

The Acquisition of Preposition Stranding and Pied Piping in Interrogatives by Arab Jordanian EFL Speakers

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Abstract

The current study aimed primarily at investigating the acquisition of preposition stranding and pied piping by Jordanian EFL speakers. As secondary purposes, the study attempted to supply convincing accounts for the occurrence of preposition stranding and pied piping based on previous literature carried out on this area of language. The study also sought to show any instances of Null preposition phenomenon as acquiring preposition stranding and pied piping. In collecting the data needed for the study, grammaticality judgment and correction task was employed. The task consisted of 21 sentences; 15 of which were incorrect as a result of absence of prepositions and 6 were correct. 355 Jordanian EFL students from ten universities took part in this study. The results of the study indicated that, there were no statistical significant difference between the use of preposition stranding and pied piping among the respondents. More specifically, the respondents produced nearly equal rates of preposition stranding and pied piping. In addition, the results showed that transfer from Arabic is the best possible account for use of pied piping since both Arabic and English permit pied piping in

interrogative clauses. In contrast, the frequent emergence of preposition stranding can be justified by salience factor. Lastly, the results revealed a strong evidence for the presence of Null preposition in the language of Jordanian EFL speakers.

Keywords: Preposition stranding, Pied piping, Transfer from Arabic, Salience

1. Introduction

It has been observed that, two options are available in all languages with regard to extraction constructions involving object of a preposition; namely preposition stranding and pied piping (Haegamann, 1995). The availability of preposition stranding undergoes cross-linguistic variation, while pied piping is present in all languages studied up to now. In English language, preposition stranding and pied piping are permissible and occur mainly in the constructions of relative clauses and interrogatives (Sadighi, Parhizgar and Saadat, 2004). Preposition stranding is mostly used in spoken English. In contrast, pied piping is a characteristic of the formal style of English. It is argued that pied piping is licit in all languages that permit preposition stranding but not vice versa. This is best interpreted in what is termed subset principle. The so-called principle holds that pied piping is a real subset of preposition stranding due to the fact that all languages include the construction of preposition stranding present pied piping, whereas languages display pied piping do not necessarily include preposition stranding (Perpinan, 2008).

Many researchers have attempted to provide a definition for preposition stranding. One of the working definitions was advanced by Denison (1998, p. 220) who pointed out that preposition stranding is “the syntactic phenomenon whereby a preposition is left in a deferred, stranded position at or near the end of a clause without any immediately following object”. To shed more light on the occurrence of preposition stranding in English language, let us have a close look at the following two sentences. The first sentence shows preposition stranding in relative clauses, while the second one depicts preposition stranding in interrogative clauses.

- 1) The university *which* Smith graduated *from* was great.
- 2) *Which* university did Smith graduate *from*?

In the above two sentences, the preposition is left in an orphaned or delayed position without combining with any object. In sentence 1, the relative pronoun *which* (the presumable object of the preposition *from*) was fronted to the beginning of the sentence through wh- movement, leaving the preposition *from* stranded near the end of the sentence. In a similar vein, in sentence 2 the preposition *from* remained stranded at the end of the interrogative clause after the object ‘*which*’ moved to the front position of the sentence. On the other hand, pied piping takes place when a preposition together with its immediate object move to the initial position of the sentence. Sentences 3 and 4 below exemplify pied piping in relative clauses and interrogatives.

- 1) The pen *with which* Smith wrote the letter was blue.
- 2) *In which* country do you stay?

In sentences 3 above, the whole prepositional phrase; the preposition *with* alongside its immediate object (relative pronoun *which*) moved to the front position of the sentence. Similarly, in sentence 4 the preposition *in* together with its object (which) were fronted through WH –movement.

Contrary to English language, Arabic prohibits preposition stranding and limits pied piping to interrogative clauses. In Arabic, extraction constructions involving object of a prepositions are disallowed unless they are followed by resumptive pronouns such as *ha*, *hu*, *hi*, *hun* etc, which is prohibited in English. Thus, if a resumptive pronoun is provided, then the sentence becomes grammatical as illustrated in examples 5 and 6 below.

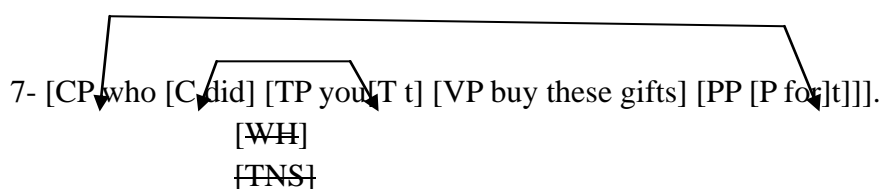
1- ?Arajulu ?la ði ji?tu ma?a *hu* ?ami.

- The man with whom I came was my uncle.

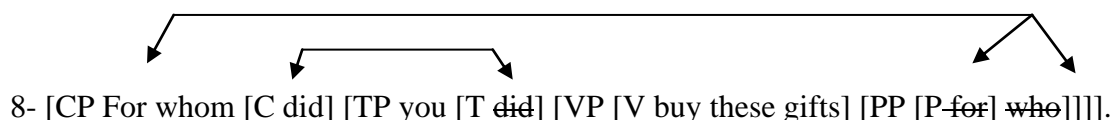
6- Ma ?la ði tarsumu bi *hi*?

- What are you drawing with?

In Arabic, the resumptive pronoun *hu* must be added after the preposition *ma?a* in order make the sentence licit as indicated in sentence 5 above. In the same manner, in sentence 6 the preposition *bi* must be accompanied with the resumptive pronoun *hi*, otherwise the sentence is malformed. Syntactically speaking, in English language preposition stranding and pied piping are derived through convergence principle. According to Radford, (2004, p. 216) “A head which attracts a constituent containing a feature [F] attracts the movement of the smallest accessible constituent containing [F] which will lead to a convergent (i.e. well-formed)”. Based on convergence principle the occurrence of preposition stranding involves two primary movements. First, the affixal [TNS] feature of C attracts the auxiliary *did* to move from T position to C as shown in sentence 7 below. Second, the WH features of C attract the smallest constituent having WH features. Thus, the smallest constituent is the wh word *who* which moves to C position leaving the preposition *for* orphaned at the end of the sentence.



Having reported how preposition stranding is derived according to convergence principle, it is fitting to reveal how pied piping is formed based on the same principle. Unlike preposition stranding which requires only movement of the object of the preposition, in case of pied piping the whole prepositional phrase moves to C position as shown in sentence 8 below.



In sentence 8, both the preposition *for* alongside its object the relative pronoun *who* moved to the initial position of the sentence. In light of the aforementioned discussion, the present research seeks to examine the acquisition of preposition stranding and pied piping in interrogative clauses by Jordanian EFL speakers. In addition the study attempts to provide

satisfactory accounts for the acquisition of these language constructions.

2. Objectives of the Study

The present study aims at achieving the following three objectives:

- i) To determine any statistical significant difference between the production of preposition stranding and pied piping in interrogatives by Jordanian EFL speakers.
- ii) To provide satisfactory accounts for the production of preposition stranding and pied piping by Jordanian EFL speakers.
- iii) To examine any evidence for the emergence of null-preposition when producing instances of preposition stranding and pied piping.

3. The Research Questions

The present research study seeks to answer the following research questions:

Q1: Are there any statistical significant difference between the production of preposition stranding and pied piping in interrogatives by Jordanian EFL speakers?

Q2: What are the possible accounts for the production of preposition stranding and pied piping by Jordanian EFL speakers?

Q3: Will Jordanian EFL speakers manifest an evidence of null-preposition when producing instances of preposition stranding and pied piping?

4. Literature Review

Previous studies conducted on the acquisition of preposition stranding and pied piping have shown conflicting findings. Some studies revealed that EFL speakers preferred using preposition stranding over pied piping (Bardovi-Harlig 1987; Sadighi, Parhizgar and Saadat, 2004), while other studies reached the conclusion that pied piping was more common among the respondents (Van Buren and Sharwood Smith, 1985). Some more studies displayed that, no preference of one construction over another was evidenced (Makvandi and Gorjian, 2014; Salehi, 2009). More specifically, the respondents used both preposition stranding and pied piping on an equal footing.

Mazurkewich (1985) investigated the acquisition of preposition stranding and pied piping in interrogatives by French and Inuktitut speakers of English. For the purpose of collecting the required data, a question formation test was used. The researcher came to the conclusion that, French EFL speakers accepted pied piping more readily than preposition stranding, while Inuktitut speakers of English used more instances of preposition stranding than those of pied piping. Acquiring pied piping more readily than preposition stranding by French EFL speakers can be explained by transfer from L1. This is because French allows pied piping and prohibits preposition stranding. With regard to Inuktitut speakers who preferred preposition stranding over pied piping, salience can be acceptable justification, because preposition stranding is much frequently used in English and Inuktitut language does not have prepositions at all.

Bardovi-Harlig (1987) replicated Mazurkewich's study, expanding the scope of investigation to the acquisition of preposition stranding and pied piping in both interrogatives and relative clauses. The sample of the study was comprised of 95 respondents speaking 15 different languages. The findings of the study revealed that, the respondents whose L1s do not have preposition stranding apparently preferred using preposition stranding over pied piping. Bardovi-Harlig attributes such result to salience of preposition stranding. The findings also indicated that, the respondents showed instances of null-preposition in both relative clauses and interrogatives. However, the occurrence of null- preposition is mitigated with the increase in the proficiency level of the participants. The researcher ascribed the emergence of null- preposition to mere ignorance of the subcategorization knowledge for the verbs that accompany prepositions.

Van Buren and Sharwood Smith (1985) conducted a study on the acquisition of preposition stranding and pied piping by Dutch speakers of English. Dutch limits the use of preposition stranding to R- pronouns which are equivalent to relative pronouns in English such as *who* and *which*. The study sought to achieve two objectives; 1- Determining the role that Universal Grammar UG plays in the process of second language acquisition. 2- Determining the role that L1 plays in the acquisition of L2. For the purpose of obtaining the data needed to achieve the objectives of the study, a series of written tasks administered to the respondents. The findings of the study showed that, the respondents used both preposition standing and pied piping alternatively, but they exhibited general inclination toward pied piping over preposition stranding. The study also showed some instances of transfer of R- pronoun from Dutch when producing preposition stranding. In other words, the responses of the participants to the tests utilized in the study contradicted the salience of preposition stranding in English. Such findings clearly supported language transfer position.

Sadighi, Parhizgar and Saadat, (2004) examined the production of preposition stranding and pied piping among Iranian EFL speakers. In Persian preposition stranding is illicit; in contrast pied piping is permitted. The researchers utilized grammaticality judgment and correction task with the aim of gathering responses from the participants. The results of the study denoted that, Iranian EFL speakers produced instances of preposition stranding more commonly than pied piping despite the non-presence of preposition stranding in Persian. The researchers attributed the overuse of preposition stranding on the part of the respondents to salience factor. Furthermore, the results revealed a robust evidence for null preposition as acquiring preposition stranding and pied piping.

Salehi, (2009) carried out a study on the acquisition of preposition stranding and pied piping by Iranian EFL speakers. The participants in the study consisted of thirty MA students of non-English majors distributing over three proficiency levels; advanced, intermediate and low level. The researcher found that, advanced students showed general inclination toward using pied piping over preposition stranding. The best account for such result is transfer from L1 since Persian allows pied piping and forbids preposition stranding. On the contrary, intermediate students accepted preposition stranding more easily than pied piping, which is explained by salience of preposition stranding in English. As for low level students, they used both constructions equally.

A recent study implemented on these constructions of language by Makvandi and Gorjian, (2014). The study aimed at determining any differences between Persian monolingual speakers and Iranian-Arabic speakers of English respecting the use of preposition stranding and pied piping. The participants were composed of 45 MA students and 65 BA students. The researcher arrived at the conclusion that, no significant differences were attested between MA monolinguals and bilinguals with respect to the acquisition of preposition stranding and pied piping. Moreover, BA Bilinguals showed more instances of pied piping than monolinguals, while BA monolinguals and bilinguals used preposition stranding equally.

In sum, the aforesaid studies revealed that language transfer and salience are the most determining factors in the acquisition of preposition stranding and pied piping. The two constructions were used alternatively by the respondents. Some studies depicted that, preposition stranding was the preferred portion, while others revealed that pied piping was more frequent. Some more studies found that, the respondents produced the two constructions equally at particular levels of proficiency. That is to say, the preference of preposition stranding over pied piping or vice versa is based on the presence of these two constructions in the native language and the quantity of input received by EFL speakers. The importance of the present research paper stems from the fact that, no previous studies have addressed the issue of preposition stranding and pied piping among Jordanian EFL speakers. To the best of the researcher's knowledge, previous research carried out on the acquisition of these language constructions by EFL speakers in other Arab countries are very scant. Therefore, researching the acquisition of preposition stranding and pied piping is an urgent and pressing issue at the present time. This can help in understanding the difficulties encountered by Jordanian speakers of English as acquiring these constructions as well as gaining more insight into the factors influencing such acquisition process.

5. Methodology

This section includes the following sub-titles; sample of the study, research instrument and validity and reliability.

5.1 Sample of the Study

In selecting the participants for the present study, cluster random sampling procedures were utilized. Ten universities out of twenty four were chosen at random. Then, a total of 355 English majors were selected randomly from these ten universities. The selected sample from each university was proportional to the population of students at that university. The sample was comprised of both males and females ranging from first to fourth academic years. All the participants have studied English as L2 for twelve years before entering the university. Thus, they have received approximate exposure to English as L2.

5.2 Research Instrument

For the purpose of collecting the data needed for this particular study, the researcher employed grammaticality judgment and correction test. The test consisted of 21 sentences; fifteen of which were incorrect due to absence of prepositions and 6 were correct. The respondents were required to perform to main tasks. First, judging each sentence as correct,

incorrect or not sure. Second, correcting the malformed sentences by inserting a preposition at the right place. Adding a preposition at the front position of the sentence was regarded as pied piping, whereas adding the preposition at the end of the sentence was considered as preposition stranding. Grammaticality judgment and correction test was acknowledged by many researchers as a reliable tool for assessing the acquisition of preposition stranding and pied piping (Di, 2006; Rezai, 2006; Sadighi, Parhizgar and Saadat, 2004).

5.3 Validity and Reliability of Research Instrument

With the aim of assessing the validity of grammaticality judgment and correction task, some experts in linguistics at Mutah University in Jordan were asked to give their feedback on the suitability of test items to measure the acquisition of preposition stranding and pied piping. Some items were removed and others inserted upon the experts' suggestions. As for reliability of the test in question, Cronbach-Alpha was employed. The results indicated that, the test was found to be reliable with Cronbach-Alpha value 0.922.

6. Findings and Discussion

This particular section reveals the findings of the study based on the three research questions. The data obtained from the respondents were analyzed by using the Statistical Package of Social Science (SPSS). The analysis of results starts with research question one and concludes with question three as displayed below.

6.1 The Acquisition of Preposition Stranding and Pied Piping in Interrogatives

The first research question formulated in this study was "Are there any statistical significant difference between the production of preposition stranding and pied piping in interrogatives by Jordanian EFL speakers"? To answer research question one grammaticality judgment and correction task was used. The results pertinent to this question are depicted in Table 1 below.

Table 1. Proportion of preposition stranding, pied piping and null prepositions in interrogatives

Structure Type	Frequency	Percentage
Preposition Stranding	111	31.38%
Pied Piping	118	33.18%
Null Preposition	126	35.44%

Table 1 above reveals that, the total percentage for the production of preposition stranding in interrogatives is 31.38%. In contrast, the total production of pied piping is 33.18%. These results indicate that Jordanian EFL speakers showed slight preference for the use of pied piping over preposition stranding. With respect to frequency of use, on average 111 respondents out of 355 used preposition stranding, whereas 118 participants produced instances of pied piping. For the purpose of determining whether the difference in the use between preposition stranding and pied piping is statistically significant or not, independent sample T- test was employed. The results are displayed in Table 2 below.

Table 2. Independent sample t- Test for the use of preposition stranding and pied piping in interrogatives

	Mean	Standard Deviaion	t- value	Df	P- value
Preposition pied piping	2.1627	.73282	.815	285	.416
Preposition stranding	2.0909	.74162			

Statistically speaking, in order to count the difference between two given variables statistically significant, P-value must be less than 0.05. In this regard, the P-value calculated for the purpose of this question was greater than 0.05 ($t = .815$, $df = 285$, $p = .416 > 0.05$). These results indicate that, the difference between the use of preposition stranding and pied piping was found to be insignificant. In other words, Jordanian EFL speakers used pied piping and preposition stranding in interrogatives at approximate rates. The results of question one are in agreement with the findings of some previous studies (Salehi, 2009; Makvandi and Gorjian, 2014). These studies depicted that, the respondents produced equal instances of preposition stranding and pied piping at some levels of L2 proficiency.

6.2 Possible Explanations for the Production of Preposition Stranding and Pied Piping

The second research question was “What are the possible accounts for the production of preposition stranding and pied piping by Jordanian EFL speakers?”

Two possible explanations were presented by previous literature on the use of preposition stranding and pied piping; namely transfer from mother language and salience of second language patterns. Language transfer is defined as “the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired” Odlin (1989, p. 27). Whereas, Saliency is known as the “the availability of input” (Gass and Selinker 2008, p. 145). More precisely, salience is used in referring to the quantity of input received by EFL speakers concerning specific L2 grammatical pattern. Let us start with the use of preposition stranding. Instances of preposition stranding produced by the respondents cannot be attributed to L1 transfer because preposition stranding does not exist in Arabic. The only possible account is salience of preposition stranding in English. Preposition stranding is more commonly used in spoken English than pied piping (Carranza, 2009). More precisely, the high production of preposition stranding by Jordanian EFL speakers can be ascribed to the fact that, the quantity of input received by the respondents regarding preposition stranding when acquiring English is relatively abundant. On the other hand, the high use of pied piping among Jordanian EFL speakers stemmed from Arabic language transfer. In other words, pied piping construction is present in both Arabic and English (Makvandi and Gorjian, 2014), therefore it is expected that the respondents resorted to the knowledge of Arabic when producing pied piping in English. To sum up, these results denote that, no one factor is dominant over another, both language transfer and salience work in tandem in the acquisition of preposition stranding and pied piping.

6.3 The Emergence of Null Preposition

The third research question posed in this piece of study was “Will Jordanian EFL speakers manifest an evidence of null-preposition when producing instances of preposition stranding and pied piping?”

Null preposition is used in referring to the case where the respondents do not provide any preposition either at initial position of the sentence or at the end when acquiring preposition stranding and pied piping. A close look at Table 1 above reveals that, the percentage of Null preposition among Jordanian EFL speakers is 35.44%, which is relatively high. These results show a strong evidence for the occurrence of Null prepositions in the language of the respondents. Emergence of Null preposition supports the premise that, the respondents do not have the subcategorization knowledge for the English verbs involving object of a preposition. In other words, absence of a prepositions when composing a sentence on preposition stranding or pied piping demote that the respondents are unaware of the fact that some English verbs require a preposition as a complement. The results of this research question are consistent with the results of some studies conducted by (Bardovi-Harlig, 1987; Klein, 1995a; Sadighi, Parhizgar and Saadat, 2004; Salehi, 2009). The aforesaid studies proved a strong evidence for the presence of Null preposition in the language of the respondents.

7. Conclusion

The present study aimed at investigating the acquisition of preposition stranding and pied piping by Jordanian EFL speakers. To collect the data required for this particular study, grammaticality judgment and correction task was utilized. A total of 355 respondents from 10 universities in Jordan took part in the study. The study arrived at the following three results. First, there was no statistical significant difference between the use of preposition stranding and pied piping by Jordanian EFL speakers. The total percentage for the production of preposition stranding was 31.38%. Conversely, the total percentage of pied piping was 33.18%. Second, two chief factors were responsible for the occurrence of preposition stranding and pied piping; that is transfer from Arabic and salience. Language transfer accounts for the production of pied piping as both English and Arabic allow this language construction. While, salience factor explains the frequent use of preposition stranding by the respondents. Third, the respondents' answers showed a robust evidence for the occurrence of Null preposition phenomenon. The total percentage for the production of Null preposition was 35.44%.

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