Foreign Language Processing of English Regular and Irregular Past Tense Verbs by Arabic-Speaking EFL Children

İншомовне засвоєння англійських правильних і неправильних дієслів минулого часу арабомовними дітьми, які вивчають англійську мову як іноземну

Abdel Rahman
Mitib Alhaineh
Ph.D. in Linguistics, Assistant Professor of English Language and Linguistics
Scopus Author ID: 57168901500
E-mail: a.altakhaineh@ju.edu.jo
https://orcid.org/0000-0001-7605-2497

Rozan Alhloul
MA in Linguistics
English Language Teacher
E-mail: rozanabdullah@yahoo.com
https://orcid.org/0000-0001-6891-4333

Aseel Zibin
Ph.D. in Linguistics
Associate Professor of English Language and Linguistics
Scopus Author ID: 57168905900
E-mail: a.zabin@ju.edu.jo
https://orcid.org/0000-0003-2509-064X
ABSTRACT

**Purpose.** This paper examines whether irregular past verbs are acquired earlier than regular past verbs by Arabic-speaking EFL children.

**Methods and procedure.** Ninety fifth graders were tested using pictures representing 20 regular and 20 irregular past tense verbs through a sentence completion task. An introspective session was conducted with 70 children following the administration of the tests in order to determine the areas of difficulty.

**Results.** The results mainly revealed that there is a statistically significant difference between regular and irregular verbs in favour of regular verbs. This suggests that the children learn regular forms prior to irregular ones contradicting the Natural Order Hypothesis and providing credence to the two Interlanguage strategies, namely, the L2 Overgeneralization of Alternative L2 Category Strategy and L1 Transfer Strategy. The children’s failure to produce the irregular form of the verb can be ascribed to the default system that they rely on, which is the computation system rather than the storage system. Thus, Arabic-speaking EFL children apply regular inflection of -ed whenever their memory fails to produce an irregular verb form.

**Conclusions.** This study has demonstrated that Arabic-speaking EFL children do not follow the same sequence of acquisition as that exhibited by first language learners in acquiring the regular and irregular simple past forms. These learners acquire the regular past tense forms prior to the irregular ones contradicting the Natural Order Hypothesis. Due to the lack of irregularities in their first language, these learners apply the regular inflection rule to novel or unfamiliar verbs without sometimes considering the possibility of an existent irregular form that needs to be retrieved from memory. This also provides credence to two Interlanguage strategies, namely, the L2 Overgeneralization of Alternative L2 Category Strategy and L1 Transfer Strategy. More studies that investigate the sequence of acquisition of other types of morphemes by Arabic-speaking EFL children are needed to explore the effect of L1 and other factors such as the learning situation on the acquisition of English morphemes.

**Key words:** Second language acquisition, inflectional morphology, language teaching, regular and irregular verb forms.
Introduction

Children learn their first language very early in life and they usually become fluent in this language first. After a period of producing bare verbs even when they describe events that took place in the past, (e.g. I drink milk) (see Wexler, 1998; Paradis & Crago, 2001), around the age of 2 years old, English-speaking children start using past tense morphemes on verbs (Brown, 1973; Philips, 1995). The majority of the verbs which English-speaking children produce at this age are irregular (e.g. sang), interestingly, according to Marcus et al. (1992) children make very few errors in this process of production. Following that initial stage, children start to produce many more regular verbs and they produce some errors in using past tense morphology (Marcus et al., 1992). Thus, according to Brown (1973), English-speaking children, acquire irregular past tense inflection before its regular counterpart. On the other hand, the acquisition of irregular verbs by EFL learners has been strongly connected with the notion of overgeneralisation. This is because these learners overgeneralise the predictable rule of English regular verbs (i.e. adding -ed to the verb stem) to irregular verbs producing errors such as *eated. Kielar, Joanisse and Hare (2008) divide irregular past tense verbs into main five categories: some verbs involve no change at all (e.g., cut-cut), other verbs involve the addition or change of a final consonant (e.g., burn-burnt), a stem vowel change (e.g., win-won), some combination of the two (e.g., catch/caught), or even complete suppletion (e.g., be-was/were). It can be noted that these verbs are characterised by varying degrees of unpredictability. However, these verbs are heard frequently by the child’s parents or caregivers in an English-speaking environment; hence, through relying on brute-force memory, English-speaking children soon grow to be familiar with their form relying on their memory (Steven & Alan, 1994). Compared to EFL children, these verbs are not frequently mentioned in their surrounding environment, and hence acquiring them could be more challenging. Another problem facing these non-English speaking children is the interference of the dominant rules. That is, Kuczaj (1977) suggests that once a child achieves an adequate amount of control of the regular past tense, he/she will begin to produce two types of errors related to the irregular past tense form; the first is that the child will either add the -ed
suffix to an irregular generic verb form such as *eated*; and the second is to attach the suffix to the past tense form itself (e.g. *ated*). In addition to this rule confusion, first language interference can also contribute to the EFL learners’ inability to master the English irregular verbs (see Denizer, 2017). Thus, it could be interesting to explore whether having a language such as Arabic as L1 which is typologically unrelated to English can have an effect on children’s acquisition of the English irregular verbs. Against this background, this study aims to examine the acquisition of regular and irregular past tense form by Arabic-speaking EFL children. In addition, the study investigates whether these children follow the same order of acquisition of regular and irregular verbs as that of children who speak English natively.

**Theoretical Background**

**Natural order**

An understanding of second language acquisition improves the ability of teachers to teach the linguistically and culturally diverse pupils in their classrooms (Yang, 2008). Therefore, a basic knowledge of the main theories of second language acquisition is required for classroom teachers, and it affects their ability to present appropriate instructions to students. Stephen Krashen has made significant contributions to the field of language acquisition (Liu, 2015). Lightbown and Spada (2006) argue that Krashen’s ideas are considered a crucial source of ideas for research studies in second language acquisition. Krashen (1985) introduces the Monitor Theory which consists of main five hypotheses: The acquisition-learning hypothesis, the natural order hypothesis, the monitor hypothesis, the input hypothesis, and the affective filter hypothesis. Unlike many earlier theories related to language learning and acquisition, Krashen’s theory has been introduced in a simple language to be understood by the majority of teachers, and it relied on examples from classroom practice (Abukhattala, 2013). In the early 1980s, Krashen proposed that there is a predictable “natural order” in the process of language acquisition (Lichtman & VanPatten, 2021). For example, Krashen finds that in English plural -s and progressive -ing are acquired by English-speaking children before a third person -s on verbs (Richards & Schmidt, 2013). Sepassi and Aryadoust (2007) discuss that Krashen proposes that there is no obvious difference, concerning the order of acquisition of grammatical morphemes, between...
students who acquire their second language in the classroom and those who acquire it in an informal context. Thus, according to Krashen, the environment may not have an effect on the acquisition of L2 linguistic forms.

From another perspective, Abukhattala (2013) explains that some structures can be easily acquired before others, and the order of difficulty is not necessarily associated with the complexity or simplicity of structure. That is to say, the order of acquisition is not dependent on the ease with which a certain language feature can be taught. For example, in English, some grammatical morphemes such as the third-person “-s” (“she swims”) are considered easy to teach in a classroom, but they are usually fully acquired at late stages of language acquisition.

The Natural Order Hypothesis is mainly based on an important ESL study by Dulay and Burt (1974), which reveals that some grammatical morphemes are predictably learned before others during the acquisition of a second language. Hawkins (2019) discusses that the predictable order of morphemes has become a fact in second language acquisition. Abukhattala (2013) states that “The Natural Order Hypothesis” sheds light on students’ mistakes: students generally make developmental errors due to using a structure that has not been fully acquired. He adds that students can utilise their learned competence in order to alter their production. As a result, they can correct mistakes when they appear in their sentences. Based on that, presenting more input including the targeted structure can be an effective way to correct students’ mistakes.

The Natural Order Hypothesis disregards the fact that there is an influence of the native language on the acquisition of a second language. Many studies have investigated if there is a predictable order of acquisition in acquiring certain grammatical morphemes, and whether L1 plays a role in the acquisition process. Interestingly, the results are significant but divergent and reveal many implications related to first and second language acquisition (Ipek, 2009). Some studies find that a second language is acquired by second language learners in different orders depending on their first language. Consequently, it is not necessary that second language learners acquire grammatical morphemes in a predictable order. McLaughlin (1987) indicates that some studies provided pieces of evidence revealing that the learner's first language has a clear influence on acquisitional sequences which either modifies
their development or slows it. He also argues that significant individual variation in the way in which learners acquire a second language, such as different performance, learning, and communication strategies, obscure the acquisitional orders for specific constructions. As a result, McLaughlin (1987) believes that “Krashen’s claim that an invariant natural order is always found is simply not true” (p. 33).

To sum up, the Natural Order Hypothesis has been significant in the field of second language acquisition, but it has not been without criticism. Another theory takes into account the influence of L1 on the acquisition of L2 and is considered very influential to account for the processes of second language acquisition, namely, the Interlanguage Theory. This theory is reviewed in the following section.

**Interlanguage Theory**

The concept of Interlanguage was first introduced by Selinker (1972) to draw attention to the notion that the learner’s language can be seen as a distinct language variety with its own special rules and characteristics (Jie, 2008). Relying on the theory, during the process of learning a second language, learners construct a system for themselves which is considered different in some ways from the systems of both their first language and second language (Khansir, 2012). The new system which the second language learners establish for themselves is called Interlanguage. According to Tarone et al. (1976), second language learners seldom conform to what one assumes native speakers of the target language produce. Selinker (1972) suggests that the strong evidence for Interlanguage is found in the term “fossilizations”, that is, syntactic, morphological and phonological characteristics in the speech of second language learners that are different from the target language rules even after many years of exposure to, and instruction in, the target language. Selinker (1972) introduced five main processes that shape the Interlanguage behaviour and cause fossilized production of a second language; they are: Language Transfer, Transfer of Training, Strategies of Second Language Learning, Strategies of Second Language Communication and Overgeneralization of the Target Language Linguistic Materials. Odlin (1989) described language transfer as the influence resulting from both similarities and differences between the native language and the target language. Selinker (1969) regarded language transfer as a widely known phenomenon for all researchers and linguists.
since it is problematic. This is because the structural principles and rules of the learners’ first language are automatically moved to the second language they intend to learn. Transfer of training can be viewed as the elements of the Interlanguage resulting from specific characteristics of the training process employed to teach the second language. Selinker (1972) assumed that many errors in the Interlanguage process may be a result of the process of training. Strategies of second language learning process is explained as the elements of the Interlanguage resulting from a certain approach to the material to be acquired. Strategies of second language communication are the elements of the Interlanguage resulting from certain ways individuals learn in order to communicate and interact with native speakers of the target language. According to Selinker (1972), the five main processes are relevant and can be used to help clarify how Interlanguages are constructed. Jacobvits (1969) explained that the second language learners over-generalize what they have already acquired in the second language and employ it in new situations. It might sometimes be useful but usually cannot be employed and lead to many mistakes. Selinker’s theory of Interlanguage presented a theoretical base for explaining second language acquisition as a mentalistic process and it is used as a base for a great deal of studies into the Interlanguage of learners. Krashen’s theory has also changed many researchers’ perceptions of language teaching and has provided new notions for communicative language teaching. The Interlanguage theory is adopted in this study to account for the acquisition of regular and irregular past forms by Arabic-speaking EFL children. The next section introduces another theory strongly related to the acquisition of these verb forms.

**The Words-and-Rules Theory**

In this theory, it is argued that the regular-irregular distinction can be regarded as an epiphenomenon of the design of the human language faculty (Pinker & Ullman, 2002). That is, there is a distinction between the lexicon and grammar which is recognised by the majority of traditional language theories. The former is a subdivision of memory consisting of, among other things, the thousands of arbitrary sound-meaning pairings which underlie the morphemes as well as simple words. The grammar, on the other hand, is a system of productive combinatorial operations which combine morphemes and simple word to construct complex
words, phrases and sentences. Based on the above, irregular forms are words which can be acquired and stored like other words, yet these forms have grammatical features such as the past tense which is incorporated into their lexical entries. Conversely, regular forms can be productively produced through applying a rule just like phrases and sentences (Pinker & Ullman, 2002). Thus, if there is a stored inflected form of verb already in memory, the application of the rule to that verb is blocked (e.g. brought blocks bringed). By default, elsewhere, the rule applies concatenating -ed with V and hence can inflect any word which is categorised as verb (V) (Pinker & Ullman, 2002: 456). Therefore, according to Pinker and Ullman (2002), irregular forms do not acquire ‘an exception module’; they emerge as a result of an overlap between the two subsystems in their expressive power (i.e. a given combination of features can be expressed via rules or words). This suggests that either a rule-product (regular) or a word (irregular) can satisfy the demand of a semantic or syntactic representation which stipulates that a feature, e.g. past tense, can be overtly expressed. Unlike classical theories of generative phonology (see Halle & Marantz, 1993) in which it is argued that irregular forms are generated through affixing an abstract morpheme to the stem and applying rules that change the stem’s phonological composition and unlike the Rumelhart-McClelland model (RMM) which suggests a single pattern associator with neither a combinatorial apparatus nor lexical entries (see Elman et al., 1996), the words-and-rules theory takes Jackendoff’s approach (lexicalist theories) in which several morphological phenomena are neither fully systematic and productive nor arbitrary. In this approach, there are lexical redundancy rules that do not freely generate new forms, rather they allow sporadic generalizations by analogy and capture patterns of redundancy in the lexicon. This theory is adopted in this study to examine whether Arabic-speaking EFL children apply regular inflection whenever memory fails to produce a form for that category.

**Literature Review**

The acquisition of past tense forms has been examined in a number of studies (e.g. Shirai, 2003). It is argued that the majority of ESL learners acquire specific grammatical morphemes in a predictable sequence (Freeman, 1975). An extensive amount of knowledge about the morphologic development of children was provided by
Brown’s (1973) highly significant study of Eve, Adam and Sarah. The participants acquired the English language as their mother tongue. Depending on the collected data from these three participants, Brown developed the order of morphological development for 14 different grammatical morphemes. In fact, Brown (1973) found that irregular past tense verbs are acquired earlier than regular past tense verbs in the developmental sequence.

In an early study, Kuczaj II (1977) examined the natural speech of fifteen children. The participants’ speech was analysed for the correct use and incorrect use and non-use of the verbal inflection of the past tense verb. The researcher investigated a number of hypotheses. Firstly, it was hypothesized that the irregular past tense form is acquired early in comparison with the regular past tense form. Secondly, the two kinds of overgeneralization errors (wented vs. goed) have a strong acquisitional relevance. Thirdly, partial regularity can block overgeneralization errors. Finally, the regular rule for using -ed is highly possible to be overgeneralized to irregular verbs such as shut, put and hit than to other irregular verbs. The results revealed that the collected data presented partial support for some hypotheses such as the second and third ones. However, the data did not provide support for the first or fourth hypotheses.

One study was conducted by Shipley, Maddox and Driver (1991) in order to obtain a preliminary view of participants’ acquisition of 49 irregular verbs. The sample consisted of one hundred and twenty children aged between 3 and 9 years old. The researchers asked the participants to respond to a picture of the target verb in a sentence completion task. The results revealed that some irregular verbs (e.g., cut) were correctly produced by the participants who were three years old. However, the children whose age was nine years old have not mastered other irregulars (e.g. bent).

Shirai (2003) conducted a study on the acquisition of English past-tense verbs in order to examine the validity of the single and dual mechanism models, shedding light on regular-irregular dissociation as well as focusing on semantic bias. The researcher attempted to combine the two different lines of research in tense-aspect acquisition—the semantic bias hypothesis and the regular-irregular debate by reanalysing and discussing previous studies. The researcher presented two different points of view. On the one hand, it was suggested that regular and
irregular verbs were controlled by semantics in L1 acquisition. That is to say, using past tense forms early is constrained to achievement verbs (regular or irregular). On the other hand, a number of L2 acquisition studies revealed semantic bias for regular past-tense forms in particular (e.g., Rohde, 1996).

Mourssi (2013) investigated the past verbs twelfth-graders acquire first, regular or irregular verbs, using two different teaching methods of writing: Describing the Traditional Product Writing (TPW) and Describing the Innovated Writing Process (IWP). The sample consisted of 74 male Arab learners of English studying in a school in the Sultanate of Oman. The researcher conducted a quantitative analysis for all the simple past verbs used by the learners in three chronological written texts collected in the experiment. The findings revealed that Arab learners of English acquire the irregular simple past verbs earlier in comparison with the regular past forms in the two different methods of teaching writing.

In the same year, Mourssi (2013) also examined the influence of L1 on learning L2 grammar, particularly the acquisition of the simple past. Mourssi explained that the simple past tense used by L2 learners have frequently originated in L2 and sometimes in L1. The sample consisted of 74 Arab learners of English and lasted for four months. The researcher conducted a detailed analysis of the acquisition of the simple past tense in 222 written texts produced by these learners. Written texts were collected chronologically from participants at three stages. Quantitative analysis revealed that there is an influence of Arabic on learning the linguistic items of English in general and on mastering the simple past in particular.

The sample of the last two studies conducted by Mourssi (2013) consisted of 74 Arab learners, whose ages ranged between 16 and 18 years old. The participants have learnt English as a foreign language for eight years attending approximately five sessions weekly. On the other hand, the sample of the present study consisted of 90 fifth-graders, whose ages ranged between 11–12 years old. They have formally studied English for five years. Therefore, this study explores whether irregular past verbs are acquired earlier than regular past verbs by young EFL learners relying on three theories.

Methodology
Research questions
The current study aims to provide answers to the following research questions:
(1). Do Arabic-speaking EFL children acquire English irregular past forms before regular forms?
(2). Does their L1 affect the acquisition of past simple forms in English?

Participants
The sample consisted of 90 female students in the fifth grade whose ages ranged between 11 and 12. Their English proficiency level is pre-intermediate to intermediate based on the results of a placement test. The sample was recruited from Al-Joufah Elementary School for Girls in Al-Balqa Governorate, Jordan. The participants were all Jordanian Arabic speakers and had been learning English as a foreign language for five years, attending five sessions weekly. Convenience sampling was used in order to select sample members from only easily accessible and available participants. It is important to point out that since the sample in the current study may not be considered representative of Arabic-speaking EFL children in Jordan, the findings of this study may not be generalized to all Arabic-speaking EFL children.

Data Collection Procedure
The test was administered at the school. The idea of past tense stimulus cards was adopted from Teaching Morphology Developmentally (Shipley & Banis, 1981) in order to elicit the target items and investigate learners’ knowledge and development of the regular and irregular past tense forms. The target verbs include regular and irregular verbs that are easily depictable and are common to most educational environments (see Appendix A). The study task required viewing the verb pictures and then completing the sentence using a past tense form. The participants were told that: “Here Salma is eating an apple. Yesterday, she -------- an apple”. The participants would complete the sentence as “she ate an apple”. This method aims to use visual cues in order to help students obtain a better understanding of these verbs and, by extension, enable them to successfully produce the past tense forms in context. Two testing sessions (45 participants per each) were required
to examine the participants’ acquisitions of the regular and irregular past tense forms with each testing session lasting for approximately 50–60 minutes. Before testing the participants, a simple practice with the sentence-completion task was given using regular and irregular past tense items adopted from Teaching Morphology Developmentally (Shipley & Banis, 1981) to ensure that the participants understood the task.

Following the administration of the test, an introspective session was administered with 70 participants in order to ensure that the participants’ memory is still fresh (Wesche & Paribakht, 2000). This session was employed to get more insight into the participants’ test experience, the difficulties they faced and the reasons behind these difficulties (Altakhaineh & Zibin, 2017). This process of individuals’ reflecting on their reasoning processes, thoughts, motives, mental states and feelings is considered one of data collection methods used to understand the underlying mental processes that motivate the participants’ behaviours (Nunan, 1994). The session lasted for 45 minutes. The participants were asked about the verbs they were tested on, and whether the sentence-completion task helped them answer the questions in the test. In addition, the participants were asked about the possible justifications of their results. In this session, all the participants were interviewed together, rather than individually. The session was recorded to analyse the results later. Hammarberg and Williams (2005) state that using introspective data is of great use in both cognitive psychology and linguistic analysis since they provide more in-depth information about a certain issue, allowing the researchers to present a valid interpretation and analysis of the acquisition process.

The participants’ answers can also be considered useful data for the examination of their Interlanguage. Categorizing the participants’ past tense forms in Interlanguage stages was based on the five main fossilization processes that were introduced by Selinker (1974). All the simple past tense verbs were carefully calculated in order to investigate the Interlanguage stages they pass through in order to acquire the correct forms of simple past tense in English.

**SPSS analysis**

According to Yim et al. (2010), a t-test is considered one of the most widely employed statistical tests in research studies (e.g. Zibin & Altakhaineh, 2019; Altakhaineh et al., 2020). A t-test was
used to compare the means of the results of the two groups of verbs. In the present study, the means of regular and irregular verbs were analysed in order to determine whether there is a statistically significant difference between the means of the two groups. The results are presented in the following section.

**Results**

Table 1 presents the results of the SPSS analysis of participants’ correct answers on the test. As shown in Table 1, there is a statistically significant difference between the participants’ correct answers on regular verbs (M=61.85) and irregular verbs (M=50.15) in favour of regular verbs as the p-value (0.0002) is less than 0.05. The t-test results suggest that the participant’s faced more difficulty with irregular verbs compared to regular past tense forms (cf. Kuczaj II, 1977). This result is in disagreement with that of Mourssi (2013) who reported that Arab learners of English acquire the irregular simple past verbs earlier in comparison with the regular past forms. The result also contradicts those of Brown’s (1973) study who reported that irregular past tense forms were acquired before the regular ones.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>N</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Verbs</td>
<td>61.85</td>
<td>9.84</td>
<td>2.20</td>
<td>20</td>
<td>0.0002</td>
</tr>
<tr>
<td>Irregular Verbs</td>
<td>50.15</td>
<td>8.24</td>
<td>1.84</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 provides a detailed analysis of the number of correct answers by the participants on the test.

Table 2 shows that the number of participants’ correct answers on regular past simple forms was 1237 out of 1800. On the other hand, the total number of participants’ correct answers on the irregular past simple forms was 1003 out of 1800. Within the irregular verb forms group, the results reveal that the participants’ highest score was on the irregular verbs group which does not need any change (n=271). The second highest score was on irregular verbs that require a complete change (n=217). The third highest score was on irregular verbs that
need addition or change of a final consonant (n=195) followed by those which require a stem vowel change (n=176). The lowest score was on irregular verbs that require addition and change of a final consonant (n=144). The next section provides a discussion of these results.

Table 2

Detailed Account of the Participants’ Correct Answers on the Test

<table>
<thead>
<tr>
<th>Past tense forms</th>
<th>The verb category</th>
<th>The number of correct answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>-ed</td>
<td>1237/1800</td>
</tr>
<tr>
<td>Irregular</td>
<td>No change</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td>Complete change</td>
<td>217</td>
</tr>
<tr>
<td></td>
<td>Addition or change of a final consonant</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>Stem vowel change</td>
<td>176</td>
</tr>
<tr>
<td></td>
<td>Addition and change of a final consonant</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>The sum</td>
<td>1003/1800</td>
</tr>
<tr>
<td></td>
<td>$40 \times 90 = 3600$</td>
<td>2240/3600</td>
</tr>
</tbody>
</table>

**Discussion**

Regarding the participants’ high scores on regular simple past forms, many reported during the introspective session that they learnt regular forms first because their teachers taught them the regular forms before irregular forms depending on the Jordanian curriculum of the English language. In participant, the participants’ had more exposure to and training on regular verbs compared to irregular ones. Since irregular verbs are arbitrary, they have weak memory entries and are considered harder to retrieve (Pinker, 1999). In other words, the high exposure to regular verbs is assumed to be the main reason for acquiring them before the irregular verbs by fifth-graders. From the view point of Natural Order Hypothesis, it seems that other factors influence the acquisition of the past tense forms by EFL children. In English, it was reported (see Brown, 1973) that irregular past tense forms are acquired first because they are more frequently produced around children in a natural environment; this is not the case with EFL learners who are taught these verbs in formal settings. As reported by Mourssi (2013), grammar textbooks and teachers of EFL usually start teaching the regular simple past forms before the irregular forms. Furthermore, Mourssi (2013)
adds that regular simple past verbs are generated by predictable rules, whereas irregular simple past verbs are not. Based on the introspective session, many fifth-graders indicated that acquiring regular simple past tense forms is easier and faster in comparison with retrieving different types of irregular forms from their memory. However, Pinker (1999) argued that irregular past simple verbs are the most common verbs in the English language. He explains that irregular verbs have to be memorized in order to survive in English and are considered the most commonly heard verbs, which makes them the easiest to be memorised. This could be true about children who speak English as a first language, but this may not be the case in foreign language acquisition. In this respect, Herschensohn (2003) states that the mastery of verbal inflection is considered essential in second language acquisition, and it is a probable indication of semantic, syntactic and morphological competencies. Thus, EFL learners need to acquire verbal inflection in L2 as it enables them to produce correct sentences and by extension have an effective interaction with speakers of L2. The task may not be easy as some children reported that they overgeneralized the-ed rule to unfamiliar verbs. For example, some children’s answers were goed, breaked and buyed.

From the view point of Interlanguage, Odlin (2001) explained that language transfer is divided into main categories: positive and negative transfer. On the one hand, positive transfer takes place when the first and second language have similarities, which contribute in a positive way to acquiring the target language. On the other hand, negative transfer plays an important role in causing errors due to the differences between the target language and the native language. Based on the participants’ answers, the differences between the first language and the second language could be regarded as a source of error. In Arabic language, there are no irregularities since the simple past tense forms are constructed using a system of suffixes. For example, in Jordanian spoken Arabic, biʃrab ‘he drinks’ is changed to ʃirib ‘he drank’ through changing the vocalic melody of the verb. The participants transferred their knowledge of L1 and produced verbs such as goed (applying the predictable regular rule to regular verbs). As a result, many fifth graders believe that the regular simple past tense forms are easier to be acquired since they are produced by a rule similarly to Arabic.

With regard to irregular verbs, the majority of participants
provided correct answers on irregular verbs which do not require any change \((n=271)\). This could be the case because these verbs are very few which may have enabled them to memorize this category of verbs easily. Additionally, during the introspective session, many participants indicated that these verbs require less effort to be retrieved from memory. Furthermore, the results showed that the performance of the participants regarding a complete change group was relatively good \((n=217)\). This can be attributed to the fact that these verbs are highly frequent in the English curriculum taught to grade 5 students in Jordan. Herschensohn (2003) suggests that the high frequency of a certain input usually results in statistically measurable progress in the short term. Moreover, it seems that the participants’ correct answers on the irregular verbs that require an addition or change of a final consonant \((n=195)\), and those which require a stem vowel change \((n=176)\) were obtained due to the relative similarity between the base form of the verb and the simple past form of these verbs. As reported by some participants during the introspective session, this similarity enabled them to produce the answers correctly. However, it seems that the performance of the participants on irregular verbs that require an addition and change of a final consonant group was poor \((n=144)\). This can be ascribed to the low frequency of these verbs in spoken and written English taught to fifth graders in Jordan. The effort these verbs require to be remember can also play a role in the participants’ low score on this category since two changes are needed to produce them. In general, it can be argued that irregular verbs, in particular, were more challenging to the participants because they are usually exposed to them only inside the classroom. Thus, they may not have opportunities to practice their knowledge of these verbs outside the classroom.

From the viewpoint of the Words-and-Rules theory (Pinker & Ullman, 2002), it can be argued that irregular verbs have the linguistic signature of lexical memory since they are stored as they are and retrieved from memory when needed, whilst regular verbs are produced through grammatical processing. When the participants are faced with a verb they do not recognize or cannot retrieve from their memory, they apply the regular rule to that verb producing instances such as *buyped*. The participants may fail to retrieve a stored irregular past tense form for many reasons. Firstly, the frequency of the verbs could be zero or very low. Secondly, the lack of a similar form that may enable the
participants to inspire an analogy and retrieve the correct form. Finally, the existence of some kind of damage to the neurological substrate of lexical memory preventing the retrieval of certain categories (Pinker & Ullman, 2002).

**Conclusion**

This study has demonstrated that Arabic-speaking EFL children do not follow the same sequence of acquisition as that exhibited by first language learners in acquiring the regular and irregular simple past forms. These learners acquire the regular past tense forms prior to the irregular ones contradicting the Natural Order Hypothesis. Due to the lack of irregularities in their first language, these learners apply the regular inflection rule to novel or unfamiliar verbs without sometimes considering the possibility of an existent irregular form that needs to be retrieved from memory. This also provides credence to two Interlanguage strategies, namely, the L2 Overgeneralization of Alternative L2 Category Strategy and L1 Transfer Strategy. In line with the Words-and-Rules Theory, the default system that these learners rely on whenever memory fails them is the computation system that allows them to apply regular inflection rather than the storage system; the latter can fail due to zero or low frequency of the verb, lack of similarity which can inspire an analogy and damage to the neurological substrate of lexical memory. Furthermore, the nature of the learning process itself, i.e., explication vs. induction, the curriculum followed as well as the learning situation, i.e., the natural situation vs. the classroom situation can have an impact on acquiring past tense verbs by EFL children and may also explain the differences exhibited between English native speaking children and Arabic-speaking children learners of English as a foreign language. Finally, more studies that investigate the sequence of acquisition of other types of morphemes by Arabic-speaking EFL children are needed to explore the effect of L1 and other factors such as the learning situation on the acquisition of English morphemes.

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**ADHERENCE TO ETHICAL STANDARDS**

*Ethics declarations.* The study was conducted according to the guidelines of the Declaration of Helsinki (1964) and approved by Research and Ethical Committee of Joufah School. Ethical principles were followed in the process of conducting the empirical research: the principle of voluntary consent (Informed consent was obtained from the administration of Joufah School for girls, Balqa, Jordan); the principle of minimizing risks for participants; the principle of confidentiality; the principle of informing participants about the content of the research; the principle of mandatory documentation of the stages and the results of the research; the principle of reliability of methodical instruments of the research having been conducted; the principle of validity of research data processing.

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**Consent for Publication.** The authors approve of this submission and, conditional upon the decision made by the editorial board from the peer-review process, consent to the publication of the current work. The work has not been, nor has it been submitted to other journals in consideration for publication.

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Appendix A
A Sample Stimulus Item

“Here Salma is eating an apple. Yesterday, she .......... an apple”

“Here Ali is playing football. Yesterday, he ............. football”
Іншомовне засвоєння англійських правильних і неправильних...

часу раніше, ніж правильні дієслова минулого часу арабомовними дітьми, які вивчають англійську мову як іноземну.

Методи та процедура дослідження. Дев'ятнадцять п'ятилітніх дітей були протестовані з використанням картинок, що представляють 20 правильних і 20 неправильних дієслів минулого часу за допомогою завдання на завершення речення. Після виконання тестів з 70 дітьми було проведено інтроспективну бесіду з метою визначення сфер, які викликали труднощі.

Результати. Існує статистично значуща різниця між правильними і неправильними дієсловами на користь правильних дієслів. Це свідчить про те, що діти засвоюють правильні форми раніше, ніж неправильні, що суперечить гіпотезі природного порядку та підтверджує дві міжмовні стратегії, а саме: стратегію L2 надмірного узагальнення альтернативної категорії L2 та стратегію L1 переносу. Незалежність дітей утворювати неправильну форму дієслова можна пояснити системою замовчуванням, на яку вони покладаються, яка є системою обчислення, а не системою зберігання. Таким чином, арабомовні діти, які вивчають англійську мову як іноземну, застосовують правильну форму -ed, коли їхня пам’ять не може відтворити неправильну форму дієслова.

Висновки. Це дослідження продемонструвало, що арабомовні діти, які вивчають англійську мову як іноземну, не дотримуються тієї ж послідовності засвоєння, яку демонструють учні, які вивчають рідну мову при засвоєнні правильних та неправильних простих форм минулого часу. Ці учні засвоюють правильні форми минулого часу раніше, ніж неправильні, що суперечить гіпотезі природного порядку. Через відсутність неправильних форм у рідній мові ці учні застосовують правило правильного відмінювання до нових або незнайомих дієслів, іноді не беручи до уваги можливість існування неправильної форми, яку потрібно відновити в пам’яті. Це також підтверджує дві міжмовні стратегії, а саме: стратегію L2 надмірного узагальнення альтернативної категорії L2 та стратегію перенесення L1. Дослідження засвідчило, що необхідні подальші наукові розвідки з вивчення впливу послідовності засвоєння інших типів морфем арабомовними дітьми, які вивчають англійську мову як іноземну, для вивчення впливу L1 та інших факторів, таких як навчальна ситуація, на засвоєння англійських морфем.

Ключові слова: вивчення другої мови, флективна морфологія, навчання мови, правильні і неправильні дієслівні форми.