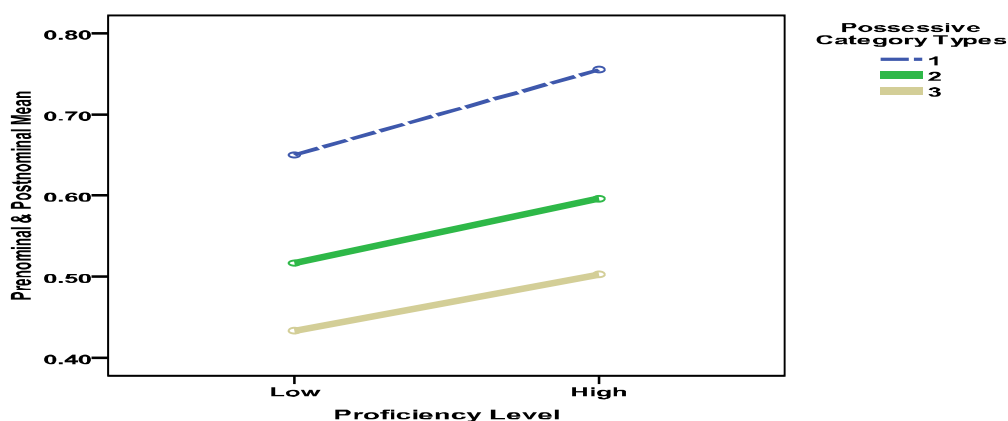


Figure 2 *Prenominal and Postnominal Results for Three Possessive Categories and Two Proficiency Levels*

To see whether learner’s language proficiency has any statistically significant effect on acquisition of prenominal and postnominal genitives, Repeated Measures ANOVA was used with possessive category type as the within-subject variable and proficiency level as between-subject variable.

Table 7

Tests of Between-Subjects Effect of Repeated Measures ANOVA for the Effect of Proficiency Level on Prenominal and Postnominal Genitives

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
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Intercept	119.306	1	119.306	2969.017	.000	.962
Level	.646	1	.646	16.065	.000	.121
Error	4.742	118	.040			

ANOVA results showed a statistically significant effect for level of proficiency as the between-subject variable ($F = 16.06$; $p = .000$, $p < .05$); The purpose of this study was to investigate the acquisition of prenominal and postnominal genitives. This was approached by raising two research questions. The first research question of the present study enquired about whether the lexical class of modifier, semantic relationship, weight and syntactic complexity affect the acquisition of prenominal and postnominal genitives by Iranian EFL learners. The participants' mean score on semantic relationship condition turned out to be .70, lexical class of modifier .55, and weight and syntactic complexity .46. These results suggest that these possessive categories influence the learning of prenominal and postnominal genitives. Therefore, semantic relationship gained the largest value ($M = .70$, $SD = 19$), lexical class of modifier the second ($M = .55$, $SD = 17$), and weight and syntactic complexity the third ($M = .46$, $SD = 19$).

Descriptive statistics for participants' performances on three possessive categories and two proficiency levels indicated that by comparing high and low students' performance on semantic relationship, lexical class of modifier, and weight and syntactic complexity, there existed a significant difference between the mean score of two groups. Since the results showed a statistically significant effect for level of proficiency as the between-subject variable ($F = 16.06$; $p = .000$, $p < .05$) it can be claimed that learners' language proficiency has a significant effect on the acquisition of prenominal and postnominal genitives.

Our study lends support to Kreyer's (2003) finding that examined the effect of lexical modifier, semantic relationship, and weight and syntactic complexity on the choice between prenominal and postnominal genitives. He concluded that *of*-genitive is associated with entities that do not show any traits of personality, whereas *s*-genitive is usually used with modifiers that designate animate entities. Therefore, the result of this study supports Kreyer' (2003) idea that the choice depends on the degree of personality assigned to the modifier or on the degree to which the modifier tends towards human reference. Thus, the *s*-genitive is favored with nouns which denote human beings whereas the *of*-genitive is, apart from some exceptions, usually regarded as the only choice with concrete or abstract inanimate nouns.

The results of a study by Szmrecsányi and Hinrichs (2008) agree with the findings of this research in that among the possessive categories, lexical class of the possessor is a crucial possessive category for predicting genitive variation choice. Hence, the more human and animate a possessor, or the more it conveys the idea of animate things and human activity, the more likely it is to take the *s*-genitive.

The findings of the present paper support Gragmiller's (2010) idea that possessors with final sibilants are much more likely to be used in the *of*-genitive than possessors without a final sibilant. However, he has different ideas about the animacy as he believes that speakers

are much more likely to use the *s*-genitive with animate possessors in speech than in writing, suggesting that the influence of animacy is significantly weaker in writing than in speech particularly noteworthy is the influence of animacy, which is quite strong in speech, slightly weaker in most written genres, and substantially diminished in newspaper texts. It appears that journalists' genitives and genitives of conversational speech are not at all affected by animacy to the same degree.

V. Discussion and conclusion

The results of this study suggested that the trend of the acquisition of prenominal and postnominal genitives was discouraging because there was a remarkable overgeneralization in the acquisition of prenominal and postnominal genitives. Szmrecsanyi and Hinrichs (2008) argue that there is no doubt the instruction of possessive categories such as lexical class of modifier, semantic relationship, weight and syntactic complexity can have a positive influence on the acquisition of them independently. With respect to those three main possessive categories which include lexical class of modifier (proper name, common noun, collective noun, higher animal noun, lower animal noun, personified noun, semi-collective noun, time & measure, non-personal), second, semantic relationship (origin, attribute, time & space, disposal, objective, subjective, partitive, possessive, kinship, descriptive), the last category is weight and syntactic complexity (N_2 +finite clause, N_2 +non-finite clause, N_2 +prepositional phrase, N_1 +finite clause, N_1 +non-finite clause, N_1 +prepositional phrase (N_1 =modifier, N_2 =head noun) impact on students' correct choice directly. The second result of this study is the positive correlation between language proficiency and acquisition of prenominal and postnominal genitives. The higher the students' proficiency, the more correct the choices.

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