

English Applied Linguistics PhD Program

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**Cross-linguistic influence in third language acquisition:  
Examples from the Algerian context**

PhD Dissertation Summary

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## 1. Introduction

In recent decades, research in third language acquisition (TLA) has expanded significantly, reflecting increased attention from researchers after the focus had primarily been on second language acquisition (De Angelis, 2007; Gass and Selinker, 2008). In the early 2000s, some researchers described multilingual people as if they were several monolinguals in one person (e.g., Jessner, 2008; Dewaele and Nakano, 2012). This view suggested that each language was learned independently and did not influence the others much. However, more recent research has shown that this idea is oversimplified. Today, scholars understand that multilingual people use their languages in an interconnected way, where the languages can influence and interact with each other (cf., for example: De Angelis, 2007; Cenoz, 2001; Jarvis and Pavlenko, 2007).

Transfer during L3 learning can originate from the first language (L1), the second language (L2), both, none, or be influenced by other factors. To account for this complexity, several theoretical models have been developed to explain morphosyntactic transfer in TLA. While some frameworks, such as the L1 Status Factor (Hermas, 2014), emphasize the privileged role of the first language, others highlight the influence of the second language (e.g., Bardel & Falk, 2007). More integrative approaches, including the Cumulative Enhancement Model (Flynn et al., 2004), the Typological Primacy Model (Rothman, 2011), the Scalpel Model (Slabakova, 2017), and the Linguistic Proximity Model (Westergaard et al., 2017), argue that both L1 and L2 may contribute depending on typological, structural, and contextual factors. The property-by-property model (Ben Abbes, 2016) further suggests that transfer can occur selectively at the level of individual linguistic properties, even in the absence of typological similarity. The more recent Cumulative Input Threshold Hypothesis (Cabrelli & Iverson, 2023) adds an input-based perspective, proposing that the amount of exposure to a background language influences both the direction of transfer and the ease of overcoming non-facilitative effects. Collectively, these models illustrate that cross-linguistic influence is not uniform but dynamic, determined by multiple interacting variables.

Building on these developments, research in TLA has shifted attention from general questions of language learning to the specific dynamics of additional language acquisition in diverse multilingual contexts (De Angelis, 2007). TLA studies have contributed to a deeper understanding of how prior linguistic knowledge shapes the acquisition of new languages, particularly through cross-linguistic influence. Nevertheless, important gaps remain, especially concerning under-researched language combinations and morphosyntactic domains where

transfer patterns are highly context-dependent. This highlights the need for focused empirical research grounded in robust theoretical frameworks.

## **2. Aims and research questions**

The present research aims to investigate how previously acquired languages influence the acquisition of a third language, with a particular focus on the role of cross-linguistic influence in shaping the learning process of L3. The aim of the present study is to shed light on the acquisition of certain syntactic elements in English when learning English as a third language. It also aims to explore the factors that affect the L3 learning, particularly those leading to instances of positive and negative transfer in learning English. Previous research in the field of TLA has drawn various conclusions regarding the source of language transfer and the factors of transfer during TLA.

The present research attempts to contribute to TLA research by focusing on a specific language combination (L1 Arabic, L2 French, and L3 English). This study aims to answer the following research questions:

1. To what extent do Arabic (L1) and French (L2) influence Algerian learners' acquisition of the English (L3) syntactic features of object object pronoun placement and verb with that- clause?
2. What specific factors, namely language distance, psychotypological similarity, and learners' proficiency in French (L2) and English (L3), may trigger cross-linguistic influence in the syntactic development of English among Algerian learners?
3. Which of the previously acquired languages Arabic (L1) or French (L2) has a greater influence on the acquisition of specific English (L3) syntactic features, namely object pronoun placement and verb with that clause, among Algerian learners?
4. What are the perceptions of Algerian learners whose L1 is Arabic, and L2 is French regarding the influence of their previously acquired languages on the syntactic development of English(L3)?
5. How do English language teachers in Algeria observe and address cross-linguistic influence from Arabic (L1) and French (L2) in their students' acquisition of English (L3) syntax, and what teaching strategies do they employ to address these influences in their classrooms?

## **3. Thesis outline**

I structured my dissertation into seven chapters. Chapter 1 serves as the Introduction to the

dissertation. It presents the background, aims, and significance of the study, outlines the research context, and introduces key terms and concepts to establish a foundation for the theoretical and empirical discussions in the subsequent chapters. Chapter 2 outlines the theoretical framework of the study, providing an in-depth discussion of key concepts and theories related to third language acquisition (TLA). It explores distinctions among L1, L2, and L3, and examines the phenomenon of cross-linguistic influence, including the factors that determine transfer. Chapters 3 and 4 focus on specific topics of the study: Chapter 3 presents the language situation in Algeria, and Chapter 4 addresses the acquisition of morphosyntax in multilingual contexts. Chapter 5 details the adopted methodology, including subchapters on research questions and hypotheses, participants and settings, research design, and data collection procedures and instruments. The results and discussion are presented in Chapter 6 in response to the research questions. Finally, Chapter 7 presents the conclusion, summarizing the study findings on cross-linguistic influence in TLA, its limitations, and its pedagogical implications and future prospects.

#### **4. Methodology**

The present study involved a total of 54 participants, categorized into two main groups: university students and university teachers. The student cohort (N=46) consisted of university students whose first language (L1) was Arabic and second language (L2) was French. These students were further classified based on their French proficiency level into a lower- intermediate group (N=21) and an advanced group (N=20). Additionally, a control group of 5 native English speakers was included within the student cohort. The teacher group (N=8) comprised 8 university teachers who were interviewed to gather expert insights on language transfer.

The data collection for this study took place in Algeria, a multilingual country where Arabic, French, and Tamazight are the primary languages spoken. As described in Chapter 3 of the dissertation, Algeria's complex linguistic landscape provides a unique environment for investigating third language acquisition (TLA), particularly the effects of cross-linguistic influence (CLI) from Arabic (L1) and French (L2) on English (L3). The main aim of this study is to investigate the potential cross-linguistic influence (CLI) of Arabic (L1) and French (L2) on the acquisition of English as a third language (L3), focusing specifically on morphosyntactic properties. To achieve this, a combination of research instruments was employed to gather comprehensive data that captures both measurable linguistic performance and participants' subjective language experiences. These instruments enable a deeper understanding of the participants' language backgrounds and learning processes, thus supporting the study's objectives. Table 20 below summarizes the research instruments used in this research along with their specific aims.

<b>Quantitative and qualitative research instruments</b>	<b>The aim</b>
<i>Linguistic Background Questionnaires (see 5.4.1 below)</i>	To gather detailed information about the participants' linguistic background
<i>Grammatical Judgment Test (see 5.4.2 below)</i>	To assess the participants' ability to judge the grammaticality of sentences in their third language (English).
<i>Language Perception Questionnaire (see 5.4.3 below)</i>	To examine participants' perception of language use and their experience with language learning.
<i>Semi/structured interview (Students) /see 5.4.4)</i>	Explores students' language learning experiences, perceptions of L1/L2 influence on L3 English, and learning strategies.
<i>Writing task (see 5.4.5)</i>	Elicits potential L1/L2 transfer by analyzing participants written production in L3 English.
<i>Semi/structured interview (Teachers) (see 5.4.4)</i>	Investigates teachers' observations of L1/L2 influence on students' English, common errors, and teaching approaches.

**Table 22: Quantitative and qualitative data collection methods of the research**

As noted by Dörnyei (2007), the use of a mixed-methods design enhances the robustness and validity of research outcomes by combining the strengths of both quantitative and qualitative data. Quantitative data, derived from instruments such as placement tests and grammatical judgment tasks, provide objective and statistically analyzable evidence of language proficiency and CLI effects. Conversely, qualitative data, gathered through language perception questionnaires and semi-structured interviews, provide valuable insights into individual learner experiences, attitudes, and perceptions that are essential for a full interpretation of the statistical findings.

## **5. Findings**

The current study investigates the influence of Algerian learners' previously acquired languages, Arabic as their first language (L1) and French as their second language (L2), on the acquisition of two English (L3) syntactic features: object clitic placement and the verb + that-clause construction. In addition, the study explores learners' linguistic perceptions to determine

how their prior languages influence third language acquisition, and it aims to investigate teachers' insights regarding these influences. Regarding the first research question, the findings demonstrate that both L1 and L2 have a significant impact on learners' English morpho-syntactic development, but the degree of influence depends on learners' proficiency and the specific syntactic structure involved. Participants with advanced proficiency in French showed greater accuracy in judging the grammaticality of English sentences involving object pronoun placement and verb + *that*- clause, indicating positive transfer from French. In contrast, those with lower French proficiency relied more heavily on Arabic syntactic patterns, especially in the domain of clitic placement, suggesting that both L1 and L2 serve as sources of cross-linguistic influence depending on the learner's language background and proficiency levels (Bardel & Falk, 2007; Rothman, 2011; De Angelis, 2007). The findings contribute important insights into cross- linguistic influence (CLI) in third language acquisition (TLA), with implications grounded in theoretical frameworks by De Angelis (2007), Bardel and Falk (2007), Rothman (2011), and Westergaard et al. (2017).

Regarding the factors that trigger cross-linguistic influence, the study highlights proficiency in French as a crucial moderator. Higher French proficiency facilitated the transfer of French syntactic structures to English, while lower proficiency diminished this effect. Linguistic proximity also played a key role: learners consistently perceived French as more similar to English than Arabic, which encouraged transfer from French when proficiency levels were sufficient. However, Arabic continued to influence features such as clitic placement despite its greater linguistic distance from English. This aligns with the Linguistic Proximity Model proposed by Westergaard et al. (2017), which explains selective transfer based on perceived structural similarity. Furthermore, learners' psychotypological awareness, how they subjectively perceive similarities and differences among their language-shaped transfer patterns, consistent with De Angelis's (2007) emphasis on language awareness as a mediator in third language acquisition.

Concerning which language exerts a stronger influence on specific English syntactic features Both the first language (L1, Arabic) and the second language (L2, French) influence English as a third language (L3) acquisition, with no single language having a privileged role over the other. Concerning which language exerts a stronger influence on specific English syntactic features, French was found to have a greater impact on the acquisition of the verb + *that*-clause construction, particularly among advanced learners, reflecting the structural closeness between French and English in this construction. Conversely, Arabic had a more pronounced effect on object clitic placement, consistent with its unique clitic system that differs

substantially from both French and English. In Arabic, the object pronoun is attached to the verb but, similar to English, it is placed after the verb, unlike in French where it comes before the verb. These findings support the Scalpel Model (Slabakova, 2017), which argues that selective transfer depends on structural similarity and learner proficiency, resulting in a complex, dynamic multilingual acquisition process.

Learners' perceptions of the influence of their previously acquired languages further reinforced these findings. Many participants reported that French, due to its perceived similarity to English, was a helpful resource for learning English syntax, especially complex constructions such as the verb + *that*-clause. Arabic, on the other hand, was often seen as less helpful or even obstructive, particularly regarding clitic placement and word order. This metalinguistic awareness influenced learners' approaches to English acquisition and their reliance on prior languages (De Angelis, 2007).

Finally, interviews with English language teachers in Algeria revealed their recognition of cross-linguistic influence as a common challenge in the classroom. Teachers noted frequent errors arising from Arabic word order and French syntactic simplifications in learners' English. To address these issues, teachers use explicit contrastive analysis, targeted grammar exercises, and activities designed to raise learners' awareness of structural differences between Arabic, French, and English.

In conclusion, this study confirms that cross-linguistic influence in Algerian learners' English acquisition is multifaceted and dynamically influenced by proficiency, perceived linguistic proximity, and metalinguistic awareness. French generally has a stronger influence on syntactic features closer to its own system, while Arabic remains a significant source of transfer for more structurally distinct features. Learners' perceptions and teachers' pedagogical practices further shape the multilingual acquisition process, highlighting the need for instructional methods that address these complex interactions. These findings enrich the theoretical understanding of TLA and offer practical implications for teaching English as a third language in multilingual contexts such as Algeria.

## **6. Conclusion**

The findings of this study provide clear evidence of the significant influence that previously acquired languages, Arabic as the first language (L1) and French as the second language (L2), have on Algerian learners' acquisition of English (L3) syntactic features, specifically object clitic placement and the verb + *that*-clause construction. This aligns with established research on cross-linguistic influence in third language acquisition (De Angelis,

2007; Bardel & Falk, 2007; Westergaard et al., 2017; Rothman, 2011). The findings support the idea that both typological and structural similarities play an important role in cross-linguistic influence (CLI), as suggested by Rothman (2011, 2013, 2015), Flynn et al. (2004), Slabakova ((2016 and Westergaard et al. (2017). The results indicate that both Arabic (L1) and French (L2) serve as sources of transfer in the acquisition of English (L3), regardless of the learners' level of proficiency in French. Although learners may be aware of the similarities and differences between the languages they know, transfer still occurs. This supports Ben Abbes' (2016) view that transfer happens on a property-by-property basis, depending on the structural similarities between the languages, even when the languages themselves are not closely related.

The findings of the research presented in this thesis add to the understanding of third language learning by showing how learners use their first and second languages when learning a third one. The results show that both language proficiency and structural similarity influence how learners transfer grammar features, especially in the early stages of learning a new language. Key findings include the observation that both L1 and L2 can influence L3 learning at the syntactic level. While the structural overlap between French (L2) and English (L3) appears to make L2 a more frequent source of transfer, L1 Arabic also contributes to learners' production and judgments. This dual influence confirms the dynamic and non-linear nature of cross-linguistic influence, where multiple languages exert influence simultaneously depending on linguistic similarity, dominance, proficiency, and context.

To gain a full understanding of third language acquisition in the Algerian context, further research is needed to explore the influence of the previously acquired languages on L3 development. This study identified two types of similarities between L2 French and L3 English: typological and structural similarity. Typological similarity compares the linguistic typological features, whereas structural similarity compares specific linguistic aspects such as grammatical structures. Taking into account both typological and structural similarities, as well as their potential implications can provide a more thorough and accurate analysis of language similarities and differences. Additionally, raising the linguistic awareness of learners about similarities and differences may help them recognize the similarities and differences between the languages they acquired and the language being learned.

In conclusion, this research aimed to contribute to the growing field of third language acquisition. Like many previous TLA studies, this project sought to find out the underlying mechanisms cross-linguistic influence from the languages that were previously acquired. However, this study diverged from existing L3 studies by investigating not only the factors



that derives CLI but also the source of transfer in learning English as a third language.

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