

# L1 Transfer among Arab ESL Learners: Theoretical Framework and Practical Implications for ESL Teaching

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**Abstract**—The study investigates common instances of incorrect usage of English sounds and words caused by interference. L1 interference research is an integral part of Applied Linguistics and its implications can be found in any foreign language classroom but we focus our attention here on Arab ESL students' production of English. The study examines multiple examples of spoken and written interferences in light of recent theoretical framework. The paper recommends ESL teachers to explicitly address these types of errors in order to make students aware of errors they commit due to interference.

**Index Terms**—ESL teaching, L1 interference, Arabic phonology, collocation, English spelling

## I. INTRODUCTION

In this project, we are trying to address and define the problem of low proficiency levels among Arab ESL learners and attribute that to factors including language interference. In the process, we aim to establish a historical account of the problem, discuss various points of view which tried to explain this phenomenon and consequently we tried to show the existence and the extent level of interference among Arab English learners by demonstrating some authentic examples gathered from Arab ESL learners and relevant literature alike. Finally, having reviewed the literature and examined the domains of Arabic interference in English learning, we would suggest possible ways for teachers to tackle this problem accordingly using both explicit and implicit tactics.

## II. DEFINITION OF TERMS

In fact, it is difficult to give only one definition for transfer that includes all the different associated aspects. Weinreich (1953) for example, defines transfer as “those instances of deviation from the norms of either language which accruing in the speech of bilinguals as a result of their familiarity with more than one language”. (p. 1) Another definition for transfer was provided by Odlin (1989) who suggests that “transfer is the influence resulting from similarity and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired.” (p. 27) Similarly Ellis (1997) considers transfer as “the influence that the learner’s L1 exerts over the acquisition of an L2.” (p. 51) This definition has further been extended by Gass (1996) who adds that transfer is the use of the mother tongue (or other language) information in the acquisition of an L2 (or additional language).

As well as the different views about the definition of transfer, there are also different terms for this phenomenon. Corder (1983, 1992), for example, referred to this phenomenon as “mother tongue influence” because of the recognition of the fact that there was more influence of the mother tongue than only obvious appearance of a mother tongue form. Others such as Kellerman and Sharwood Smith (1986) and Odlin (1989) also take such recognition into their consideration and referred to this phenomenon as cross-linguistic influence or cross-linguistic generalization (see Gass, 1996 and Whong-Barr, 2006).

## III. STATEMENT OF THE PROBLEM

The available statistics from various sources including ETS and Cambridge ESOL suggest an alarming fact about Arab ESL learners; extremely poor proficiency levels. For instance, it appears that IELTS test takers who come from an Arabic background are among the lowest scorers from any linguistic background ever, and they scored far beyond the international average in every skill included as table (1) below shows.

TABLE (1):  
MEAN IELTS SCORE OF SOME FIRST LANGUAGES (FROM CAMBRIDGE ESOL: RESEARCH NOTES, ISSUE 40, 2010)

Academic	Listening	Reading	Writing	Speaking	Overall
Amharic	4.78	5.64	5.62	6.11	5.60
Arabic	5.14	4.96	<b>4.89</b>	5.65	5.23
Bengali	5.85	5.44	5.54	5.87	5.74
Chinese	5.72	5.85	5.19	5.28	5.57
Dutch	7.95	7.79	6.79	7.60	7.60

Obviously, there is a multitude of reasons for this poor performance and many stakeholders can share the blame; the educational authorities, teacher trainers, curriculum designers, teachers and learners themselves. However, we are looking at an entirely different direction to explain this phenomenon, something much more fundamental and one which has not been carefully considered in classroom, and that is the role played by the mother tongue in affecting learning English.

We are not suggesting that research has never been carried out to investigate Arabic interference in learning other languages especially English, but we rather believe that findings and recommendations of previous research have not been seriously considered in the actual classroom environment. Therefore, we intend to tackle this issue by looking into its deeper theoretical foundations and by accounting for real-life manifestations so teachers and learners alike can attribute common errors to their origins and subsequently find proper solutions. In fact, many foreign language teachers have noticed this trend among their students that is constantly referring to their existing L1 knowledge when they are learning a foreign language, a phenomenon widely known in the literature ‘L1 transfer’ or ‘mother tongue interference’.

#### IV. LITERATURE REVIEW

The role of L1 transfer has long been a controversial issue in applied linguistics, Second Language Acquisition (SLA) and language teaching (Odlin, 1989). The question of the role of L1 cannot be ignored by researchers in the field of the second language acquisition because of the clear L1 effects in L2 learner data that indicate the existence of an L1 influence (Whong-Barr, 2006).

In this section, we will start with a brief historical background of the L1 interference followed by a review of the debate set forth by different schools of thoughts in language acquisition in general and SLA in particular. This review should lay the basis for our current understanding of the transfer phenomenon and subsequently enable us to better examine the issue with our students.

##### A. Historical Overview

The role of first language transfer has an extended history in the field of second language acquisition as researchers and linguists have been discussing the issue of transfer in second language acquisition for many decades. Sweet (1899), for instance, suggests that the perfect way for acquiring a new language is through a comprehensive knowledge of the peculiarity of the mother tongue, a notion which according to Odlin (1989) was widely accepted at the time. However, Odlin also mentions that the significance of transfer was not recognized during those early years. In the 1950s, in the context of language learning, behaviorist learning theory regarded language as “habit and that language learning involves the establishment of a new set of habits” (Gass and Selinker, 2001, p. 72). Then, the role of the mother tongue was very important because it was the major cause of failure in second language learning.

It can be argued that the history of the transfer concept is closely related to the different theories of Second Language Acquisition (SLA) as Gass & Selinker (2001) mention which makes us shift our attention to examine the association of L1 transfer with some of these theories.

##### B. Contrastive Analysis Hypothesis

It was believed that mother tongue transfer enhanced target language learning when the same linguistic elements were present in both the native and the target language (positive transfer) but the difference between them created difficulties in learning the target language (negative transfer). This notion was known as the Contrastive Analysis Hypothesis (CAH). Contrastive Analysis is a structural comparison of two languages in terms of phonology, morphology, syntax, and lexicon. The central point of the Contrastive Analysis Hypothesis is stated by the two advocates of this hypothesis, Lado (1957) and Weinreich (1953):

...the student who comes in contact with a foreign language will find some features of it quite easy and others extremely difficult. Those elements that are similar to his mother tongue will be simple for him, and those elements that are different will be difficult.

(Lado, 1957, p. 2)

The greater the difference between the two systems, i.e. the more numerous the mutually exclusive forms and patterns in each, the greater is the learning problem and the potential area of interference...

(Weinreich, 1953, p. 2)

The Contrastive Analysis Hypothesis claims that errors in the second language can be predicted by identifying the differences between the first and the second language forms and patterns. Systematic L1 effects on L2 learning have been studied by assuming that L2 linguistic patterns can be largely predicted on the basis of L1 characteristics, which

transfer to L2 either positively or negatively (Gass and Selinker, 2001). In terms of language transfer, Gass and Selinker (1992) state that comparative studies between the first and the second languages are one important preliminary step to understanding language transfer. This comparison, they add, often guides us to understanding hypotheses related to language transfer phenomena.

Furthermore, Contrastive Analysis provides a way of comparing the phonological and syntactic systems of two languages. In contrastive studies, the following procedure is commonly used in order to predict errors:

- Description (i.e., a formal description of the two languages is made)
  - Selection (i.e., certain items, which may be entire subsystems such as the auxiliary system, are selected for comparison)
  - Comparison (i.e., the identification of areas of difference and similarity)
  - Prediction (i.e., identifying which areas are likely to cause errors)
- (Ellis, 1985:25-26)

However, the Contrastive Analysis Hypothesis runs into problems as a theory of second language acquisition as soon as it become subject to empirical testing. One of these problems is that the Contrastive Analysis Hypothesis predicts a number of difficulties that are not observed in second language learning. In other words, the differences between the first and the second language do not always highlight particular difficulties in second language learning. For example, two verbs in Spanish (*conocer* and *saber*) correspond to different meanings of the English verb *to know*. This lexical difference causes many problems for English speakers learning Spanish, while Spanish speakers learning English appear to have little difficulty in connecting the two lexical senses with one form (Odlin, 1989, p. 17).

Another problem with Contrastive Analysis Hypothesis is that this hypothesis fails to predict certain difficulties that were observed in second language learning (Ellis, 1985). For instance, Odlin (1989) states that, despite the similarity in grammatical structures, Spanish speakers learning English omit the verb *to be* in the sentence "*that very simple*" instead of "*that's very simple*". Moreover, Ellis (1985) adds two more reasons to illustrate the failure of this hypothesis. Firstly, he claims that the hypothesis was criticised from a theoretical point of view because of the feasibility of comparing languages as well as the methodology of Contrastive Analysis. Secondly, he has some reservations about the role of Contrastive Analysis in the field of teaching. From this discussion, it can be said that while there is concrete evidence of L1 influence on the acquisition of the second language, the Contrastive Analysis Hypothesis is not an adequate theory accounting for mother tongue influence because it over-predicts where the influence will occur.

However, there have been some attempts to rescue the Contrastive Analysis Hypothesis by distinguishing a 'strong' and a 'weak' version. The strong version is the one that has been discussed above, which makes incorrect predictions. The weak version, as described by Gass and Selinker (2001), "begins with what learners do and then attempts to account for those errors on the basis of NL-TL differences." (p. 73) They argue that the weak version, which becomes part of Error Analysis, has a wide acceptance because of the shortcomings of the strong version of contrastive analysis.

### C. Error Analysis

As for Error Analysis, Corder (1967), cited in Gass and Selinker (2001), claims that errors are not only regarded as something to be eliminated, but rather can play an important role in L2 acquisition. In fact, Gass and Selinker (2001) argue that errors can be 'red flags', and they may provide evidence of the state of the learner's progress in second language learning. They also make a clear distinction between errors and mistakes in that a mistake is a slip of the tongue that may occur one time. The speaker who makes a mistake can recognise it and correct it. On the other hand, an error is systematic and it may occur frequently. The speaker cannot recognise it and, therefore, cannot correct it. Error analysis provides researchers with more potential explanations for errors than does Contrastive Analysis, because the latter only relate errors to the mother tongue. Error analysis divides errors into two types: interlingual and intralingual. Interlingual errors are related to the mother tongue while intralingual errors (also known as developmental errors) are related to the target language (Gass and Selinker, 2001).

However, as its critics maintain, Error Analysis is not without its shortfalls. It has mainly been criticized because of its complete reliance on errors which is not sufficient to account for the whole second language acquisition process as Gass and Selinker (2001) believe.

### D. Cognitive Response to the Behaviorist Theory

As has already been seen, behaviorist theories are not suitable for explaining SLA and they fell out of favor in the early 1970s according to Ellis (1997) which explained the emergence of new approach in studying SLA. In other words, the view with regard to the issue of L1 transfer changed because of these new trends in second language research (Pienemann et al., 2005a). One of these trends was a reaction against the behaviorist habit formation theory. Moreover, this trend was influenced by child language research and the possible similarity between first and the second language acquisition. It considers language acquisition, whether first or second, as a creative process (Gass and Selinker, 1996). The learners construct their own language to a certain extent, away from L1 and L2 (Pienemann et al., 2005a).

### E. The Creative Construction Theory

The creative process of language acquisition has come to be known as the 'Creative Construction Hypothesis' which claims that first and second language acquisition proceeds similarly and that the mother tongue has nothing to do with

the acquisition of the second language. This hypothesis became the predominant research concept in North America (Faerch and Kasper, 1987) and it was further supported by the work of Dulay and Burt (1974), who claim that the acquisition of the second language was guided by universal innate principles rather than by the first language (Gass, 1996). Moreover, as Kellerman (1984) points out, many studies tried to analyze errors in a way that would support their Creative Construction Hypothesis where many errors in the target language would be classified as ‘developmental’ because these errors are similar to those made by children when they learn their mother tongue. They give the order of acquisition of a set of grammatical morphemes in English as evidence and they also noted that two groups of language learners with different backgrounds (Chinese and Spanish) have the same order of acquisition. Consequently, they argued that the role of the mother tongue in the acquisition process was very limited (Gass and Selinker, 1996). In other words, “the notion of L1 transfer appeared a less attractive explanatory concept.” (Pienemann et al., 2005a, p. 129). Additionally, there has been further work (e.g. Bailey, Madden, and Krashen, 1974) that has focused on the acquisition of a second language by adults that supports the claim made by Dulay and Burt, whose concern was focused on the acquisition of a second language by children.

However, the Creative Construction Hypothesis has also been criticized for underestimating the role of L1 transfer in second language acquisition, while, at the same time, a number of empirical studies have proved the influence of L1 transfer in L2 acquisition. Additionally, there were methodological problems in morpheme-order studies which have affected the reliability of the results (Gass and Selinker, 2001).

From the previous discussion, it can be concluded that the behaviorist Contrastive Analysis Hypothesis and the mentalist Creative Construction Hypothesis represent opposite position in terms of the issue of L1 transfer.

#### F. Interlanguage Hypothesis (IL)

While the leading hypothesis in North America was ‘Creative Construction’, the situation in Europe was different. Faerch and Kasper (1987) note that in Europe, researchers followed the hypothesis of Corder (1967) and Selinker (1972) which shifted from the Contrastive Analysis Hypothesis to the Interlanguage Hypothesis (IL). The assumption of this hypothesis is that L2 learners, at any time in their learning sequence, will be using a language system which is different from that of their mother tongue as well as of the target language. According to this hypothesis, transfer was reconceptualised within a cognitive framework and was still regarded as one of the factors that affects second language acquisition by playing an important role in the development of an individual’s interlanguage (Ellis, 1997). Moreover, this hypothesis led researchers to recognise that the mother tongue definitely plays a part in second language acquisition, but that its influence may take forms other than positive and negative transfer, e.g. overuse and under-representation (Gass and Selinker, 1992 and Odlin, 1989).

Consequently, Sharwood Smith (1994) differentiates between these hypotheses (Contrastive Analysis Hypothesis “CAH”, Creative Construction Hypothesis “CCH”, and Interlanguage Hypothesis “ILH”) using two different approaches. One way of comparing them is in terms of how these hypotheses regard the role of L1 in second language acquisition (major for the CAH, partial for the ILH, and minimal for the CCH). The other is how these hypotheses treat the differences or similarities of L1 and L2 learning (the ILH regards them as different whereas the other two regard them as parallel). (See table 1 below)

TABLE 1:  
CAH, ILH, AND CCH COMPARED ( FROM SHARWOOD, 1994, P 86)

	CAH	ILH	CCH
Role of environment in learning?	Major	Partial	Partial
L1/L2: same developmental processes?	Yes	No	Yes
L1 influence in development?	Major	Partial	Minimal

#### G. Kellerman’s Framework

As a reaction to the previous research into SLA studies which ignores the role of the mother tongue in second SLA, Kellerman (1979, 1983 cited in Gass 1996) argues that transfer is definitely an active mental activity. Kellerman’s framework is very important because it places the study of transfer within a cognitive sphere. He has proposed that learners have perceptions regarding the linguistic features of their own language. They can make decisions about which features are potentially transferable and which are potentially nontransferable. Kellerman suggests two factors relating to language transfer. The first is the learner’s perception of L1-L2 distance, which he refers to as psychotypology. The second factor is the degree of markedness of an L1 structure. By this he means that learners categorize the linguistic features into language-neutral features and language-specific features. Language-neutral features are those items that learners think are very common in all languages. These features might include certain aspects of semantics, writing conventions, stylistics and certain grammatical structures. On the other hand, language-specific features are those elements that learners consider as being unique to his/her language. These features might include idioms, inflectional morphology, and slang expressions (Gass and Selinker, 2001). Gass (1996) considers transferability in Kellerman’s framework a relative notion which depends on the perceived distance between the L1 and the L2 and the structural organization of the learner’s mother tongue. She also notes that the idea of perceived distance constantly changes for

learners as they acquire more of the target language. Kellerman's work was very important because it attempted to put the notion of L1 transfer in a cognitive area and liberated it from the behaviourism (Gass, 2001).

#### *H. L1 Transfer and Universal Grammar (UG) in SLA*

The emergence of Universal Grammar, especially parameter settings, encourages many L2 researchers to investigate how UG and L1 transfer work together in second language acquisition (Siegel, 2003). Universal Grammar has paid considerable attention to certain areas where L1 transfer may operate. Within the UG framework, many researchers have not concentrated primarily on transfer, but have recognised its importance in second language acquisition (Odlin, 2003).

White (1992) differentiates between the current UG-based theories of the phenomenon of transfer and the earlier theories, particularly those based on the Contrastive Analysis framework. Accordingly, he notes four ways in which UG relates to the phenomenon of transfer:

(i) Level of representation- generative grammar crucially assumes that representations involve a number of different syntactic levels; transfer may affect some or all of these, with direct or indirect consequences. The CAH, in contrast, concentrate on "visible" surface similarities and differences between languages.

(ii) Clustering – parameters link clusters of properties, which superficially might seem to be unconnected. Thus the claim that the L1 value of a parameter will be adopted, or will colour the L2 learner's perception of the L2 input, is a claim about a whole range of structures in the interlanguage.

(iii) Interacting parameters- since UG contains many parameters, it is likely that a number of these will have to be reset in L2 acquisition. This leads to the possibility that they will not all be reset at the same time. In that case, interlanguages will result that are neither exactly like the L1 nor the L2. Similarly effect will be achieved if learners adopt parameter settings which are present in neither the L1 nor the L2.

(iv) Learnability –certain parameter settings may be unmarked or marked, their status determined by learnability considerations, in particular by the assumption that L1 acquisition proceeds largely on the basis of positive evidence. When applied to L2 acquisition, this perspective gives a different twist to transfer issues from traditional claims about markedness and transfer.

(pp 220 – 1)

Among the current theoretical models of second language acquisition, there is some disagreement over the role of the mother tongue in L2 acquisition. Nevertheless, most of these and other models have something in common as they define transfer in term of the initial state (Whong-Barr, 2006). According to the L2 initial state, Gass (1996) mentions two main possibilities found in the literature related to the issue of the accessibility of the UG of second language learners and the L1 transfer. First, learners have access to UG which, in turn, is divided into two versions: strong access and weak access. The strong version claims that UG is the starting point of second language grammar formation. Consequently, this version downplays the influence of the target language. On the other hand, the weak version of UG access claims that the starting point of second language acquisition not only depends on UG, but also that the mother tongue plays an important role in this stage. Second, learners do not have access to UG, hence the mother tongue is the starting point for the second language learners' development.

In terms of the L2 initial state, literature assigns three positions for L1 transfer, namely no transfer, full transfer and partial transfer.

##### ***No Transfer***

This position is based on the notion of the absence of L1 properties in L2 acquisition. "On this view, the L1 final state does not constitute the L2 learner's grammar or mental representation at any stage." (White, 2000, p. 135). The L2 initial state is similar to the L1 initial state. White (2000) claims that although the proponents of this approach such as Epstein, Flynn and Martohardjono (1996, 1998), Flynn and Martohardjono (1994) and Flynn (1996) exclude the properties of L1 grammar from the interlanguage representation, they nevertheless assume some role for the L1 without specifying what this role is. White describes this position as inconsistent. With regard to grammatical development after the initial state, the advocates of this position claim that L2 acquisition is constrained by UG and that the final state of L2 grammar is similar to the final state of the grammar of native speakers of the target language.

##### ***Full transfer***

This position was first introduced by White's (1989) work in which she investigated the pro-drop parameter. She concluded that L2 learners begin with L1 parameter values and then reset them to L2 values. Later, this notion was refined by Schwartz's (1998) and Schwartz and Sprouse's (1994, 1996) hypotheses (Full transfer/full access), which claim that the starting point of L1 acquisition is different from the starting point of L2 acquisition. Also, L1 grammar constitutes the initial L2 grammar. In other words, the properties of L1 are taken as the starting point of L2 acquisition. According to this hypothesis, all lexical projections, functional structures, parameter settings and feature values transfer from L1 to the L2 (White, 2000). With regard to the relationship between the mother tongue and UG, this hypothesis considers "...that UG and L1 are a complementary sources of knowledge that guide interlanguage development." (Montrul, 2000, p. 232). The properties of L1 grammar act as a filter and prevent the learners from noticing certain properties of L2, leading them to fossilization at a point short of native-like competence. Thus, the convergence on L2 grammar is not necessarily expected (White, 2000).

##### ***Partial Transfer***

This position claims that "only parts of L1 grammar is represented in the L2 initial state (either lexical categories alone or lexical and functional categories)" (White, 2000, p. 138). So, when L1 grammar cannot accommodate the L2 input, learners have to resort to options made available by UG. In other words, the L2 initial state draws on properties of both the L1 and UG concurrently.

In the literature, advocates of partial transfer are not in agreement over which parts of L1 are transferred and what are not (Sabourin et al., 2006). White (2000) gives an overview of this disagreement by giving examples of some researchers and, according to them, what parts of L1 are transferred.

- Vainikka and Young-Scholten (1994, 1996): this is called the "minimal tree hypothesis". According to this hypothesis, there is partial transfer in SLA. In other words, the authors claim that only L1 lexical categories (NP, VP) are found and functional categories (DP, IP, CP) are not transferred. Functional categories are projected gradually in response to L2 input just as L1 acquirers are assumed to do.

- Eubank (1994): he claims that both L1 lexical and functional categories are found. However, features do not take on L1 values and are initially unspecified or inert. Functional categories eventually become specified for L2 feature values.

- White (1996): she claims that L1 lexical and functional categories as well as feature values are found where possible. But there will be cases where the L1 grammar simply could not constitute an initial theory related to L2, e.g. the acquisition of French clitics by English speakers.

However, Schwartz and Sprouse (1996) argue against the 'minimal trees' of Vainikka and Young-Scholten (1994, 1996) and the 'weak transfer hypothesis' of Eubank (1994). They claim that their data shows the inadequacy of the minimal trees hypothesis with regard to stages of interlanguage, subsequent to the L2 initial state. They state that the 'minimal trees hypothesis' fails to give an explanation for the 'S V Adv O' data for native-French speakers acquiring English. With regard to the 'weak transfer hypothesis', they show that the morphosyntactic empirical foundations which drive the whole approach are defective.

### *I. Transfer and the Processability Theory*

Processability Theory (PT), introduced by Pienemann (1998), is considered one of the leading theories in the field of the second language acquisition. According to this theory, L2 learners can only produce forms they are able to process. Therefore, L1 transfer is developmentally moderated (Hakansson et al., 2002). In other words, regardless of linguistics typology, L2 learners can only transfer the linguistic forms that they can process. The 'Developmentally Moderated Transfer Hypothesis' implies

... that first language (L1) transfer is constrained by the processability of the given structure; and 2) that the initial state of the second language (L2) does not necessarily equal the final state of the L1 (contrary to the assumption made by Schwartz and Sprouse, 1996), because there is no guarantee that the given L1 structure is processable by the under-developed L2 parser.

(Hakansson et al., 2002, pp 250 – 1)

The findings of these researchers support the 'Developmentally Moderated Transfer Hypothesis' by introducing the results of their study of 20 Swedish learners of German. Swedish and German are typologically very close. They found that, in spite of the fact that the verb-second structure is identical in both languages, Swedish learners of German do not transfer this structure from their mother tongue (Swedish) to the target language (German). Instead, they produce a canonical word order and an intermediate structure (adv NP subj V X), which is regarded as an ungrammatical structure in both languages. This study, according to Pienemann et al. (2005b), falsified the "Full Transfer/Full Access" hypothesis of Schwartz and Sprouse by reporting non-transfer cases, since the authors assume that the L1 final state is the L2 initial state. Additionally, Pienemann et al. also mention that the observation by Kawaguchi that Australian learners of Japanese began with an initial SOV hypothesis falsified the "Minimal Tree" hypothesis which predicts that L1 word order is transferred to L2.

According to the 'Developmentally Moderated Transfer Hypothesis', Pienemann et al. (2005b) demonstrate that, in the context of typological proximity and typological distance, transfer may or may not occur. With regard to the initial state, Pienemann and Hakansson (2007) argue that different types of word order may be found at the initial state in different languages. This notion was demonstrated by Pienemann et al. (2005b) in studies of L2 acquisition in several non-SVO languages.

The assumption that L1 transfer is developmentally constrained is not new in second language research. However, "Processability Theory" supplies an explicit framework for this notion (Pienemann et al., 2005b).

Pienemann et al. (2005b) sum up the discussion into the two fundamental trends with regard to L1 transfer:

1. Structures higher up the processability hierarchy are never transferred at the initial state, regardless of typological constellation.
2. Initial word order may vary as long as the flow of grammatical information is restricted to the initial stage of processability. (p. 111)

## V. DISCUSSION

We have identified a number of errors categorized according to their sources. It must be noted however that these errors are not necessarily exclusive for Arab learners but rather commonplace among them. In every case however, we believe that these errors are committed as a direct result of L1 transfer, partially or completely, which therefore gives support to points of discussion already seen in the previous literature review.

#### A. Errors Caused by Non-phonetic English Spelling

The main reason of these errors is the inconsistency of English spelling. A good example that demonstrates this is the spelling of the weak vowels. Arab ESL learners find it difficult to decide whether to use <e>, <a> or <i> to write the phonetic value schwa /ə/. This fact actually account for a large group of errors such as *biginner, mannar, devide, dicide and grammer* (Cook, 1999). Moreover, some sounds are represented in more than one way. For instance, the sound /ɔ/ can be seen in *fought* and *caught*. Thus learners may write *tought* by analogy with words like *fought* and *bought*. In the same respect, many spelling errors can be seen as in *original* (c.f. regional), *languidge* (c.f. knowledge) *fation* (c.f. nation). (Ibrahim, 1978)

Another example of the inconsistency of English spelling is the silent letters. Arab ESL learners are used to reading or writing each word according to what they see or hear. Thus they may write *lisen* instead of *listen* or they may pronounce it as /li-stʰn/.

#### B. Transfer and English Spelling

Arabic language is an alphabetic system. It consists of 28 letters: 25 consonants and 3 long vowels. In addition, there are diacritical marks that contribute phonology to the Arabic alphabet. These diacritical marks are short vowels signs posted above and/or below the letters for letter-sound pronunciation. Adult Arab readers are expected to read Arabic texts without short vowels because they rely on context and other knowledge to do that (Abu-Rabia and Taha, 2006).

Many spelling researches indicate that L1 influences the ESL spelling skills. This influence can be seen in two ways. The first is the transfer of phonological knowledge or the transfer of grapheme-phoneme correspondence skills. The second involves the manner in which orthographic word forms are processed and subsequently acquired (Fender, 2008). According to Arabic language, these ways will be discussed as follows.

- *The transfer of L1 (Arabic) grapheme-phoneme correspondence.*

Arabic language spelling depends on reliable and consistent grapheme-phoneme mappings. In contrast, Cook (1999) says that English language has complex correspondences between sounds and letters which cause some difficulties for many students to master English spelling system. In other words, English has some variable grapheme-phoneme spelling such as the phoneme /k/ can be spelled as <c> as in *picnic*, <k> as in *kitchen*, <ck> as in *stuck*, <ch> as in *school*, and the grapheme <gh> can be spelled in various ways as /g/ in *ghost*, /f/ as in *laugh*, or as part of a complex vowel digraph as in *through* or *caught*. Arab ESL learners may not initially discover the inconsistency in English language spelling. Therefore, they may transfer their L1 spelling knowledge to deal with English spelling. Such transfer accounts for many misspelling among Arab ESL learners such as *piknik* for *picnic* and *fone* for *phone* and others (Fender, 2008).

- *The transfer of L1 (Arabic) phonological knowledge.*

Transfer of phonological knowledge account for some problems that Arab ESL learners may encounter when they acquire ESL phonemic segments and patterns that are not found in Arabic language (Fender, 2008). For instance, English language has two distinctive bilabial plosives, <p> and <b>, whereas Arabic language has only the latter (Ibrahim, 1978). This fact sometimes causes problems to Arab learners. They may misspell words such as *blay, bicture, Jaban* and others. In addition, Arab ESL learners sometimes face some difficulties in distinguishing between <q> and <c> in writing when the <c> corresponds to the phoneme /k/ such as *quickly* (Cook, 1999). Moreover, Arabic language has only /o/ sound, while English language has /oo / and /ɔ/. This fact usually makes it difficult for Arab ESL learners to distinguish between the pronunciation of *whole* and *hall*, and to write *coast* when they mean *cost* (Ibrahim, 1978). Consequently, most Arab ESL learners show more spelling difficulties with multisyllabic words that contained of spelling patterns across syllables such as *customer, bottle* and *success* (Fender, 2008).

Another example of this type of error is that Arab ESL learners appear to have difficulty with consonant clusters in English. They tend to insert a vowel to these clusters when they want to write or pronounce them such as *communisem, childiren, bilastic* and *tiransilate*. (Ibrahim, 1978)

#### C. L1 Transfer and English Grammar Rules

These kinds of errors are not only particularly related to Arab ESL learners as non-Arab learners may still make the same errors. Ibrahim (1978) says that teachers sometimes give their students a rule without its exceptions. In this situation the rule is considered incomplete. For example, when learners want to add suffix to a word with a final *e*, they must be taught that in this case if the suffix begins with a vowel letter, the final *e* must be dropped unless that it must be retained such as *complete: completely*, but *compare: comparing*. However, teachers may not teach this rule in its complete form. Therefore, errors such as *completely* or *comparing* will occur.

Ibrahim also mentions that overgeneralization is one of the obvious factors that influence the spelling of Arab ESL learners. He illustrates this fact by giving some examples that demonstrate his notion. He argues that some Arab ESL learners may make error such as *savety* because they know that *brave* becomes *bravery* and *slave* becomes *slavery*.

Moreover, according to derivation in English, learners are taught that this can be done by adding a suffix to the stem without changing the spelling of the stem such as *equal* becomes *equality*, *appreciate* becomes *appreciation* and *quick* becomes *quickly*. Therefore, learners overgeneralise this idea to some cases where some changes to this idea must be take place. When this happens, some spelling errors occur such as *day* becomes *dayly*, *pronounce* becomes *pronunciation*, *argue* becomes *arguement*, *four* becomes *fourty* and *enter* becomes *enterance*.

#### D. L1 Transfer and English Collocations/Lexical Phrases

From our analysis of the written texts, we have identified two incorrect usages of the preposition 'from' which were found in texts written by Arabs and we can relate this phenomenon to L1 interference. Another example of L1 interference is the incapacity to differentiate between verbs such as 'record' and 'register' and how to use them in their proper contexts. Again, this mistake has occurred in texts written by Arabs which further supports the hypothesis that L1 interference is widespread indeed. The only case we came across was using a relatively common expression in Arabic by a group of Arab students in the UK to promote their conference but we also accept that it is not uncommon to see more of the same.

### VI. IMPLICATIONS FOR TEACHING

We certainly believe that once teachers are equipped with proper knowledge about L1 transfer, that in turn should help them make informed decisions when faced with real-life problems later on. In other words, a language teacher can now address this problem by directly asking students not to constantly translate meanings from their mother tongue and revert instead to their L2 competencies.

A direct application of knowledge gained from L1 interference research in the classroom could be achieved by assigning special sessions for recurring interference errors at the right time of the course. Doing so should help students realise the problem whenever it occurs which in turn can help students avoid them.

Building 'students' awareness' repertoire sounds ideal and straightforward but it does not come without challenges as is the case with most newly introduced techniques. However, as we earlier tried to establish how widespread interference issues are among Arab ESL learners, a careful application of this alternative approach is quite worthy of researching.

### VII. CONCLUSION

Interference errors among Arab ESL students are quite possibly one of the biggest problems they face in their endeavour to achieve a satisfactory proficiency level in English. However, as the literature well documents real-life examples of Arabic interference in the fields of grammar, syntax, phonology, grapheme-phoneme and idiomatic use of language, it is just becomes logical to expect teachers to become more aware of these errors and explain them to students in the hope they also become aware of this issue and take necessary steps to avoid commenting such mistakes later on.

However, knowing and recognising errors also require teachers to understand the deeper foundations of the problem which is why they also need to be informed about the different explanations provided in the literature and how different schools of thought attempted to tackle it.

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