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The Acquisition of Do-Support in Negation and Interrogatives by Adult Arab Learners of English: A preliminary study

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Abstract

This preliminary study investigates the acquisition of do-support in negation and interrogatives by adult Arab learners of English. The main question is to identify how Arabic language influences the acquisition of do-support. The influence of L2 proficiency level in the acquisition of do-support is also addressed. The study is conducted within the perspective of Full Transfer/Full Access Hypothesis and Differential Markedness Hypothesis. Do-support as a marked feature of English has received little or no attention in previous work on the acquisition of English as a second language by adult Arab learners. This study seeks to fill that gap by documenting the acquisition of do-support in negation and interrogatives. To address these aims, a written production task, a multiple-choice task and a semi-structured interview were administered to 10 adult Arab learners of low and advanced English proficiency levels. The findings indicate that the role of Arabic is noted. While not the source of errors, it acts as a strategy that adult Arab learners use to dealing with limited L2 knowledge and the markedness of do-support, which is the main source of difficulty shown by adult Arab learners. The role of learners' L1 is selective according to the learners' perception of what is difficult or not. Moreover, a significant relationship was found between L2 proficiency level and the mastery of do-support in that high- proficiency learners outperform low-proficiency learners. It is recommended that future research examine the acquisition and markedness of do-support in the interlanguage of Arabic-speaking children.

Key words: Arabic influence, do-support, L2 proficiency level, markedness

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1. Introduction

The acquisition of a second language has been a topic of intense debate in the history of language acquisition. Learners' mother tongue has been one of the factors that has attracted much interest since most work on second language acquisition has assumed the primacy of the L1 influence (Ilomaki, 2005). The standard assumption during the 1950s and 1960s was that learners' mother language influenced the acquisition of the L2, positively, if L1 and L2 were similar, or negatively, if they were not (Saville-Troike, 2006). This phenomenon was known as L1 transfer and since then it has occupied one of the major areas of language acquisition. However, few have made explicit statements about its precise role. Different terms have been used to refer to the notion of transfer. Dulay et al. (1982) for instance, uses the term "interlingual errors" while Kellerman & Sharwood-Smith (1986) argue in favor of the substitution of "transfer" by "crosslinguistic influence". As for Odlin (1989), transfer refers to the influence resulting from similarities and differences between the target language and any other language that has been obviously, and perhaps imperfectly, acquired. Moreover, Brown (2007, p. 117) views transfer as "the interaction of previously acquired linguistic and/or conceptual knowledge with the present learning event to facilitate a new language learning task". According to this definition, L1 transfer has been seen as one of the strategies that L2 learners use in their process of L2 acquisition. In this way a new scope has been opened for the influence of L1 since the focus is no longer on whether L1 plays a role in L2 acquisition but, on how, where, why and what to transfer (Schumann, 1988).

Ravem (1978) studies children's L2 production of negatives and interrogatives and concludes that there are clear examples of transfer and children consider it as one of their processing strategies. Moreover, two of the learning strategies used by L2 learners, transfer and overgeneralization, include reliance on existing knowledge to make learning easier (Taylor, 1975). These strategies can be differentiated, with L1 reliant on transfer and L2 exclusively influenced by overgeneralization. Taylor's results indicate that learners who know less of L2 are more reliant on transfer from L1. The amount and type of language transfer are influenced by a number of popularly held factors. For example, in a study conducted by Ringbom (1987), language distance is revealed to influence language transfer; in the early stages of acquisition, L1 influence is greater than at later stages; at lower levels of proficiency, L1 influence is stronger than at advanced levels.

Different existing theories take different stances on the role of language transfer on the acquisition of L2. One of these theories is Full Transfer/Full Access Hypothesis (FTFA) (Schwartz & Sprouse, 1994, 1996), which holds that the first language has a greater effect in the initial states of L2 acquisition and the acquisition of L2 functional categories and features is possible from the beginning even though such functional features are not presented in L2 learners' mother language. It postulates that the first stage of L2 acquisition is the final stage of L1 acquisition process (Schwartz & Sprouse, 1994). L2 learners tend to transfer what is available in their L1. In this regard, the L1 features that are not instantiated in L2 challenge the L2 learners towards reformulating their hypotheses about the target language. L2 learners in this case resort to what is allowed by Universal Grammar (UG) when they have to restructure the relevant features along with the available input. Accordingly, L2 learners' performance at every stage of the interlanguage is constrained by UG, which indicates that all errors that L2 learners produce fall within the limits of UG properties. Furthermore, L2

learners at later stages of the interlanguage become more proficient because of the increase in the input that they receive. Overall, the three stages of interlanguage are supposed to be driven by UG. Importantly, FT/FA assumes a gradual convergence on L2 properties as Learners with lower L2 proficiency perform worse than learners with higher proficiency. We will consider the L1 transfer in initial stage and the influence of proficiency level on full attainment of English do-support.

Another theory underlying L1 transfer is Differential Markedness Hypothesis (DMH) (Eckman, 1977) which seeks to link L1 transfer with the degree of markedness of the L2 feature(s). Unlike contrastive analysis, differential markedness hypothesis tries to predict the likelihood of L1 transfer based not only on the differences and their negative influence, but also on whether these differences are marked or unmarked. The degree of difficulty in learning or acquiring L2 structures linked to the degree of markedness, for example, an L2 structure that is less frequent than an L1 structure will be difficult to learn and the possibility of transfer is greater in this case.

Consequently, a structure or a language property is considered marked if it is less usual and frequent across languages (typological markedness). In addition, markedness is applied to different concepts, for example, it is employed to differentiate between simplicity/complexity. The marked feature is more complex than less marked one. In frequency contexts, marked features tend to occur more frequently than less marked (Maier, 2010). Within the perspective of UG, marked feature is part of the periphery rather than core grammar and consequently its acquisition needs more evidence than that of less marked (Maier, 2010). In the acquisitional hierarchy, on the other hand, "the structures that are acquired first are less marked than those that are acquired later" (Maier, 2010, p. 38). According to Givón (1991, p. 337), "the marked category tends to be cognitively more complex—in terms of attention, mental effort or processing time—than the unmarked one".

In addition, the notion of markedness can be applied within a particular language or among languages and the kind of evidence that can be used in support of DMH "indicates that markedness can predict the relative degree of difficulty associated with the learning of various TL structures" (Eckman, 2008, p.7). In this connection, Eckman (1977) proposed the Markedness Differential Hypothesis as follow:

- (a) Those areas of the target language that differ from the native language and are more marked than the native language will be difficult.
- (b) The relative degree of difficulty of the areas of the target language those are more marked than the native language will correspond to the relative degree of markedness.
- (c) Those areas of the target language that are different from the native language, but are not more marked than the native language will not be difficult. (p. 321)

What follows immediately from this hypothesis is that not all L1 and L2 differences will cause equal difficulty. L2 learners may transfer the unmarked features of their L1 in the case that the target features they are acquiring are marked ones. Moreover, L2 features that are distinct or unavailable in L1 will be learnt with less difficulty if they are unmarked.

DO-SUPPORT

The variation between English and Arabic in the ways of expressing sentential negation and interrogatives (yes-no and wh-questions) poses a great challenge to Arab learners of English in that English is more marked than Arabic. Arabic, in featuring negation and inversion, does not need that type of do-support available in English. English makes extensive use of a feature known as do-support since it is impossible for the English thematic verb to emerge from its head position of the verb phrase (VP) to carry the tense affix in the tense phrase (TP) or the complementizer phrase (CP) as is required in certain constructions including negation and interrogatives.

In present-day English, thematic verbs that were originally located in the VP lost the property of moving from its position as the head of the VP to the head position T (Tense) of the TP (Radford, 2006). Because of this historic change in the verb movement system, the need for do-support appeared. This appearance took place over the course of Middle English, with the very earliest uses appearing in the beginning of the 15th century. The frequency of 'do' rose continuously until sometime after the 18th century, and 'do' has become obligatory in these contexts (Ecay, 2015). In negative sentences, the tense affix in TP is no longer strong enough to attract the thematic verb to raise to the T position of the TP. In addition, the presence of negation phrase (NegP) that intervenes between VP and TP blocks such movement. As a result, this unattached tense affix must be hosted to a proper host and the only remaining possible satisfactory candidate is the application of the phonetic process 'do-support' (Radford, 2006). In interrogatives, on the other hand, a verbal element must move to the head position C of the CP attracted by the strong feature of C, and since thematic verbs must remain in situ, a proper element manifested as do-support must first host the unattached tense affix in TP and move from there to occupy the C position of the CP (Radford, 2006).

Accordingly, do-support is an English phenomenon where the dummy auxiliary verb 'do' appears bearing tense and agreement morphology in certain environments: do appears in the presence of sentential negation, T-to-C movement, emphasis and VP-ellipsis when there is no auxiliary verb functions as a tense-bearer in these environments (Ecay, 2015). Moreover, unlike other auxiliaries that are classified as having universal status, 'do' is classified as a language-specific property of English (Culicover, 2008). Its VP complement must be [-AUX] and since the operation of do-support is a phonetic and for syntactic reasons and contributes nothing to the semantic meaning of the statement, 'do' does not have any intrinsic meaning in contrast to other auxiliary verbs (Jung Jo, 2004). However, the auxiliary 'do' shares some features with other auxiliary verbs. For example, it is sensitive to NICE properties (negation, inversion, code, emphasis) and it shares lack of finite forms with modal auxiliaries. Thus, auxiliary 'do' has received attention in studies examining early auxiliary system acquisition, negation and question formation to determine what syntactic knowledge is accessible at the early stages of the acquisition process.

2. Previous L2 findings

A direct investigation of English do-support property has been very limited. The majority of studies indicate the difficulty with do-support as a unique structure that requires the acquisition of other features such as agreement and tense. Some studies document the late acquisition of do-support compared to other types of auxiliaries such as 'be' and modals. Limited studies also

show the earlier appearance of do-support in context of negation than in interrogatives. The amount of literature on the acquisition of 'do' by children whether they are native or L2 learners, is fair. A number of studies research do-support in interrogatives. For example, Stromswold (1990) observes cases of auxiliary-less, doubled marking questions. The number of errors in yes-no questions and wh-questions are high and the majority of these errors are with do-support and inversion. The inversion errors with the auxiliary 'do' override inversion errors with other auxiliaries. Stromswold assumes that the difficulty with the application of the rule of do-support is the major source of such errors. Stromswold claims that if UG is unable to direct L2 learners' acquisition, late acquisition is expected. Two studies, (Hadley, 1993) and (Hadley and Rice, 1996) are conducted to find out whether the acquisition and development of the auxiliary system is influenced by the three syntactic factors: Chomsky's minimalist program (1995), which involves an underlying phrase structure underlying the base-generation site; complexity of morphological paradigm; and language – specific status versus universal status . One of the main findings is that the acquisition of modal auxiliaries (can and will) is less difficult than 'be' and 'do'. In addition, compared to 'be' and 'do', these modals may be generated at a faster rate.

Likewise, the findings of Santelmann et al (2002) study of yes/no question formation involving English-speaking children show a large percentage of errors with auxiliaries and features of tense and agreement. They add that the problem is not with the operation of subject-verb inversion but with auxiliaries and their features. In addition, the fact that children have no pervasive difficulties with questions, but do have problems with features of English that are language specific, formed the basis of the hypothesis developed by Santelmann et al. (2002)

Haznedar (2003) documents a similar result, where the appearance of inflection was missing early, but developed gradually. In the early stages of acquisition, the majority of errors are of the types: the missing of 'do' and 'be' in questions, lack of inversion which predominated in wh- questions than in yes-no questions. Moreover, Rowland et al (2005) investigates whether children have more problems with the language-specific property 'do-support' than they do with other auxiliaries. They argue that 'do' as an auxiliary is more marked than the auxiliary of 'be' in questions. Such assumption underlies the hypothesis that the language-specific properties of 'do' would result in additional difficulty for this auxiliary type as compared to the auxiliary 'be'. However, the data shows no significant differences in overt marking between 'do'/modals and 'be' and the rate of errors with do-support in both types of questions, yes-no and wh-questions, is equal. Rowland (2007) comes to the same conclusion in his study. The percentage of errors with do-support in both types of questions is very high, but the t-test displays no significant differences in the rate of errors across the two types of questions. In contrast, the effect of the type of auxiliary is found to be effective in the study of Rowland & Theakston (2009). They indicate that models are correctly produced significantly more often than 'does' as predicated by Santelmann et al. (2002). Children have a greater tendency to produce double marking errors than inversion errors and the high proportion of using 'do' in yes-no questions does not indicate that learners' use of the 3S form 'does' is highly accurate.

Similarly, the acquisition of do-support by adult L2 learners has been examined, but the majority of these studies researched it partially. Bhatt & Hancin-Bhatt (2002) address the acquisition of CP by 125 Hindi learners of English aged between 11 and 18. They find that the

application of do-support is acquired after the rule of auxiliary inversion (AUX inversion). Regarding the acquisition of Aux to-Comp movement, the study exhibits that it emerges earlier in yes-no questions than in wh-questions. Furthermore, Maier (2010) studies the acquisition of interrogatives by 31 adolescent German learners of English as a second language. She detects the late appearance of do-support. L2 learners have problems with do-support since it is not available in their L1. The participants perform poorly in Interrogatives requiring do-support and they avoid producing structures that require do-support compared to structures that do not require it. Moreover, the influence of L2 learners' mother tongue is obvious, especially in case of contexts with do support; however, the L2 learners progressed fast as long as there are similarities between L1 and L2 such as cop inversion (inversion of subject and copula verb) and aux inversion (inversion of subject and auxiliary).

In line with this, the acquisition of English interrogatives by 25 Omani adult language learners is researched by Umale (2011). The researcher points out that learner's L1(Arabic) plays a role especially in the contexts that require do-support and L2 learners use 'do' to form and test hypotheses in questions. Within the perspective of the Processability theory, Candry (2013) considers the stages of do-support acquisition in three types of constructions in which 'do' appears. The production of 16 native speakers of Belgian Dutch aged between 11 and 15 years old is significantly different cross the three groups. L2 learners in group 1 apply the rule of do-support in negation but not in inversion and codes. However, they are still unable to produce it correctly particularly in case of negative sentences, in which the 3rd person singular is required. They incline to use the Dutch structure instead. The command over do-support in negation is also proved in group 2. In addition, group 2 exhibits the rule of do-fronting that is applied in yes-no questions but not do-2nd that is required to form wh-inversion. Learners in group 2 show an accurate use of the 3rd person singular form 'does'. In contrast, do-support in negation, yes-no inversion and wh-inversion seems to be acquired fully by learners in group 3. The researcher concludes that the majority of informants who have not had formal instruction are unable to apply do-support appropriately. On the other hand, informants who have received formal instruction seem to acquire do-support at different pace.

Several studies, on the other hand, have addressed the acquisition of do-support in negation. For example, Irvine (2005) contends that his informant who is a beginning-level Mexican adult ESL learner, starts to employ 'don't +v' form in level B and level C of his acquisition process more often, but he continues to use it as unanalyzed formulaic unit as he used to do in Level A. The use of 'no' with a verb without a subject is the overriding form of negation in Level A, even though some instances of 'don't' are manifested, but as a chunk. Accordingly, Irvine suggests that her informant's L1 influences his production as he tends to transfer the structure of his native language particularly at early stages of his acquisition process.

Perales et.al (2009) studies the acquisition of sentential negation by 78 bilingual (Spanish/Basque) learners of English, who are divided into three groups (ages four, eight and eleven) depending on when they began to learn English in an effort to determine whether or not functional categories are present or absent, whether cognitive strategies are employed rather than UG-driven, and whether the order of the functional projections NegP and TP are transferred. The findings indicate that there are differences between syntactic representation of functional categories development and the system of inflection. The presence of 'no+v' structure dominates

the production of groups 1 and 2. Such structure reflects learners' L1 structure, but the researchers argue that the learners' interlanguage system is still driven by UG. Regarding the production of unanalyzed 'do', there are no significant differences among the groups, whereas the analyzed 'do' appears only in the production of group 3. Group 1 and 2 observe the presence of 'do' but fail to inflect it correctly. Furthermore, the proportion of the structure 'v (aux) +not' is very high which indicates that such structure emerges early compared to the emergence of the auxiliary 'do'. Overall, the findings show that L2 learners do not reset the order of the projections NegP<TP, yet older learners outperform younger in terms of morphosyntax of English negation. An interview two years later reveals no significant differences in the performance of group 1 and 3 while group 2 exhibits more instances of analyzed 'do'.

Comparably in Perales(2010), the performance of 77 bilingual (Spanish/Basque)L2 learners of English is compared to that of L1 acquirers to find out if negative sentences containing the auxiliary 'do' in L1 and L2 English exhibit the same deep syntactic representation. The analysis of the interview with L2 learners indicates that the non-agreeing 'do' is very productive especially in using 'don't' instead of 'doesn't'. The cases of non-agreeing and agreeing 'do' coexist in the grammar of the same learners. The rate of non-agreeing errors is higher in the case of L2 learners in comparison of L1 children. This kind of non-inflection errors can be understood since 'don't' is considered less marked than 'doesn't'. According to the researcher, L2 learners are incapable to recover from this stage of lack of inflection with 'do', unlike L1 children. Even though the vast majority of errors with 'do' are of the lack of agreement kind, the learners in both groups commit other errors of the kind 'doesn't = isn't', which is more productive in case of L1 children and double marking error in which 'didn't is followed by the past form of the verb, which is only committed by L2 learners. Generally, the process of 'do' acquisition in L1 and L2 is dissimilar. L1 children are capable to converge on the target grammar eventually, but this is not the case of L2 learners who incline to treat 'do' as an independent preverbal marker of negation.

Bohnacker (2013) revises his longitudinal study of a bilingual girl, Katla, a daughter of Icelandic parents who lived in England, and documents the acquisition of do-support as follow:

- i. 1; 0-1; 11: No DO
- ii. 2; 0-2; 11: DO for negation but nothing else
- iii. 3; 0-3; 6: DO for negation, questions, ellipsis, emphasis
oversupplied in affirmative declaratives
- iv. 3;7-4; 7: DO for negation, questions, ellipsis, and emphasis. (P. 14)

The study, which lasts for over 3 years, embodies data collected spontaneously in a natural context. The data from age 2 to 3 reveals that in contexts like prohibitions and threats, 'do' is used as unanalyzed frozen form but not as a productive auxiliary 'do'. Emphasis is formed by shouting while yes-no questions are formed by rising intonation or clipping. Moreover, wh-questions are constructed by fronting the wh-word but no 'do' is used. The appearance of other auxiliaries like 'be' and 'have' in obligatory contexts is target like compared to 'do'. From age 3 to 3; 6, 'do' appears in constructions like emphasis, questions and ellipsis. Nevertheless, Katla does not inflect 'do' correctly especially in third person singular and past tense. The most important finding is the emergence of do-support first in negation other than contexts like questions. The delayed acquisition of do-support in contexts other than negation has also been

reported in studies of Ervin-Tripp (1973), Miller (1973) , Miller& Ervin-Tripp (1973), Fletcher (1985), Gawlitzek,-Maiwald& Tracy (1996), De Houwer (1990) and Knipschild (2007).

Yazdfazeli & Maleckzadeh (2014) analyze the production of 15 Persian high school students in elementary level and 16 university students in intermediate level to find out if they follow a universal order of learning negation, the influence of their proficiency level in the acquisition process and if there is a difference in the use of negation in their comprehension and production. For the elementary group, 'don't' is the prevalent answer in the multiple choice test (50%) but it is analyzed only in 5% of the answers, while 'not' is more common than 'don't' in the writing test. In contrast, 40% of the intermediate students' answers on the multiple choice test is the option of unanalyzed 'don't', yet the percentage of analyzed 'don't' increases five times compared to group 1. On the contrary, 'not' comprises 20% of intermediate students' responses. In the writing test, the intermediate group's uses of analyzed 'do' increases, while the rate of 'no' and 'not' declined in comparison with the elementary group. In sum, the use of unanalyzed 'don't' is the most productive form which indicates, according to the researchers, that Persian learners follow their own order and this could be a result of the influence of their L1 structure.

The influence of Arabic is investigated in the acquisition of negation by Eisouh (2011). The study also aims at exploring whether L2 learners commit developmental errors similar to those produced by L1 children. The participants are low and low intermediate levels of English at the University of Jordan. Double-marking, alternating do-support and omission of auxiliary are the types of errors that are observed with do-support. Alternating do-support is documented as the most common type. For example, 'he didn't eats' and 'they doesn't study English'. Moreover, L2 learners in all level continue to produce errors with 'did not + verb'. While students of English 102's performance are better than those of English 99 and 101, they keep the third singular person-s along with 'does not'. The data reveals that the knowledge of do-support has been acquired, but learners in the three groups are not sensitive to its properties as a carrier of tense and agreement features. Such finding is consistent with that of Perales et.al (2009), Perales (2010) and Yazdfazeli & Maleckzadeh (2014). In conclusion, the influence of native language is documented and this is compatible with Perales et.al (2009) and Yazdfazeli & Maleckzadeh(2014).

To sum up, three conclusions can be drawn from the above studies: 1) L1 and L2 learners' acquisition of 'do' appears late with a number of difficulties, including wrong inflection and auxiliary less inversion especially in wh-questions. 2) The influence of L1 is evident; however, some of these difficulties that L2 learners exhibit are similar to those experienced by L1 learners. 3) do-support seems to appear earlier in negation than interrogatives and other contexts.

3. Methodology

Research Objectives

The initial objective of this present pilot study was to investigate the acquisition of do-support in negation and interrogatives by adult Arab learners of English. Specifically the following objectives were discussed.

1. To investigate how the acquisition of Do-support is influenced by Arabic language among Arab learners of English.
2. To find out if there is a relationship between adult Arab Learners' proficiency level and their mastery of do-support

Research Questions

The research questions underlying this study are:

1. How does Arabic language influence the acquisition of do-support by adult Arab learners? Do adult Arab learners' responses reflect their L1 structure?
2. Is there a relationship between Learners' proficiency level and their mastery of do-support?

Research Sample

The participants were first year undergraduate Arab learners from different majors at Mutah University in Jordan. According to their scores in the placement test employed at the university, learners were divided into two proficiency levels: the pre-intermediate group (who got 50% and below) and the advanced group (who got 80% and above). The pre-intermediate group was studying English 99 as a remedial course at the time of the study while the advanced group was studying English 102 as an elective course. The participation was voluntary and unpaid.

Research Instrument

The instruments used were a written production task (WPT), a multiple-choice task (MCT) and a semi-structured interview. Both tasks involved 45 items equally distributed among negation, yes-no inversion and wh-inversion. All the items were randomized. In each context 5 items out of 15 required the use of do-support while the remaining 10 items involved auxiliaries including 'be' and 'have'. In the multiple choice task, participants had to choose only one option that was supposed to be the more syntactically correct one. In the written production task, participants had to produce negative sentences, yes-no questions and wh- questions using the given sentences. The semi-structured interview consisted of open-ended and closed-ended questions concerning Arabic influence and the difficulty do-support constructions over other auxiliaries of 'be' and 'have'.

Research Procedures

The participants were conveniently selected from those who studied English 99 and 102. The instructions of the two tasks were given in Arabic and the participants were made aware that the results were completely confidential and their participation was voluntary. In the first session, participants received the written production task. Each production was considered correct if it was grammatically appropriate. The multiple-choice task took place in the next session. Participants' production in the two tasks was then transcribed and coded for scoring and statistical analysis. The multiple-choice task was followed by an immediate semi-structured interview. The participants of the interviews were chosen intentionality and the numbers are determined according to the availability of the students and according to the number of students who volunteered in this research sample. The Interviews involved seven questions. The participants' answers in the interview were audio recorded and were analyzed using content analysis.

Results and Discussion

In this section, the results of the two tasks and the semi-structured interview are presented and discussed according to the study main questions as follow:

Q1: How does Arabic language influence the acquisition of Do-Support by adult Arab learners? Do adult Arab learners' responses reflect their L1 structure?

Depending on learners' answers to the interview questions and the two tasks, we can predict that Arabic is employed as a learning strategy rather than being used as a source of production or errors except in the context of wh-questions and some cases of pre-verbal negation and verb inversion. Moreover, the interview data illustrates that 40% of L2 learners in the pre-intermediate group confirmed the influence of Arabic when there was inadequate knowledge of the English structure while 40% of participants in the pre-intermediate group asserted that they used Arabic only to translate the given sentences and questions as a strategy of facilitating their task. In contrast, 20% of learners in the pre-intermediate group denied any influence of Arabic in their performance.

Adult Arab learners in the pre-intermediate group explained their reliance on Arabic as a strategy they tended to utilize because they did not have the sufficient knowledge of English structures. They inclined to compare what is available in their L1 and L2 and tried to figure out similarities to produce. However, it is obvious from their answers that the influence of Arabic is crucial in case of wh-inversion because the Arabic structure in this case is less marked and consequently less difficult and needs less time to process than that of English. The following are some examples of their answers:

- I applied the Arabic structure because I did not know the English structure and Arabic structure is easier than that of English.
- I applied the same order because it is easier.

L1 transfer in wh-inversion gives evidence to the DMH predictions in that L2 learners show a tendency to transfer what is unmarked in their L1 if the L2 structure or feature is marked. Additionally, the noticeable percentage of the error "pre-verbal negation" (e.g. the movie no lasted two hours) that was detected in their production on the negativesentences in both tasks may reflect their L1 structure. In other words, learners' Arabic background may evoke this kind of error. However, such type of error does not follow directly from L1 transfer since it has been documented in the production of children and L2 learners of other languages (e.g. Irvine, 2005, Perales et.al, 2009 and Yazdfazeli & Maleckzadeh, 2014), suggesting that it could be a developmental error rather than a transfer error.

The results of both tasks show that Arabic influence in the case of inversion was more effective than that of negation. The error of the type 'no inversion (omission of do-support), which comprised the highest percentage, and the error of the type 'verb inverted' (e.g. 'suggested the waiter pasta to Maria?'), reproduce what is present in the Arabic question structure. Furthermore, the findings indicate that Adult Arab learners with low proficiency level linked the use of 'do' with negation. They considered it a negative marker rather than an auxiliary verb which is inserted under T for feature-checking purposes. Although the pre-intermediate group perceived the presence of 'do' and reset their grammar to suit that of English, they were unable

to use it correctly and used 'do' in forming hypotheses and testing them. They fluctuated between unanalyzed 'do' and analyzed one, but generally non target forms are more frequent.

Overall, the data from the pre-intermediate group partially supports the claim of FTFA in that the first state of L2 acquisition is characterized by the use of L1 grammar; in contrast, it supports FTFA all errors that L2 learners produce fall within the limits of UG properties. The errors of the type verb inverted, no do-support in questions, double marking, pre-verbal and post-verbal negation could be induced by Arabic grammar, though the fact that such errors have been reported in the interlanguage of L2 learners from different language backgrounds, signifies that the structural difficulty of certain features and structures might be universal for all L2 learners. Furthermore, the rates of these errors in the contexts of do-support were higher than in the contexts of 'be' and 'have', indicating that DMH is upheld since marked features attract more L1 transfer and cause more difficulty than unmarked ones.

On the other hand, the advanced group, in responding to the interview questions disregarded any reliance on the Arabic grammar. Psychotypology, as one of the constraints on language transfer, plays an influential role in the case of advanced group's interlanguage system. Advanced group participants' perception of how Arabic is distant from English put an end to its influence with the exception of one participant who acknowledged the use of Arabic structure in the production of wh-inversion, pointing out that English wh-inversion involve more syntactic operations and accordingly more time to process than the corresponding Arabic structure. The learner's deviation from the L2 target structure does not imply that do-support is not incorporated in his interlanguage system or the L2 grammar is not fully shaped, but it reflects a strategy of communication he prefers. Furthermore, another participant displayed a variable use of inflection system in contexts of do-support. The presence or absence of tense feature in Arabic might not be the main factor initiating such inconsistency in supplying the inflection since this pattern of performance holds for L2 learners from a variety of L1 backgrounds.

In sum, the advanced group's performance is consistent with the prediction of FTFA proposal. The final state of L2 acquisition as result of increased L2 input exhibits convergence on L2 grammar, but the difficulty of certain L2 structures (e.g. do-support and inflection system) could be "a cause of effect on suppliance of overt morphology and not on underlying representation" (White, 2003,p.129).

Q 2: Is there a relationship between learners' proficiency level and their mastery of Do-support?

To answer this question, first we calculated the performance (right answer ratio) of each group (pre-intermediate group, advanced group) in both multiple-choice and written production task. The ratios are shown in Tables (1) and (2).

Table 1. The right answer ratio for the advanced group

Context	Do-support	
	Multiple- choice	Written production
Negation	88%	76%
Yes-No questions	84%	84%
Wh-questions	88%	52%

Table 2. The right answer ratio for the pre-intermediate group

Context	Do-support	
	Multiple-choice	Written production
Negation	52%	24%
Yes-No questions	32%	8%
Wh-questions	36%	0%

As shown in tables (1) and (2) above, the effect of proficiency level as predicted by FTFA is very prevalent. The advanced group's performance overrides that of pre-intermediate group. In other words, although the two groups seem to have perceived the presence of the auxiliary 'do', only the learners in the advanced group showed signs of convergence on L2 norms. Moreover, to find out whether these differences in the performance of the two groups are significant or not, an independent sample t-test was employed as the statistical mean for the data analysis purpose. The result reveals that there are statistically significant differences between the pre-intermediate and the advanced group in favour of the advanced group where the Sig value for do-support in the multiple choice task is .001, which is less than α (0.05), while the Sig value for do-support in the written production task is .007, which is also less than α (0.05).

Conclusion

The findings of the two tasks show that do-support as a unique characteristic of English language is troublesome for adult Arab L2 learners of English in the pre-intermediate group. Some problems were encountered with the interpretation of the data obtained from the advanced group. The performance of participant number 4 in the advanced group was somehow problematic. She seemed to acquire the rule of do-support but she failed to show native-like sensitivity to inflection. In addition, participant number 2 appeared to create his own system concerning wh-inversion, neglecting the grammar of English because of the difficulty of such structure compared to that of Arabic. Furthermore, the development trend in the acquisition of do-support outplays that of L1 transfer demonstrating that the difficulties adult Arab learners have with the three contexts might be the result of the complexity of do-support as a marked feature. However, in most cases, it can be noted that do-support appears earlier than the development of inflection. The overall findings are partially consistent with FTFA, but they are fully consistent with DMH.

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References

- Bhatt, R. M. & Hancin-Bhatt, B. (2002). Structural Minimality, CP and the Initial State in Second Language Acquisition. *Second Language Research*, 18,(4), 348-392.
- Bohnacker, U. (2013). Reflections on Dummy Do in Child Language and Syntactic Theory. In Blom, E., Van de Craats, I., & Verhagen, J. (eds.), *Dummy Auxiliaries in First and Second Language Acquisition* (PP. 171-208). Berlin. De Gruyter Mouton.
- Brown, D. H. (2007). *Principles of language learning and teaching*. NY: Pearson Education.
- Candry, S. (2013). The Acquisition of Do-support by Belgian Dutch-speaking Learners of English. (Unpublished master thesis). University in Ghent, Belgium.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, MA: MIT press.
- Culicover, P. W. (2008). The Rise and Fall of Constructions and the History of English Do-support. *Journal of Germanic Linguistics*, 20, (1), 1-52.
- De Houwer, A. (1990). *The Acquisition of Two Languages from Birth: a case study*. Cambridge: Cambridge University Press.
- Dulay, H., Burt, M., & Krashen, S. (1982). *Language 2*. Oxford: Oxford University Press.
- Eca, A. W. (2015). A Multi-Step Analysis of the Evolution of English Do-support. (Unpublished doctoral dissertation). The University of Pennsylvania, USA.
- Eckman, F. R. (1977). Markedness and the Contrastive Analysis Hypothesis. *Language Learning*, 27, (2), 315-330.
- Eckman, F. R. (2008). Typological Markedness and Second Language Phonology. *Phonology and Second Language Acquisition*, 36, 95-115.
- Eisouh, Z. S. (2011). Negation Errors in English by University of Jordan Students. *Reading Improvement*, 48,(3), 139-154.
- Ervin-Tripp, S. M. (1973). Imitation and Structural Change in Children's Language. In Ferguson, C.A. & Slobin, Dan I. (eds.), *Studies of Child Language Development* (PP. 391-406). New York: Holt, Rinehart and Winston.
- Fletcher, P. (1985). *A Child's Learning of English*. Oxford: Basil Blackwell.
- Gawlitzeck-Maiwald, I. & Tracy, R. (1996). Bilingual Bootstrapping. *Linguistics*, 34, (5), 901-926.
- Givón, T. (1991). Markedness in Grammar: Distributional, Communicative and Cognitive Correlates of Syntactic Structure. *Studies in Language*, 15, (2), 335-370.
- Hadley, P. A. (1993). A longitudinal Investigation of the Auxiliary System in Children with Specific Language Impairment. (Unpublished doctoral dissertation). University of Kansas, USA.
- Hadley, P. A., & Rice, M. L. (1996). Emergent Uses of BE and DO: evidence from children with specific language impairment. *Language Acquisition*, 5,(3), 209-243.
- Haznedar, B. (2003). The Status of Functional Categories in Child Second Language Acquisition: evidence from the acquisition of CP. *Second Language Research*, 19,(1), 1-41.
- Ilomaki, A. (2005). Cross-linguistic Influence—A Cross-sectional Study with Particular Reference to Finnish-speaking and English-speaking learners of German. (Unpublished B.A thesis). Trinity College, Dublin.
- Irvine, M. G. (2005). Developmental Stages of Negation in One Learner's Interlanguage: a case study (Unpublished doctoral dissertation). Portland State University, USA.

- Jung Jo. (2004). A Study of the Auxiliary Do in English. *SNU Working Papers in English Language and Linguistics*, 3,165-186.
- Kellerman, E. &Sharwood Smith, M. (1986).*Cross-linguistic Influence in Second Language Learning*. New York: Pergamon Press.
- Knipschild, B. (2007). Verb placement, DO-insertion and Object Shift: a case study of a bilingual German/English child (Unpublished doctoral dissertation). University of Essex, UK.
- Maier, A. (2010). The Structure of Interlanguages: the acquisition of simple English interrogatives in guided second language acquisition (Unpublished doctoral dissertation). Heinrich Heine University, Düsseldorf.
- Miller, W. R. (1973) .The Acquisition of Grammatical Rules by Children. In Ferguson ,C. &Slobin, Dan I.(eds.), *Studies of Child Language Development*(PP. 380–391). New York: Holt, Rinehart and Winston.
- Miller, W. R. and Ervin-Tripp, S. M. (1973). The Development of Grammar in Child Language. In Ferguson, C. &Slobin, Dan I. (eds.), *Studies of Child Language Development* (PP. 355–380). New York: Holt, Rinehart and Winston.
- Odlin, T. (1989).*Language Transfer: cross-linguistic influence in language learning*. Cambridge: Cambridge University Press.
- Perales, S., Mayo, M. D. P. G., &Liceras, J. M. (2009). The Acquisition of L3 English Negation by Bilingual (Spanish/Basque) Learners in an Institutional Setting. *International Journal of Bilingualism*, 13,(1), 3-33.
- Perales, S. (2010). The Status of the Auxiliary Do in L1 and L2 English Negative Clauses.*IRAL-International Review of Applied Linguistics in Language Teaching*, 48,(1), 1-23.
- Radford, A. (2006). *Minimalist Syntax Revisited*. Cambridge: Cambridge University Press.
- Ravem, R. (1978). Two Norwegian Children’s Acquisition of English Syntax. In E.M. Hatch (ed.), *Second language acquisition: a book of readings* (pp. 148-154). Rowley, MA: Newbury House.
- Ringbom, H. (1987). *The Role of the First Language in Foreign Language learning* Clevedon: Multilingual Matters Ltd.
- Rowland, C. F., Pine, J. M., Lieven, E. V., &Theakston, A. L. (2005). The Incidence of Error in Young Children's Wh-questions.*Journal of Speech, Language, and Hearing Research*, 48,(2), 384-404.
- Rowland, C. F. (2007). Explaining Errors in Children’s Questions.*Cognition*, 104,(1), 106-134.
- Rowland, C. F., &Theakston, A. L. (2009). The Acquisition of Auxiliary Syntax: a longitudinal elicitation study. part 2: the modals and auxiliary do. *Journal of Speech, Language, and Hearing Research*, 52(6), 1471-1492.
- Santelmann, L., Berk, S., Austin, J., Somashekar, S., & Lust, B. (2002). Continuity and Development in the Acquisition of Inversion in yes/no Questions: dissociating movement and inflection. *Journal of Child Language*, 29,(4), 813-842.
- Saville-Troike, M. (2012).*Introducing Second Language Acquisition*. Cambridge: Cambridge University Press.
- Schumann, J. (1988). Interview in TESOL Newsletter. March issue: 8-9.
- Schwartz, B. D., & Sprouse, R. (1994). Word Order and Nominative Case in Nonnative

- Language Acquisition: a longitudinal study of (L1 Turkish) German interlanguage. *Language Acquisition Studies in Generative Grammar*, 31,(4), 71-89.
- Schwartz, B. D., & Sprouse, R. A.(1996). L2 Cognitive States and the Full Transfer/Full Access Model.*Second Language Research*, 12, (1), 40-72.
- Stromswold, K. J. (1990). Learnability and the Acquisition of Auxiliaries (Unpublished doctoral dissertation).Massachusetts Institute of Technology, USA.
- Taylor, B. P. (1975). The Use of Overgeneralization and Transfer Learning Strategies by Elementary and Intermediate Students of ESL.*Language Learning*, 25, (1), 73-107.
- Umale, J. (2011). The Effect of Consciousness Raising on Errors in L2 Question Formation: an investigation of Omani students. *Arab World English*, 2,(4), 88-135.
- White, L. (2003). Fossilization in Steady State L2 Grammars: persistent problems with inflectional morphology. *Bilingualism: Language and Cognition*,6 ,(2), 129-141.
- Yazdfazeli, M., & Maleckzadeh, D. (2014). Performance of Negative Sentences with Regard to Learners Proficiency Levels.*International Journal of Multidisciplinary and Current Research*,2, 549-554.