

**The Impact of Prototypicality Judgement on Syntactic Transfer:  
A Case Study of Second Year Students of English, Laghouat University**

تأثير تقييم السمات اللغوية على التداخل اللغوي البنوي:

دراسة حالة طلاب السنة الثانية لغة إنجليزية، جامعة لغواط

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**Abstract**

The analysis of transfer involves determining the way different factors interplay in shaping multilingual competence. The present study aims at investigating the impact of prototypicality on syntactic transfer. The study adopts a qualitative approach where data is collected from the written composition of 40 students of English at Laghouat University. The first step is the analysis and categorisation of errors. The students' judgements of prototypicality are measured through individualised questionnaires. The findings of the study indicate that there are some patterns to the learners' syntactic errors; part of these errors is attributable to transfer from the mother tongue. The findings also reveal that learners' awareness about syntactic markedness in their mother tongue has a direct impact on reduction of transfer. One major implication is teaching practices that take into account explicit consciousness raising activities that are built on contrastive analyses of markedness.

**Keywords:** Transfer; Cross linguistic Influence; Prototypicality; Markedness; Consciousness Raising.

ملخص:

يتضمن تحليل التداخل اللغوي ضبطاً للعوامل التي من شأنها تحديد ماهية الكفاءة متعددة اللغات. تهدف الدراسة الحالية لتحديد تأثير تقييم السمات الفريدة في اللغة على مدى التداخل اللغوي في استعمال اللغة الإنجليزية. تعتمد الدراسة على المنهج الكيفي لتحليل مقالات لأربعين طالباً في السنة الثانية ليسانس لغة إنجليزية. تتضمن المرحلة الأولى من البحث تحليلاً للأخطاء المرتكبة من قبل الطلبة ويليها تحليل لتقويم السمات المميزة عن طريق استبيان فردي لكل طالب. تظهر نتائج الدراسة الحالية أن الأخطاء البنوية في مقالات الطلبة تتسم بنسق معين حيث أن كثيراً من هذه الأخطاء سببها التداخل اللغوي بين العربية والإنجليزية على المستوى الإدراكي للمتعلم. كما أظهرت الدراسة أن وعي الطلبة بخصوصية قواعد اللغتين قلل من نسبة الأخطاء المتعلقة بالتداخل اللغوي. من خلال نتائج الدراسة يمكن اعتماد تعزيز الإدراك اللغوي كأداة مساعدة في تعلم اللغة الثانية لتقليل الأخطاء التي يسببها القياس والاعتماد على لغة الأم.

**كلمات مفتاحية:** تداخل لغوي، التأثير بين اللغات، تقويم السمات، الخصائص اللغوية الفريدة.

## **1. Introduction**

During the past few decades, a growing interest has been placed on the cognitive niceties of second language acquisition. This shift in research paradigms is motivated by the corresponding shift in the theoretical foundations of the field of psychology. The rise of Chomskyan linguistics translated to observable differences in the perspective with which behavioural and social phenomena are approached, with a primary focus on the humanistic nature of learning. In more particular contexts, second language learning started to be seen as an opportunity to have more insight into the nature of the human faculty of cognition, thus, stirring more theory-oriented research endeavours. The accumulation of the institutional memory in the field of SLA owes it to the load of empirical data found in applied research. With that, came a better understanding of the unique features linguistic systems entertain and a more appreciation of learner peculiarities as worthy of investigation.

Perhaps, the most notable shift of stance is the refusal of boycotting learners as a variable of analysis, not only in applied research but also in theory-oriented research. The body of literature shows that the description of language started to shift away from the isolated prescriptive traditions to more descriptive traditions of actual and contextual language tokens. The dichotomies of typology vs. psychotypology and markedness vs. prototypicality are perfect exemplary of the noted shifts. With that in mind, learner's perception of the structural and cultural aspects of language factored in as key variables of analysis with solid implicational capacities.

Given the complex nature of second language acquisition, the call for theoretical meticulousness is progressively more needed. The interplay of the first language and the subsequently learnt languages is a clarion call for investigation. Indeed, the by-product of this interplay is crosslinguistic influence, which arguably offers valuable insight into the nature of multilinguistic competence. In view of that, the present study aims at investigating the extent to which learner-related evaluation of the structural patterns of language affects the outcomes of multilinguistic competence. The study seeks to address how the evaluation of structural proximity between the mother tongue and the target language feeds into the nature of transferability and the rate of transfer. A more detailed theoretical account for crosslinguistic influence, transferability, markedness and prototypicality is offered in the subsequent sections.

## **2. Theoretical Background**

### **2.1 Crosslinguistic Influence**

One of the features that distinguish research in first language acquisition from that in second language acquisition is the investigation of crosslinguistic influence. The conceptual meticulousness that is found in SLA research is owed to the fact that the analysis of multilinguistic competence offers more insight into the language-related cognitive faculty (Flynn, Foley & Vinnitskaya, 2004). Crosslinguistic influence refers to any form of interaction that occurs between the linguistic systems a given individual knows. This suggests that influence can occur between the mother tongue and any

other subsequently learnt language, with the mother tongue, not necessarily being the locus of influence. Moreover, the definition implies that influence can occur not only at the level of observable linguistic behaviour, i.e., output, but also at the level of competence represented in learners' linguistic processing of information, memory and problem-solving.

What is noteworthy at this juncture is that the literature offers different terms that refer, more or less, to crosslinguistic influence. The change in terminological use is best-exemplary of the intricate nature of the phenomenon; Murphy (2003, p. 03) maintains that "the difficulty in pinning down the phenomenon of language contact is reflected in the evolution of the term used to designate the process". Perhaps, the first, who brought up linguistic relatedness to the discussion, is Weinrich. In his seminal book, *Languages in Contact*, published in (1953), Weinrich uses the term *interference*, which refers to "instances of language deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language". Here, his visualisation of linguistic interrelatedness is limited to instances, where knowledge of the mother tongue hinders the internalisation of the target language structures.

Dissatisfied with the theoretical oversimplification and building on Lado's (1957) more visionary proposition, Odlin (1989) uses the term *transfer* to refer to "the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired" (p.27). One new outcome of Lado's terminological use is the recognition of the aiding role the mother tongue can play in the acquisition of the new language. Here, researchers recognise *negative transfer*, which refers to what Weinrich referred to as interference, and *positive transfer*, which helps learning. However, Odlin's proposition is also over simplistic inasmuch as it ascribes negative and positive transfer to typological differences and similarities, respectively. This terminological categorisation is stated by Lado (1957), who argues that: "The student who comes into contact with a foreign language will find some features of it quite easy and others extremely difficult. Those elements that are similar to the learner's native language will be simple for him and those that are different will be difficult" (p. 01).

This view of second language acquisition is criticised for its salient influence by the heavily criticised behaviourist approach, which views second language learning as an issue of habit formation, and learners are expected to draw on previously acquired habits. This means, according to proponents of this perspective, that the target language errors are attributable to negative transfer. This claim is stated in Corder earlier works (e.g., 1973), and it echoes the contention of the scholarly community's prominent figures at that time, such as Lee (1968, p. 180), who argues that "the prime cause, or ever the sole cause of difficulty and error in foreign language learning is interference coming from the learner's native language."

The decline of behaviourism as a theory for human cognition and learning catapulted the view of linguistic interrelatedness in multilinguistic contexts into a

completely new perspective. Sharwood Smith and Eric Kellerman (1986) realised that much of the theoretical hindrance in SLA is consequential to terminological failure to capture the exact nature of the phenomenon. They reserved the term transfer to instance, where there is a perceptibly direct influence between the mother tongue and the target language, and, still, averred that “terms like ‘interference’ and ‘facilitation’, with their negative and positive connotations respectively, are best abandoned altogether” (p. 01). They, instead, suggested the term *crosslinguistic influence*, which gained more scientific endorsement, as it allows for the discussion of, inter alia, reverse influence and avoidance as examples of other forms of linguistic interrelatedness.

## **2.2 Factors that Interfere with Crosslinguistic Influence**

The nature of crosslinguistic influence is very intricate and subsumes multiple variables at play. Some of these variables are the result of the inherently systematic nature of language, which enforces certain patterns both in terms of structural regularities and at the level of mental representations of grammar. Other variables, however, are related to the humanistic nature of language and the variable nature of humans. Learners, here, are marked with peculiarities that the however systematic, flexible nature of language accommodation. The following sections highlight learner-related and language-related variables that are in close interface with crosslinguistic influence.

### **2.2.1 Learner-Related Factors**

One of the main differences between research in first language and second language acquisition is the variable of age. While subjects of inquiry in first language acquisition research, i.e., children, are characteristically of the same age, age is of a peripheral importance in this field. However, subjects of inquiry in SLA research, i.e., second language learners, are aged highly variably, with the possibility of taking samples of children, adolescents or adults or even a miscellaneous sample age-wise. Different age groups correspond to different levels of cognitive maturity and, hence, fashions of language use, such as different levels of: sensitivity to language structure, i.e., metalinguistic awareness, lexico-syntactic complexity and control over register and discursive ties to mention, but a few (Cenoz, 2002). It is only conceivable, then, to assume that age is very critical in the analysis of crosslinguistic influence.

In the more particular context of second language acquisition, many theoretical frameworks, including *Fossilisation* (Selinker, 1972) and *Critical Period Hypothesis* (Lennenberg, 1967), show that, despite the positive correlation between age and cognitive maturity, age seems to set cognitive limitation on the lateralisation of language, thus, having less likelihood of achieving native-like competence in the target language. This claim is supported by empirical data as it is observed that, despite the observably lesser level of lexico-syntactic complexity and discursive control, younger learners of an L2 are less prone to fall back on their L1 knowledge (Cenoz, 2001).

Learners of similar ages are characterised with different levels of proficiency in the target language. However, the analysis of proficiency, as a prospective variable of impact, is fraught with some procedural complications related to scalar development. This is first expressed by Odlin (1989), who recognises the inherent difficulty of defining and measuring proficiency, thus, making it uneasy to account for. Despite the remarkable developments in the pedagogy of assessment, two decades later, Jarvis and Pavlenko (2008, p. 202) voiced similar concerns regarding the theoretical complications in the face of pinning down “clear-cut” findings regarding the “recipient-language proficiency”. This difficulty is consequential to the fact that different scholars rely on different criteria to measure proficiency (years of learning, grading, some tests, etc.). Notwithstanding the aforementioned limitations, most of the studies seem to agree that observable instances of crosslinguistic influence are inversely correlated with proficiency. That is, more proficient learners are less likely to draw on their L1 knowledge to iron out difficulties in L2 (Bardel & Lindqvist, 2007; Hammarberg, 2001; Ringbom, 1987).

In addition to age and proficiency, learners’ metalinguistic awareness can be a determinant factor constraining language use. Metalinguistic awareness refers to learners’ ability to not only use language but also contemplate upon it as a system of compositional hierarchies that can be broken down into constituents and reconstructed. This awareness results in higher levels of conscious efforts to map form onto meaning (Auer & Wei, 2007). Some aspects of metalinguistic awareness involve the sensitivity to the structural layout of some linguistic tokens, the frequency of certain constituents’ occurrence and the lexico-syntactic and morpho-phonetic implications associated with register variation.

Multilinguals are believed to have relatively higher levels of metalinguistic awareness (De Angelis & Selinker, 2001), particularly when L2 is learnt through formal instruction. However, there can be some individual differences with reference to metalinguistic awareness, which translate directly to observable variations in the linguistic behaviour of these learners. With regard to crosslinguistic influence, Odlin (1989, p. 140) contends that “whatever the exact nature of the role that linguistic awareness plays, such awareness is a non-structural factor that interacts with crosslinguistic influences”. Generally, it can be argued that higher levels of metalinguistic awareness are associated with noticeable decreases in the rate of crosslinguistic influence (Hammarberg, 2001). One explanation for this decrease is that awareness of the structural patterns of both the target language and the mother tongue results in more conscious monitoring and more attention to L2 structures.

An exhaustive theoretical account of all learner-related factors pertinent to crosslinguistic influence is by no means achievable, nor is it of an expedience given the scope of the present study. It is, however, worthwhile noting that factors, such as the frequency and rate of exposure to the target language along with recency of use, especially in multilingual contexts, are some of the factors that are empirically proven to be eminent in the analysis of crosslinguistic influence (Duran, 2016). Researchers should be aware of the

fact that it is more often than not the case that multiple variables interact, and the isolation of one variable is methodologically and procedurally non-viable.

### **2.2.2 Language-Related Factors**

The discussion of crosslinguistic influence in relation to learner-related factors is useful in explaining differences in the linguistic behaviour of different learners. However, there are some uniform patterns that are observed among learners notwithstanding the discrepancies in terms of proficiency and linguistic awareness. It is, therefore, necessary to assume that there are some universal elements to second language and first language interplay across learner groups. These universals are partly attributable to the inherently systematic nature of language and the assumed in-built syllabus for language learning. Learners with a similar linguistic background demonstrate similarities in the linguistic behaviour that are worthy of investigation. In fact, the literature offers some detailed insight into some language-related aspects of crosslinguistic influence. The most prominent language-related factors are crosslinguistic typology and structural markedness.

The analysis of universal principles in crosslinguistic influence and the cognitive aspect of multilinguistic competence lead to the discussion of Universal Grammar. This involves analysing how universal grammar principles are accessed by learners when learning a second language, and how parametric variations interfere in the production of L2. However, there seems to be little, if any, theoretical certainty in this matter. Scholars hold differing stances regarding not only whether or not UG principles are accessible to learners (White, 2000), but also the extent to which this prospective access is relevant in the discussion of crosslinguistic influence (Odlin, 2003). Given the methodological difficulty, associated the measurement of UG principles in SLA, a more interest is, then, shifted towards the more measurable, yet still indicative of universal patterns, aspects of crosslinguistic influence.

Typological differences and similarities between languages are established on the basis of the structural analysis of languages, thus, classifying into language families with metaphorical genetic ties. The outcomes of linguistic typology, as an independent field of enquiry, can promote the better understanding of many phenomena in SLA (Odlin, 1989). Typological proximity/distance between the target language and the other languages a learner speaks can impact crosslinguistic influence to the extent that it may override learner-related variables, such as proficiency and metalinguistic awareness (Poullisse & Bongaerts, 1990). Empirical data suggest that languages that are closer to the target language are more likely to function as supplier language for the latter's structures (Ortega & Celaya, 2019). After all, it is the criterion of sameness and difference that constitutes the very basis of Weinrich's (1953) and other subsequent analyses' perspective on crosslinguistic influence, such as Contrastive Analysis Hypothesis (Lado, 1957). However, many of these suggestions are discredited by actual empirical data, but this is due to the shortcomings regarding the criteria of sameness and difference. The subsequent section discusses a more

empirically valid perspective to the analysis of linguistic typology.

The concept of typology is more comprehensive inasmuch as it refers to the structural proximity between two languages in a holistic fashion. However, it is, sometimes, more beneficial to address structural proximity in particular contexts. Indeed, two languages that are typologically distant are expected to share some structural constraints. In view of that, the discussion of markedness is more particular as it characterises isolated structures and dismisses overall typological proximity. Marked features in a language are those features that are language-specific while unmarked features refer to the more common feature across world languages. Evaluation of markedness is central to SLA research in the sense that marked features are more demanding to learn and are generally acquired later in the process of acquisition (Andria, 2014). Regarding crosslinguistic influence, empirical data (e.g., Ellis, 2003; Gass & Selinker, 1984) show that marked features are less likely to be transferred.

The discussion, thus far, made a clear distinction between the factors that are related to learners' differences and those that are related to the nature of language. However, the distinction is motivated by explanatory needs and is by no means conceptually pronounced. The interplay between what is believed to be a learner peculiarity and what is uniquely linguistic is possible. In fact, it is more empirically consistent to view language and learner as one variable, yet, systematic entity that reflects the humanistic nature of cognition. The following sections aim to discuss the conceptual ground that substantiates this interweaves with the claim that contradictory outcomes of previous studies is part consequential to failing to regularise and frame the appropriate terminology.

### **2.2.3 Learners' Perception of Language**

One major issue with the dichotomy presented above "learner- vs. language-related factors" is that it offers conflicting findings when tested against actual empirical data. The separation between two closely related variables calls for a high level of methodological meticulous and is not supported by verifiable data. A more moderate approach is the assumption that learner-related and language-related variables work in tandem. This approach is best represented in the discussion of *psychotypology* and *prototypicality* by Kellerman (1983).

The discussion of typological proximity is based on the highly scientific premises of descriptive linguistics, and no consideration is taken regarding the learners' attitude towards the languages under comparison. In many cases, predicting crosslinguistic influence on the basis of structural proximity, or the lack thereof, failed to materialise. This led researchers, namely Kellerman (1983), to opt for the term psychotypology, which refers to the learners' perception of the level of proximity between two languages. This intuitive judgement may or may not come in congruence with the outcomes of what descriptive linguistics evaluates as genetically related languages. The learners establish, conscious or unconscious, mental standards of comparison,

which translate to constraint on both the supplier language and the frequency at which items are transferred. (Gass & Selinker, 1984) This means that “not everything that looks transferable is transferable.”(Kellerman, 1983, p. 113).

Javris and Pavlenko (2008) elaborate on Kellerman’s discussion, as they make a distinction about *perceived proximity* and *assumed proximity*. Perceived proximity refers to the conscious and unconscious judgments made by learners that a given set of linguistic tokens, encountered in the target language, has its correspondence in the source language. This is a more informed judgement although it may not, necessarily, concord with the outcomes of linguistic typology. Assumed proximity, however, is a less informed and more intuitive guess that given structural and functional combinations in the source language have their correspondences in the target language. This assumption is not, necessarily, the outcome of an evaluation of encountered structures in the target language. Rather, it is the outcome of what learners perceive the target language to be in reference to the source language. Two major differences are noted between perceived and assumed proximity. The first is that while the former is based on learners’ analysis and synthesis of the structure of language, the latter is more intuitive. The second difference is that perceived proximity evaluation starts from the encountered tokens of the target language to the source language while assumed proximity starts with prior knowledge about the source language to a synthesised knowledge about prospective linguistic tokens in the target language.

Kellerman’s discussion (1983) often surfaces in SLA research inasmuch as it offers interesting insight into the possible ways learners constitute active parties in the assessment of linguistic structures. The analysis of markedness is purely the linguist’s task to undertake. However, what learners perceive as being unique in their language is not essentially consistent with the outcomes of linguistics’ descriptive measures. Being equally important, Kellerman (1983) alludes to the concept of *prototypicality*, where features that are assumed/perceived by learners to be unique in their language, are referred to as *aprototypical* while features that are assumed/perceived to be common across the target language and the language(s) the learner speaks are referred to as *prototypical* (Jarvis & Pavlenko, 2008). These two types correspond to *marked* and *unmarked* features, respectively. Evidence suggests that many instances of crosslinguistic influence are, heavily, dependent on the *learners’ judgement of prototypicality* (Rothman, 2015).

The interplay between crosslinguistic influence and the learners’ evaluation of the linguistic structures can be summarised in Kellerman’s hypothesis (1983, p. 23) that “transfer will be constrained: (1) when L1 and L2 are perceived as sufficiently unrelated (2) when a particular L2 structure is perceived as sufficiently ‘marked’”. Although research is still to determine what variables are more determinant of crosslinguistic influence in what contexts, it can be argued that a more suited approach to the study of this influence is to view learner-related variables and language-related variables as closely interdependent.

### **3. Statement of the Problem**

The understanding of crosslinguistic influence requires understanding not only the cognitive mechanisms that underlie it, but also the factors that trigger it. The discussion above shows that any analysis that seeks to investigate the factors related to crosslinguistic influence can be inconclusive if language-related variables are isolated from their humanistic nature. Two of the factors, discussed above, are, ideally, integrative of both learner-related and language related variables: psychotypology and prototypicality. The former can be investigated in cases of multilingualism, where several languages can be the default supplier for crosslinguistic influence. Answers stemming this kind of holistic research can help understand the criteria that determine what language serves what function. However, in bilingual contexts, a more specific analytical context is needed; a cross-structural, rather than crosslinguistic analysis, is required, where levels of similarities are determined on more particular levels. Prototypicality analysis can serve the function of explaining why certain structures are more transferrable than others despite the seeming inconsistencies typology-wise.

On the other end of the spectrum, learning English requires an understanding of the native-like patterns of usage, at both productive and receptive skills. Being a highly important skills in the academic context, a growing interest is being placed on the analysis of errors in learners' written production. The present study attempts to investigate the impact of prototypicality judgement on the transfer of morpho-syntactic features in writing. It seeks to answer the following questions:

- What are the most prominent errors in English learners' written production?
- How does bilingual competence impact L2 writing in relation to Crosslinguistic influence?
- How does Prototypicality judgement impact crosslinguistic influence at the level of writing?

### **4. Methods**

The methodological design in this study is essentially qualitative. The sample of the study consists of 40 second year university students from the department of English at Laghouat University. Excluding first year students is motivated by the fact that they are not yet introduced to extra-sentential compositional writing (paragraphs and essays), and the exclusion of third year students is due to the fact that they have graduated by the time of the second phase of this research, which makes rescheduled meetings not possible. The sample is chosen, randomly, from one of the groups of third year.

#### **4.1 Phase One: Error Analysis**

The first step of this phase involves building a corpus for analysis. Here, the learners' exam questions in Written Expression second term exam are collected. The corpus built for this study consists of 40 essays. The second step is the identification of errors in the students' essays, which is followed by a description of errors. The

descriptive categories available for error description are numerous. The present study is concerned, exclusively, with morpho-syntactic errors. A linguistic taxonomy for the description of errors would, thus, be futile. Instead, the descriptive category depends on a surface strategy taxonomy (Dulay, Burt & Krashen, 1982) and a comparative analysis taxonomy (Richard, 1973) as shall be discussed in subsequent sections.

#### **4.2 Phase Two: Establishing Correlational Patterns**

The first phase results, inter alia, in a description and evaluation of all errors, including those stemming from crosslinguistic influence. The second phase of this research revolves around accounting for the source of these errors. Among the various sources, discussed above, prototypicality is central to this scope of this study. A meeting is scheduled with the students, and they are given customised *Prototypicality Judgement Tasks* in the form of individualised questionnaires, where they express the extent to which they think a given structure is unique to their mother tongue and/or English. A five-point Likert scale is offered to enable learners' perception of markedness to be quantified. It should be noted that the use of the scale is justified by the fact that prototypicality is scalar in nature as students' perception of the uniqueness of given structures can range between "strongly agree" to "strongly disagree". The scores obtained from the questionnaire are qualitatively, compared with the results obtained from the previous phase.

### **5. Analysis and Discussion**

#### **5.1 Error Analysis**

The primary phase of the analysis, essentially, involves a description and categorisation of learners' morpho-syntactic errors in English written composition. The writing task requires the students to write an essay describing a memorable event. It should be noted that although the sampling criteria is random within the purposeful population, some sample writings are excluded from the analysis, as they do not constitute complete essays (e.g., paragraphs of less than 40 words). However, some of the content offers some insight into the nature of transfer and is used to support the discussion.

The analysis of the essays shows that the notion of errors is rather obscure inasmuch as mere criteria of well-formedness can be misleading. Examine the following sentences written by one of the students: "*She supported me in all my cases*" and "*I grew up in a centre cares about art*". The generative morpho-syntactic rules of English would judge the first sentence as correct and the second as incorrect. The incorrect sentence involves a semantic superimposition of homonyms in Arabic that are transferred to English. The word "*centre*" translates to /*wasat*<sup>2</sup>/, which, in Arabic, is homonymous with the word "*atmosphere*". The student, clearly, superimposed Arabic semantic relations on those of English. The other error in the sentence is the result of overgeneralisation of a rule. The complementiser *that* can be omitted only in some textual contexts. The occurrence of verbs with no coreferential subjects warrants the

retention of *that*. The overgeneralisation resulted in an erroneous omission. The sentence, clearly, breaches the code of grammatical well-formedness in English and the error is **overtly** detected. The second sentence, however, does not represent an overt breach of code inasmuch as it can be judged grammatical and well-formed. However, the textual cues indicate that the use of “*cases*” is erroneous, as it is a literal translation of the word /haalaat/, which in Arabic means, in addition to the meaning of *cases*, *states* and *conditions*. It is, now, conceivable that learners have a lexically intricate item, which is homonymic in nature and translates to non-homonymic equivalents in English. The learners’ perception of similar homonymic structures in L2 results in the negative transfer of semantic content. In such cases, the error is **covert** in nature. Other examples of covert errors include the use of “*special school*” instead of “*private school*”.

The errors identified in the corpus can also be described in terms of the surface strategy taxonomy. Examine the following structures from the students’ essays: “*to describe an event happened to me*”, “*watched movie*”, “*this essay about*” and “*happiest event*”. The structures involve overt omission errors of: “*that*”, “*a*”, “*is*” and “*the*”, respectively. Although not necessarily influenced by the mother, such errors have in common the fact that they involve cases of **omission**. Now, examine the following structures: “*make my dream comes true*”, “*at the home*”, “*to developed*” and “*the success it needs*”. In all the structures, there is an addition of an item (*s*, *the*, *ed*, *the/it*, respectively). The **addition** of items that would otherwise not appear in a well-formed sentence is one type of errors that is very common in the observed essays.

Another category of learner errors can be observed in the following example: “*an obstacle that standed*”. The use of the regular past tense marker *ed* with irregular verbs is a common phenomenon in second language and even first language learning. The **regularisation** of the morpho-syntactic representations at the phonetic form interface is one example of **misinformation** errors. Examine the following structure: “*her and me were*”. The use of accusative case pronouns in nominative subject position is a common error among learners and even native speakers. Such **archi-form** errors can be tolerated in spoken registers. It transpires, then, that the integration of functional linguistics aspects of inquiry is of expedience to the formal analysis of linguistic token inasmuch as norms of structural adequacy are variant vis-à-vis register discrepancies. Another set of errors can be exemplified in the sentence: “*I did not know what is it*” and “*never again I have seen her*”. Here, learners are familiar with the morphological and grammatical constraints on structure; yet, they fail to realise the constraint on subject-verb inversion in the first sentence and the focus-phrase in the second, which results in **misordering** of constituents.

The most important aspect of error analysis in the present study is interlingual errors that are the result of multilinguistic competence. Some structures in the analysed essays contain errors that are the result of negative transfer of morpho-syntactic patterns from Arabic. The examination of learners’ essays shows that learners sometimes project the inflectional morphology of Arabic on English phrases.

Examples of this include “*sixteen time*”. The realisation of plural morphemic agreement in Arabic is complex. To illustrate, numbers between 03 and 99 (it is 02-99 in dialectal Arabic due to loss of dual inflections) do not materialise as plural markers on the nouns they modify, and the nouns are in singular morphological forms. The students’ written compositions also include projections of Arabic morphology in the case of count and noncount nouns. Sentences such as “*many informations*” represent common errors among Arab learners of English.

One of the marked features of English nominal phrases is the use of indefinite determiners “a/an”. Arabic does not have an overt inflection of definiteness. Rather, it is realised by the absence of definite “al”. Moreover, English has cases of zero-determiner nominal phrases with some abstract nouns, such as “happiness, beauty and courage”. Some of the learners’ errors result from the transfer of Arabic patterns, such as in “*it was good year*”, “*an evidence*” and “*hard work is the key to the success*”, which are readily identifiable, as the result of negative transfer.

Other instances of negative transfer involve the addition of prepositional elements with serial verb constructions that typically do not require prepositional specifications. Examples of this include “*it helps to build confidence*” and “*I practice on speaking English*” were learners clearly drew on the predication patterns of Arabic. The omission of other prepositional specifications can also be consequential to negative transfer of Arabic collocational constraints. An example of this is “*I waited the results*,” where the preposition “*for*” is a typical collocate of “*wait*” in English, but not in Arabic.

The syntactic constraints on the generation of adverbial modifiers in English and Arabic are different. Arabic allows for nominal or prepositional phrases that can serve adverbial functions. Sentences, such as “*My level increased a gradual increase*” and “*He came running with speed*” from the students’ writings are exemplary of such patterns of transfer. In addition, Arabic syntax, like many other Semitic languages, allows for sentences with no overt copular predication. The omission of copulas in English is a common error that results from Arabic language influence. This pattern is comparable to another form of erroneous production that involves non-finite tense markers /ʔan/, which translates to “*to*”. In Arabic, gender, person and number agreement affixes are given an overt spell-out after non-finite tense markers. It should also be noted that Arabic present tense inflections have the same phonetic form as the non-finite tense inflections, which results in a misinformed perception of non-finite verbs as conjugated in present. This leads learners to apply the ill-perceived pattern on English structures, resulting in sentences such as “*He was not required to participates*”.

The materialisation of Arabic morpho-syntactic patterns on English sentences can also be observed in the following example “*I wanted that she stays with me*”. The structure is not structurally incorrect. However, null non-finite subjects are more typical of English sentences than the finite complementiser clauses, i.e., “*I wanted her to stay*”. It transpires here that criteria of *dispreferred forms* can be taken into account

in the analysis of errors.

The use of double subjects in structures that are topicalised/focused in Arabic is a common error among the analysed essays. Sentences, such as “*The event it is very memorable*” and “*My family they supported me*” are a common pattern in the analysed essays. One rhetorical difference between English and Arabic is that the emphatic topicalisation, associated with Arabic SV structures, can be achieved with do-support in English. The sentence “*My family did support me*” can function as an emphasised equivalent of “*My family supported me*”. Failing to realise this feature in English resulted in the application of Arabic rules on English structures. This supports the claim that transfer can be viewed as a highly cognitive problem-solving strategy to fill in gaps of knowledge in L2 structures. More evidence for this claim comes from resumption in English relative clauses. Resumptive pronouns are omitted in English but can appear in Arabic and French. Sentences, such as “*The moment that I dreamt of it*” and “*A friend that I used to revise with her*” involve a common error, where Arabic resumption rules are applied on English sentences.

## **5.2 Prototypicality Judgment and Transfer**

The individualised questionnaires involve submitting sets of structures in English and Arabic; students are required to express the degree to which they think the structure pattern is unique to English and Arabic. The structures submitted to each participant correspond to the transfer-induced errors, or the lack thereof, in their essay in addition to some errors that are believed to be common across all essays.

The analysis of the feedback from the questionnaires shows that not all differences in structural patterns materialised as transferred items in L2. For example, the do-support in English question and negation forms do not have an equivalent in Arabic syntax. It, however, does not constitute a transferrable material, due to the learners’ conscious awareness of the differences in interrogative and negative constraints in English. The answers to the question “*I did not realise linguistics is fun*” amount to the learners’ awareness of the aprototypical status of do-support in English. This is concordant with the obtained results from the Error Analysis, where the use of do-support does not seem to have been subject to negative transfer.

When submitted sentences contain adjectival phrases in Arabic, the students’ showed metalinguistic awareness of the differences in the order of adjectives in Arabic and English, which constitutes another area of difference; yet, the N-Adj order is never transferred to English. Higher level of metacognitive awareness and evaluation of syntactic word orders as aprototypically Arabic translates directly to decreased rates of transfer. Moreover, the VS is a marked structure in Arabic; yet, it is not transferred to English SV structures. It is, now, conceivable that learners’ metacognitive awareness and judgement of prototypicality with regard to the structural pattern differences can factor in the reduction of L1-driven errors to the extent that it overrides markedness and typology factors.

On equal footing, certain marked structures are judged by learners as prototypical in

the sense of being shared across a wide variety of languages including English and Arabic. This results in negative transfer of items. Examples of this include students' perception of topicalised subjects in Arabic, as having similar functions in English. This leads the students to produce structures with double subjects "*The effort that I made it is the reason.*" Moreover, the resumptive pronouns' marked overt spell-out in relative clauses is perceived by the learners as prototypical. Consequently, structures, such as "*The lesson that I revised it*" are the result of misinformed judgement of prototypicality.

The discussion of all instances of prototypical judgement and negative transfer is beyond the limited scope of the present study. It should be noted, however, that the analysed corpus offers solid evidence with regard to the role of prototypicality judgement in the formation of linguistic behaviour in L2. Metacognitive awareness of the structural patterns of both the mother tongue and the target language can be thought of as possible strategies with which learners can monitor the learning outcomes.

## **6. Conclusion**

The analysis of learners' errors can give insight into the regularities governing their linguistic behaviour in L2. The results of the present study show that learners' errors in L2 writing are primarily driven by Standard Arabic, rather than their actual mother tongue, i.e., Colloquial Algerian Arabic. This is partly attributable to the learners' perception of rhetorical proximity between Standard Arabic and English, given that their mother tongue does not typically occur in formal written registers. The analysis also shows that errors can be described in terms of both structural and communicative well-formedness, and the bisection of either can be counterproductive and internally inconsistent. Both overt and covert errors are of essence in the applied research of Error Analysis. It has also been argued that error can be classified on the basis of their surface structure interface, i.e., whether the error results in an addition, omission or misinformation. The sources of errors in the analysed corpus are both intralingual errors that are the natural outcome of the developmental sequences in L2, and interlingual errors that are the by-product of multilinguistic competence and crosslinguistic influence.

Errors that are attributable to transfer from L1 can be, in turn, ascribed to factors that both the language and the learner take part in. Purely linguistic factors involve generative principles of universal grammar and crosslinguistic markedness criteria. On the other hand, factors, such as proficiency and motivation, are, substantially, learner-related.

The results of the present study show that a more valid stance would, otherwise, view learner-related and language-related factors as working in tandem. The degree of markedness is not of a determinant factor unless measured against what learners perceive to be marked (hence prototypical), and the formal analysis of crosslinguistic typology can yield conflicting findings unless coupled with the psychological

assessment of learners' perception (hence psychotypology).

Finally, the study shows that what learners perceive to be a marked/unmarked feature can, highly, determine the transferability of morpho-syntactic patterns. Inaccurate judgements can be a primary cause of negative transfer. The study, thus, recommends further research on the possible impact of metacognitive awareness raising on reducing negative transfer. This stems from the fact that the study entertains the idea of implementing metacognitive awareness raising activities that are built on contrastive analyses of markedness between the mother tongue and the target language into the teaching practices to reduce L1-driven output errors in L2.

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