

A Cross-Linguistic Transfer Study of Plural Nouns after Numerical Adjectives and Quantifiers in English by Turkish and Persian EFL learners

Hamideh Hamdi Khosroshahi

Anadolu University
Turkey

Abstract

English grammar obligates usage of plural nouns after numerical adjectives and quantifiers, whereas languages like Persian and Turkish require that bare nouns be used in that case. This study investigated sixty EFL learners who were Turkish or Persian native speakers to find out whether or not there was a negative transfer in their interlanguage in terms of using bare nouns instead of plural nouns. Two tests of oral and written form were conducted to collect the data. The results revealed that there is almost no negative transfer in written sentences of the both experimental groups. However their oral test utterances were affected by their related L1 structure and bare nouns were used after numbers or quantifiers.

Keywords: bare noun, EFL, quantifier, transfer, L1

1. Introduction

Language transfer has been a focal point in the field of second language acquisition since 1950s. However, its popularity decreased during 1960s and 1970s since comparative studies received many criticisms due to the counter-evidences researchers found in their studies (e.g. Dulay & Burt, 1974; Hyltenstam, 1977) where learners' errors did not reflect structure differences between the languages. During the recent decades though, SLA researchers have taken a middle ground and have taken more balanced approaches, they believe that transfer can interact with other factors in L2 acquisition (Odlin, 1989). Odlin believes that "transfer is an extremely important factor in second language acquisition" (Odlin, 1989: xi), and it "is the influence resulting from these similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired" (Odlin, 1989, p. 27). Researchers identify two types of transfer, 'negative transfer' and 'positive transfer' which means that the L1 transfer can either facilitate the L2 learning process (positive) or hinders it and be a source of learners' errors (negative). They also claim that language transfer can happen in any part of the language, and it is argued that transfer plays a more crucial part for some language parts comparing with others (e.g., Dulay, Burt, and Krashen, 1982). One such a difference in L1 and L2 can be found in the subsystem of morphemes, which are the smallest grammatical units in a language. Different languages have distinct morphemes, which is very predicative and expected, but there are cases where a morpheme of the second language is absent in learners' native language. It can be predicted that learners may get negatively influenced by this discrepancy; for instance in English after numerical adjectives, the plural marker of {-s} is attached to the nouns (excluding the irregular plural nouns), whereas in languages like Turkish and Persian, there are no plural morphemes attached to the nouns after numerical adjective or any other quantifier. This study focuses on this issue and investigates the influence, if any, that it can have on Persian speaking and Turkish speaking learners of English, and whether it hinders those learners' production concerning pluralizing the nouns after quantifiers and numerical adjectives. This study will answer the following questions:

1. Does lack of plural marking of the nouns after numerical adjectives and quantifiers in Persian influence Persian speaking English learners' negatively, if it does, which production skill gets more affected?
2. Does lack of plural marking of the nouns after numerical adjectives and quantifiers in Turkish influence Turkish speaking English learners' negatively, if it does which production skill gets more affected?
3. Which experimental group, Turkish or Persian, neglect pluralizing nouns after numerical adjectives more?

2. Review of Literature

2.1. L1 Transfer

In the field of second language acquisition, researchers have frequently been attracted to the notion of language transfer (Lado, 1957; Selinker, 1972; Kellerman, 1983; Odlin, 1989), or linguistic interference (Schachter and Rutherford, 1979; Ringbom, 1987), the role of the mother tongue, native language influence (Master, 1987; Mesthrie and Dunne, 1990; Jarvis and Odlin, 2000), and language mixing (Selinker, 1972; Kellerman, 1983).

Studies in the 1970s and 1980s caused the importance of transfer to be more pronounced and researchers like Odlin (1989) claims that the similarities and differences between L1 and L2 can cause transfer. There have been various studies studying the Substratum transfer which means the language learners' native language influence their new language acquisition (e.g. Möhle, 1989; Schachter and Rutherford, 1979; Ringbom, 1987). Mesthrie and Dunne (1990) investigated the learners' behaviors with two or more native languages behaviors in which a specific structure found in one native language was not found in the other(s). These studies have tried to indicate the issue of differences and transfer in all of the linguistic subsystems like phonology, morphology, and even discourse; Smith (2017) for instance studied the order of morpheme acquisition order in English and Spanish acquisition. Jia (2003) studied a group of native Mandarin-speaking children who had immigrated to the United States and investigated the similarities and differences between L1 and L2 plural morphemes.

Considering plural morphemes cross-linguistically, there are languages such as Turkish and Persian, where numeral modifiers that are greater than one, combine with singular (bare) nouns (obligatory Singular), whereas in languages like English, the noun following the numerical modifier greater than one, should be plural (obligatory Plural):

- 1) English
 - a. two car-s
 - b. *two car
- 2) Turkish
 - a. iki araba
two car
"two boys"
 - b. *iki araba-lar
two car-PL
- 3) Persian
 - a. do mashin
two car
"two cars"
 - b. *do mashin-hâ
two car-PL

According to Bale, Cagnon, and Khanjian (2011), in Turkish, nouns with plural morpheme (-lar) is not allowed to be used when it is modified by a numeral like iki ('two') as in 2(b). The same case exists in Persian, as it can be noticed in 3(b), the plural morpheme of (-hâ) is not permitted after do ('two') to be agglutinated to the noun; English, on the other hand, requires plural marking after numerals greater than one.

The reason for this is the fact that in both Turkish and Persian "bare nouns denote the set of all singular individuals as well as any group formed from these individuals" (Bale, Cagnon & Khanjian, 2011:591). In other words as Corbett (2000) claims there are languages with a bare-noun/plural-noun contrast where the bare noun is not semantically singular but rather is unspecified for number, while in English bare nouns are semantically singular. We can see this property in other examples too:

- 4) Turkish
 - a. John çocuk
John boy
"John is a boy"
 - b. John ve Brad çocuk
"John and Brad are boys"

(Bale, Cagnon & Khanjian, 2011: 586)

- 5) Persian
 - a. John pesar-e
John boy-is
"John is a boy"
 - b. John va Brad pesar hastand
John and Brad boys are
"John and Brad are boys"

- 6) English
 - a. John is a boy
 - b. * John and Brad are a boy

(Bale, Cagnon & Khanjian, 2011:587)

So as seen in the above-mentioned examples, ‘çocuk’ and ‘pesar’ can be used as predicates to both singular subjects (4a and 5a) and plural subjects (4b and 5b). In contrast (6b), in English, is an ungrammatical sentence because of the singular nature of the word “boy”. The question here then, which is investigated in this study, is whether this difference affects Turkish or Persian speaking learners of English regarding the use of plural noun after numerical adjectives greater than one.

3. Methodology

3.1. Participants

Sixty EFL learners participated in this study, thirty of whom were Turkish speaking EFL learners studying in Turkey, and the rest were Persian speaking EFL learners that were studying English in Iran. The participants were all high school students whose ages were between 14-17, and were in A2 level (Oxford Placement Test was conducted to assure of the homogeneity).

3.2. Instruments

3.2.1. Written Exam to Elicit Plural Nouns

An exam was designed by the author to elicit plural nouns preceding quantifiers or numerical adjectives; it consists of three pictures and twenty questions, in which students were going to make sentences about the items on the pictures. To make the output more reliable, the instruction part of the test requires the use of prepositions, in other words students were asked about correct usages of the prepositions. However the main purpose was to see if they would use nouns with plural morpheme or not. The test was confirmed by an expert on the EFL field, and a pilot test was conducted on five students prior to the study in order to assure the effectiveness of the test. You can see Appendix 1.

3.2.2 Oral Exam to Elicit Plural Nouns

To elicit plural nouns orally the same pictures from the written exam were used. Pictures were marked for the students so they knew which items they should talk about. The students were told again that the main purpose of the test was to investigate their correct usage of the prepositions.

3.3 Procedure

Prior to the study conduction, the students, both in Turkey and in Iran, were given the Oxford Placement Test, the result of which led to removal of a few students for the sake of homogeneity. On the testing day the learners were told that they were going to be tested to see if they had learnt correct usage of prepositions. The written test was given to them, the duration of which was twenty-five minutes. A week later students were asked to make sentences about the same items on the picture orally and they were recorded individually, which took five sessions, an hour in each session, since it took ten minutes for each student. The same process was followed in Iran to collect the data from Persian speaking students, since there were not enough Persian participants in Turkey. Both written and oral exam had twenty items, each of which had five points. If the students marked the noun with plural morpheme they would get the points.

4. Results

4.1. Research Questions 1&2

Table 1 includes the descriptive analysis of both groups, and as it can be noticed that the mean scores of both Turkish and Persian students in the written exam are high, which can mean there is almost no negative transfer cross-linguistically.

Table 1. Descriptive Analysis of Participants' Writing and Speaking scores

		N	Mean	Std. Deviation	Std. Error
Turkish Students	Writing	30	98.00	3.851	.703
	Speaking	30	81.33	13.126	2.397
	Total	60	89.67	12.751	1.646
Persian Students	Writing	30	99.00	2.754	.503
	Speaking	30	90.67	9.890	1.806
	Total	60	94.83	8.334	1.076

However, considering the speaking test, both means get lower when compared to the mean scores of the written exam.

Table 2. Paired Samples T-test of Learners' Writing and Speaking Exam Scores

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Turkish-student-writing-score - Turkish-student-speaking-score	16.667	12.753	2.328	11.905	21.429	7.158	29	.000
Pair 2	Persian-student-writing-score - Persian-student-speaking-score	8.333	8.442	1.541	5.181	11.486	5.407	29	.000

A paired samples t-test was conducted to see if the difference between written and speaking test scores is significant or not. The results indicate that Turkish students got significantly lower scores in their speaking test ($M=81.33$, $SD=13.126$) than their written test ($M=98$, $SD=3.851$), ($t(29) = 7.158$, $p<.001$); the same result can be seen for Persian speaking participants' speaking ($M=90.67$, $SD=9.890$), and their written test ($M=99$, $SD=2.754$), ($t(29)= 5.407$, $p<.001$). Considering the fact that plural morpheme markers are not used after numbers and quantifiers in Persian and Turkish, it can be interpreted that students, both Turkish and Persian, transfer their mother tongue structure to English negatively in their oral output. Whereas the transfer in the written output is insignificant enough to claim that there is no transfer.

Table 3 shows the correlation between speaking and written tests scores in both of the groups. The results indicate that there is a very weak positive correlation between the mean scores of both test types among Turkish speaking EFL learners ($r=.242$).

Table 3
Correlation between Learners' Speaking and Written Exam Scores

		N	Correlation	Sig.
Pair 1	Turkish-student-writing-score& Turkish-student-speaking-score	30	.242	.197
Pair 2	Persian-student-writing-score& Persian-student-speaking-score	30	.627	.000

However, considering Persian speaking EFL learners, there is statistically significant moderate positive correlation between the test types.

4.2. Research Question 3

Considering the mean scores and correlation scores, it may be interpreted that Turkish speaking English learners get more affected by their mother tongue in terms of pluralizing nouns after numerical adjectives according to their means in both spoken and written forms.

Table 4

Paired Samples T-test of Turkish and Persian Students' Scores in Written and Speaking Tests

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Turkish-student-writing-score - Persian-student-writing-score	-1.000	3.806	.695	-2.421	.421	-1.439	29	.161
Pair 2	Turkish-student-speaking-score - Persian-student-speaking-score	-9.333	16.699	3.049	-15.569	-3.098	-3.061	29	.005

To find out if the differences are significant or not, a paired samples t-test was conducted. The results in table 4 indicate that there is no significant difference between the two groups considering their written test ($t(29) = -1.439$, $p=.161$).

However there is a significant difference between Turkish students ($M=81.33$, $SD=13.126$) and Persian students ($M=90.67$, $SD=9.890$) in terms of their speaking test ($t(29) = -3.061$, $p<.05$). We can answer research question three by stating that only in the case of oral output, Turkish speaking EFL learners rely on their L1 more than Persian students.

5. Discussion and Conclusion

The current study investigated Persian and Turkish speaking EFL learners' written and oral productions to find out whether there was a lack of pluralization morpheme after numerical adjectives and quantifiers, since in Turkish and Persian bare noun is obligatory after numbers and quantifiers, whereas in English it is obligatory to use plural nouns. The results from the written exam indicated that both groups of learners were aware of the difference between their L1 and L2 and there was almost no negative transfer from their L1, which is against the findings of previous studies (e.g. Kubota, 1998; Kaivapalu & Martin, 2007). On the other hand, the obtained data from the oral test confirms the influence of bare noun transfer from their L1, since participants neglected the use of obligatory pluralized noun. It can be speculated that learners have more control over their produced sentences and they have time to reflect on their output while writing. However since in speaking there is much less time to prepare the sentences, their L1 transfer is more obvious, in other words, students may have relied more on their L1 translation to L2, but also have sometimes referred to L2 structure to adjust their utterances but since the time needed for that was very short they could not perform on the speaking test as well as the written one.

The familiarity of the nouns in the test also might have played a role since the bare nouns that were used were the words that were less common for A2 level students (e.g. candle, cushion, etc.). Another finding was also the fact that there was less transfer observed in oral production of Persian students compared with Turkish students. This may be due to the type of the different textbooks. The Persian EFL learners were using 'American English File' which has a plenty of written and speaking tasks to teach plural morphemes, while Turkish students were studying Real World series which do not emphasize pluralization as the former does, for instance checking A1 and A2 textbook there were almost no speaking tasks to practice pluralization. Given that L1 transfer is obvious in Turkish and Persian learners' EFL oral production, Chan (2004) argues that practitioners and teachers should try to make students aware of the existing difference, particularly in the starting steps of interlanguage formation.

6. References

- Bale, A. C., Gagnon, M., & Khanjian, H. (2010, August). Cross-linguistic representations of numerals and number marking. In *Semantics and Linguistic Theory* (Vol. 20, pp. 582-598).
- Corbett, Greville G. 2000. *Number*. Oxford University Press.
- Jarvis, S. & Odlin, T. (2000). "Morphological Type, Spatial Reference and Language Transfer", *Studies in Second Language Acquisition* 22-4: 535-56.
- Jia, G. (2003). The acquisition of the English plural morpheme by native Mandarin Chinese-speaking children. *Journal of Speech, Language, and Hearing Research*.
- Kaivapalu, A., & Martin, M. (2007). Morphology in transition: Plural inflection of Finnish nouns by Estonian and Russian learners. *Acta Linguistica Hungarica*, 54(2), 129-156.
- Kellerman, E (1983). "Now you see it, now you don't" in S. Gass L. Selinker (eds.) *Language Transfer in Language Learning*. Rowley, Mass.: Newbury House
- Kubota, R. (1998). An investigation of L1-L2 transfer in writing among Japanese university students: Implications for contrastive rhetoric. *Journal of Second Language Writing*, 7(1), 69-100.
- Lado, R. (1957). *Linguistics across Cultures* Ann. Arbor: University of Michigan Press.
- Selinker, L. (1972). "Interlanguage." *International Review of Applied Linguistics* 3: 209-231.
- Master, P. (1987). "Generic the in Scientific American", *English for Specific Purposes*, 6/3, 165-186.
- Mesthrie, R. & Dunne, T. T. (1990). "Syntactic variation in language shift: the relative clause in South African Indian English". *Language Variation and Change* 2.
- Möhle, D. (1989). Multilingual interaction in foreign language production. In H.W. Dechert & M. Raupach (Eds.), *Interlingual processes* (pp. 179-194). Tübingen: Gunter Narr Verlag.
- Odlin, T. (1989). *Language transfer: Cross-linguistic influence in language learning*. Cambridge University Press.
- Odlin, T. (2003). Cross-linguistic influence. *The handbook of second language acquisition*, 436-486.
- Ringbom, H. (1987). *The Role of the First Language in Second Language Learning*. Clevedon: Multilingual Matters.
- Schachter, J. & W. Rutherford. (1979). "Discourse Function and Language Transfer." *Working Papers in Bilingualism* 19: 1-12.

Smith, D. (2017). Spanish and English contact and morpheme acquisition. *Normas: revista de estudios lingüísticos hispánicos*, 7(2), 297-302.

Appendix 1

Name: _____ age: _____

Find the things below in the pictures and write a sentence for each: Use a number or many, a couple of, a few, and prepositions (on, in, over, between, under)



1)Plate.....

2)Chair.....

3)Woman.....

4)Piece of cake
.....

5)Candle.....

6)Flower.....

7)Glasses.....



8)Person.....

9) Book
case.....

10)Picture.....

11)Magazine.....

12)Cushion.....

13)Log.....



14)lamp.....

15) sofa
.....

16)Book.....

17) Coffee
Table.....

18)Vase.....

19)Magazine.....

20)Table.....