Learning Transfer and Universal Grammar: The Case of Arabic as a Foreign Language

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ABSTRACT: This Arabic as a Foreign Language (AFL) is considered a parsimonious field in applied linguistics. Therefore, this article tries to highlight how language transfer influences American students in their Arabic learning process. Additionally, this work attempts to explore whether Arabic foreign learners rely on their pre-existing knowledge to learn Arabic and determine the role of transfer regarding language universals. The study employs a quantitative methodology based on a Grammaticality Judgment Task (GJT) to achieve its objective. According to the study's results, L2 Arabic learners initially transfer their L1 setting to L2. In other words, Universal Grammar (UG) exists, but learners only have indirect access to it via their L1. By studying and investigating the influence of language transfer on learning outcomes, experts' and educators' interventions can be tailored to more effectively assist foreign students in overcoming errors connected to their first language and improving their proficiency in learning Arabic language.

KEYWORDS: Arabic as a foreign language (AFL), Arabic SLA, language transfer, universal grammar (UG), errors.

1. INTRODUCTION

Learning Arabic as a foreign language has become a broad field that attracts many foreign students from different parts of the world. The effectiveness of learning Arabic language is affected by many pedagogical factors, such as the size of the vocabulary learners have, years of study, and the role of transfer. Alhawary (2018) acknowledges that "many studies have so far been conducted on Arabic morphosyntax, but little has been investigated with respect to other L2 Arabic language components (such as phonology/pronunciation, vocabulary, and interlanguage pragmatics)" .

This study tries to pinpoint how transfer constrains learning Arabic second language acquisition (SLA) and determine the role of transfer with reference to language universals. Most available studies in the consulted literature focus on English either as a second or a foreign language (ESL/ EFL). Unfortunately, studies related to language transfer or universal grammar (UG) in learning Arabic SLA are rare or absent at all. That is why; research is required to set up vivid facts related to Arabic SLA.

2. LANGUAGE TRANSFER

The issue of language transfer and UG in Arabic SLA has not been adequately researched yet. As mentioned above, A wealth of studies in the literature, especially EFL or ESL, have focused on the role of L1 (or L1 interference) in learning a second language and, if there is, how much the L1 could influence this process. The richness of morphological and syntactic properties of the Arabic language makes it a perfect field to be investigated in the area of SLA research. According to many theoreticians and language teachers of L2 learners, when they (learners) try to communicate in the second language, they transfer elements of their L1s onto the target language's speech patterns. Thus, debates have been focused on the putative existence of transfer as a significant variable in second language learning. L2 learners subconsciously rely on their L1s to communicate or transmit ideas in the target language (TL). Many researchers (Slabakova, 2000; White, 2003; Bond et al., 2011; Alamry, 2014; Alhaawary, 2018) agree that L1 transfer has a negative or positive effect on learning an L2 at least in the initial stages. According to Alamry "the concept of language transfer has always been linked to other linguistic and non-linguistic phenomena, including but not limited to typological distance, degree of markedness, processing load, and learners' individual strategies" (Hakansson, 2001, cited in Alamry, 2014, p. 8). The concept of language transfer is capable of being classified into two types: positive and negative. The positive transfer results from the similarities that match the learner's L1 and the TL, while the negative transfer results from the differences between the two languages (L1 and TL), making the learning process more challenging and lengthier. That is to say, the more similarities, the fewer difficulties, and the more differences, the more problems.

3. UNIVERSAL GRAMMAR AND LANGUAGE TRANSFER IN ARABIC L2

It is worth mentioning that six hypotheses try to reveal the role language transfer and UG played in L2 learning. But we will stick only to three of them; the others will be summarized in the table below. The first hypothesis is named no transfer, which claims L1 does not affect L2 learning. Some researchers (Platzack, 1996; Epstein, Flynn & Martohardjono, 1996) argue that L2 grammatical development takes place via UG, and that is what makes it possible for L2 learners to reach a final state as natives. Other researchers (Clahsen & Muysken 1986), on the other hand, claim that L2 achievement is attributed to general problem-solving strategies; they concluded in their study that L1 is not involved in L2 learning.

Partial transfer, which is the second hypothesis, states that only some properties of L1 are used or transferred into L2 by learners at least at the initial stage either via lexical categories (verb, noun, adjectives, preposition…) only or via both lexical categories and functional categories (complementizer, inflection, gender, tense…). According to the Minimal Trees Hypothesis (MTH) proposed by Vainikka and Young-Scholten (1994, 1996), only L1 lexical categories can be transferred, not functional, because of the lack of morphological markings and syntactic movement. Furthermore, Vainikka and Young-Scholten claim that the functional categories are believed to be increased gradually in stimulus to L2 input and UG-constrained structure building (cited in Messouab, 2021, p. 2). However, this hypothesis was challenged by the findings of some researchers (White, 2003), who show those functional category parameters of L1 were adopted in the L2 grammar. After that, the Valueless Features Hypothesis (VFH) of Eubank (1994, 1996) came as a proposal in favor of the partial transfer hypothesis. It claims that L2 initial state involves lexical and functional categories of L1. Eubank also insists that these functional features are neither strong nor weak, but they are valueless or 'inert' in the initial state. In the same line, according to Alamry (2014), "these functional features are said to be acquired during the development phase, and, at the end stage of acquisition, L2 learners are expected to convert to the L2 grammar" (p. 11). The third hypothesis, known as full transfer, posits that all elements of the L1 are transferred into the grammar of L2 during the first phases of language acquisition. This hypothesis, proposed by Schwartz and Sprouse (1994, 1996), contrasts the first hypothesis. To say it differently, the entire L1 grammar is transferred not just the L1 parameter settings. That is the ultimate condition of the L1 grammar functions as the initial condition of the L2 grammar. According to White (1989), who was the first researcher to propose this idea, "L2 learners start initially with L1 parameter values and then reset them according to L2 values; that is, she argues that L2 learners have access to UG" (cited in Alamri, 2014, p. 11).

As far as what we have seen, we can summarize UG access and language transfer in the following table:

Table 1: UG access and language transfer positions

Approach	Hypotheses of transfer and Access	Explantation	Pionniers
No transfer	No transfer/no access (NTNA)	There is no effect of L1 in learning L2. Learners resort to general problem-solving strategies.	Clahsen and Muysken, (1986); Meisel, (1997)
	No transfer/full access (NTFA)	L2 learners rely on their UG. To simplify, the starting point is the UG.	Platzack,(1996); Epstein, Flynn and Martohardjono (1996)
Partial transfer	The MTH	The functional categories are believed to gradually increase in stimulus to L2 input and UG-constrained structure building.	Vainikka and Young-Scholten (1994, 1996a, b)
	The VFH	L2 initial state involves both lexical and functional categories of L1.	Eubank (1994, 1996)
	Fulltransfer/full access (FTFA)	The starting point of L2 learning is the final state of L1.	White(1989); Schwartz and Sprouse (1994)

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	Full transfer/partial access (FTPA)	The initial state of L2 learning is the final state of L1 final state. Thus L2 learners have a fully formed grammar. If UG principles are not found in L1, they will not be available in L2 learning therefore, they recourse to general problem-solving strategies.	Schachter (1989, 1990); Clahsen and Hong (1995)
Full transfer	Full transfer/Partial access	L2 learners learn their TL grammar through the parameter settings of L1. The principles of UG are available, but L2 learners cannot reset parameters.	Tsimpli and Roussou (1991), and Smith and Tsimpli (1995).
	The Failed Functional Feature (FFFH)	Adult L2 learners are unable to acquire features of functional categories that differ from those realized in the L1 (White, 2003, p. 276).	Hawkins and Chan (1997)

Being aware of the road Arabic L2 learners follow in their learning process will inevitably get its place positively in Arabic SLA classrooms. It is worth stating that "Two broad goals should guide SLA research: firstly, determining the second language learner's L2 grammatical knowledge; and secondly, explain how it (grammatical knowledge) develops over time from the initial state to an end state" (Lakshmanan & Selinker, 2001, p. 393). Also, the aim of SLA research is not just to pinpoint the end of L2 learning but also to draw the road of the L2 learning process and, therefore, how L2 learners reached that state.

4. METHODOLOGY

This section presents the methodology employed in the presented research. It includes the participants, the instructions and instruments, and data collection. The study adopted a quantitative research methodology that addressed American students who came to Morocco to study Arabic language. Unlike previous studies that centered around English as the target language, this research specifically examines Arabic as the target language and English as the source language.

It is worth pointing out that Arabic has not received as much attention as English and some European languages, even though it is considered an essential language in the contemporary world. Many researchers (Winke & Aquil, 2006; Lee-Ellis, 2009) acknowledge that Arabic language does not enjoy the range of studies and validated assessment tools that most researchers in other languages do. Therefore, this study aims to provide an important opportunity to advance the understanding of the area of AFL.

4.1 Participants

The participants in the presented research are 25 American learners of Arabic language whose mother tongue is English. They study in a language Center in Meknes (summer programs). All of them are intermediate students according to the Common European Core of References for Languages (CEFR), studying with the same textbook /al-kitāb f ī taʿallum al- ʿarabiyya/ series written by Brustad, Al-Batal and Al Tonsi (2004). They have been studying Arabic for about one year in both the USA and Morocco. The participants will be taken as a case study to examine their errors.

4.2 Instrument and instructions

A GJT was used to explore the effect of learners' mother tongue (English) in learning Arabic language. Careful design and piloting are taken into consideration for the validity and reliability of the GJT. The test contains two parts: the first is translating some sentences from English into Arabic and vice versa. In the second part, the testees are given a sample of sentences that can either agree or disagree with the rules proposed for the underlying competence in Arabic, and they are asked to identify if the sentences are correct or not. The question was as follows: "Please read the following Arabic sentences quietly. If the sentence is grammatical, write "G" and if the sentence is ungrammatical, write "Un". Please make your judgment after you read each sentence immediately".

All the instructions are written in English, hoping that it will help learners focus on the content of the task, not on understanding or translating the questions. The task took about 20 minutes. The participants also are asked whether they use their L1 while learning Arabic or not to demonstrate the impact of language transfer in their learning process.

4.3 *Data collection*

Data were collected by the researcher himself in a summer program in Meknes. The task was distributed at the end of the session. It is worth mentioning that the students were not allowed to consult any dictionary during the task.

5. THE RESULTS

The disputed question about UG access in SLA and the role played by language transfer in L2 learning has attracted researchers' interest in recent years. However, this issue is still controversial. There is agreement among theoreticians and practitioners that when L2 learners try to communicate in the target language, they often transfer some elements of their L1 into the target language. Many studies tackled the issue of language transfer by L2 learners and most of these studies focused on English as a target language and Arabic as a source language. This research deals with the opposite direction to better pinpoint how transfer constrains learning Arabic SLA. To determine the role of language transfer of language universal. This research aims to check whether or not Arabic L2 learners activate their UG in learning Arabic language. The obtained results indicate that L2 American learners first transfer their L1 setting into L2. That is to say, UG exists but learners only have indirect access to it via their L1. That is, what learners know of universals is constructed via their L1. Thus language transfer has a significant role in Arabic L2 learning since most generative SLA researchers always relate transfer to the extent to which UG constrains SLA. As in the following examples:

On Friday and Saturday

/ayam- al-ʒomoʕa wa al-sabt/ أيام الجمعة والسبت

*على جمعة وسبت

I am attracted to Arabic literature.

/anā moʕʒa-b- bi al-adab al-ʕarabi:/ أنا معجب بالأدب العربي

*أنا معجب إلى الأدب العربي

He left a deep impact on himself

/taraka ataran-ʕami:qun fī nafsihi/ ترك أثرا عميقا في نفسه

*ترك أثرا عميقا على نفسه

In these examples, the majority of the testees have many problems with using prepositions due to language transfer. Prepositions in Arabic language have been considered a source of challenge in their learning process. One reason behind this is that they transfer the English prepositions system and meaning into Arabic. Another reason is the cross-linguistic varieties that exist between English and Arabic. Further, learners mix the meaning of Arabic prepositions in which they chose'إلى' as an equivalent to'to'and the same thing with the preposition'on'.

Another example is when learners drop the preposition because they think that it does not have any language function as in their L1. As in the following example:

I felt bored

/ʃaʕarto bi-al-malali/ شعرت بالملل

*شعرت الملل

In addition to that, another error is the use of gender with adjectives as in the following example:

A big fast car

/sayyaratun kabīratun wa- ʒamīlatun/ سيارة كبيرة وجميلة

*سيارة كبير وجميل

In English, unlike Arabic, adjectives do not present or indicate any type of agreement with the nouns they modify. They also have the same plural and singular forms as well as feminine and masculine nouns. As a result, the use of adjectives presents a challenge to Arabic L2 learners, especially those whose knowledge is incomplete, particularly beginners. In other words, English adjectives are devoid of gender; in contrast, adjectives in Arabic must be either feminine or masculine (gender agreement). Furthermore, syntactically speaking, the attributive adjective in English precedes the noun it modifies. However, in Arabic, the attributive adjective follows the noun it modifies. Thus, L1 transfer anticipates that Arabic L2 learners will produce the incorrect order with this structure. That is why learners need enough input to produce correct sentences.

A key technique for understanding how language transfer affects learning is to examine the correlation between students' performance on the GJT and how often they reported using their L1 (English) while learning Arabic.

It is worth mentioning that students who stated that they used their L1 most of the time during Arabic learning tended to make many errors in both tasks 1 (translation) and GJT. This result raises the possibility that their performance on activities requiring Arabic language competency may suffer as a result of their frequent use of L1.

The results of both task types indicate a significant correlation between reported L1 usage and error-prone performance, suggesting that language transfer from English to Arabic may have contributed significantly to the obstacles experienced by these participants. These students would have encountered difficulties or interference when accurately comprehending and creating Arabic sentences during the GJT since they primarily depended on their L1 grammatical rules, structures, and vocabulary.

This outcome emphasizes the significance of taking into account the impact of language transfer effects in language learning contexts. To mitigate the impact of L1 interference, educators and curriculum designers should employ techniques that prioritize target language immersion, provide clear teaching on language distinctions, and incorporate practice activities that encourage self-sufficient use of the target language.

Further, these outcomes inform us that Arabic L2 learners are influenced by their L1. To state it differently, L1 is seen as a knowledge base that learners resort to either consciously or unconsciously, especially at the initial stage of Arabic L2 learning.

6. DISCUSSION

A vast number of SLA studies investigated the effect of learners on L2 learning, especially in Indo-European languages. However, non-Indo-European languages such as Arabic have not been given much thought yet (limited research and development compared with other languages); that is, further research in Arabic language is still required to set up vivid facts related to Arabic SLA. Another important point that needs to be taken into consideration is the paucity of pedagogical materials, especially reliable textbooks; this causes challenges for learners and instructors to get access to the required resources for effective language learning.

7. CONCLUSION

The study set out to determine the role of language transfer with reference to language universals in learning Arabic as a foreign language. Although the current study is based on a small sample of participants, the results concluded that students' L1 (English) has a significant role in their learning process. That is to say, learners tend to rely on their L1 knowledge by translating Arabic words or sentences into their L1 to get the correct answer. Hence, the results confirm the significant role played by learners L1 through the adoption of their L1 parameter setting in interlanguage grammar. Therefore, learners' interlanguage demonstrated evidence of being constrained by UG principles.

Declaration of Authorship Contribution

I, Imad Messouab, hereby declare that I am the sole author of the manuscript titled Learning Transfer and Universal Grammar: The Case of Arabic as a Foreign Language" and that I have written the entire content of the work.

REFERENCES

1) Alamry, A. (2014). *The acquisition of gender agreement in adult learners of Arabic* (Doctoral dissertation). Carleton University, Canada.
2) Alhawary, M. T. (Ed.). (2018). *Routledge handbook of Arabic second language acquisition*. New York, Routledge.
3) Bond, K., Gabriele, A., Fiorentino, R., and Banon, J. A. (2011). Individual differences and the role of the L1 in L2 processing: An ERP investigation. *Proceedings of the 11th Generative Approaches to Second Language Acquisition Conference GASLA*, (17-29).
4) Clahsen, H., & Muysken, P. (1986). The availability of universal grammar to adult and child learners-a study of the acquisition of German word order. *Interlanguage Studies Bulletin (Utrecht)*, *2*(2), 93-119.
5) Clahsen, H. and U. Hong. (1995). Agreement and null subjects in German L2 development: New evidence from reaction-time experiments. *Second Language Research (11),* 57–87.
6) Epstein, S. D., Flynn, S., & Martohardjono, G. (1996). Second language acquisition: Theoretical and experimental issues in contemporary research. *Behavioral and Brain Sciences*, *19* (4), 677-714.
7) Eubank, L. (1994). On the transfer of parametric values in L2 development. *Language Acquisition*, *3(3),* 183-208
8) Eubank, L. (1996). Negation in early German-English interlanguage: More valueless features in the L2 initial state. *Second Language Research*, *12*(1), 73-106.
9) Hakansson, G. (2001). Against full transfer-evidence from Swedish learners of German. *Working papers-Lund University Department of Linguistics, 48(4),*67-86.
10) Hawkins, R. and Y.H. C. Chan. (1997). The partial availability of Universal Grammar in second language acquisition: The failed functional features hypothesis. *Second Language Research 13*, 187–226.
11) Lakshmanan, U., & Selinker, L. (2001). Analyzing interlanguage: How do we know what learners know? *Second Language Research*, *17*(4), 393-420.
12) Lee-Ellis, S. (2009). The development and validation of a Korean C-Test using Rasch analysis. *Language Testing, 26*(2), 245–274
13) Meisel, J. (1997). The acquisition of the syntax of negation in French and German: Contrasting first and second language acquisition. *Second Language Research* 13, 227–63.
14) Messouab, I. (2021). Language transfer: The case of Arabic as a foreign language. *International Uni-Scientific Research Journal*, 26-30. doai202107172139

15) Platzack, C. (1996). The initial hypothesis of syntax: A Minimalist perspective on language acquisition and attrition. In Clahsen. H, *Generative perspectives on language acquisition (pp. 369-414)*. Essex University.John Benjamins Publishing Company.

16) Schachter, J. (1989). Testing a proposed universal. *Linguistic Perspectives on Second Language Acquisition. 73–88.* *https://doi.org/10. 1017/cbo9781139524544.007*

17) 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 Sudies in Generative Grammar*, *31*(4), 71-89.

18) Schwartz, B.D. & Sprouse, R. (1996). L2 cognitive states and the full transfer/full access model. *Second Language Research, 12*(1), 40–72.

19) Slabakova, R. (2000). L1 transfer revisited: The L2 acquisition of telicity marking in English by Spanish and Bulgarian native speakers. *Linguistics, 38,* 739-770.

20) Smith, N. V., & Tsimpli, I. M. (1995). *The mind of a savant: Language learning and modularity.* Blackwell Publishing.

21) Tsimpli, I. M., & Roussou, A. (1991). Parameter-resetting in L2. *UCL Working Papers in Linguistics*, *3*, 149.

22) Vainikka, A., & Young-Scholten, M. (1994). Direct access to X'-theory: Evidence from Korean and Turkish adults learning German. *Language Acquisition Studies in Generative Grammar*, *31*(4), 71-89.

23) Vainikka, A., & Young-Scholten, M. (1996). The early stages in adult L2 syntax: Additional evidence from Romance speakers. *Second Language Research*, *12*(2), 140-176.

24) White, L. (1989). *Universal grammar and second language acquisition*. Amsterdam: John Benjamins.

25) White, L. (2003). *Second language acquisition and universal grammar*. Cambridge University Press.

26) Winke, P., & Aquil, R. (2006). Issues in developing standardized tests of Arabic language proficiency. In K. Wahba, Z. Taha, & E. L (Eds.), *Handbook for Arabic language teaching professionals in the 21st century* (pp. 221–235). Mahwah, NJ: Lawrence Erlbaum Associates, Inc