LANGUAGE TYPOLOGY AND L3 TRANSFER PHENOMENA IN ADULT LEARNERS: THE CASE OF LINGALA-FRENCH SPEAKERS LEARNING ENGLISH

BY

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As the candidate's Supervisor **I agree**/do not agree to the submission of this thesis.

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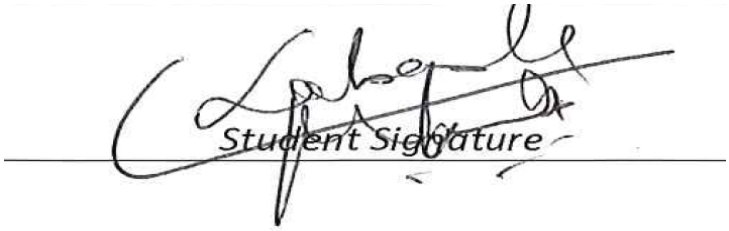

This thesis is dedicated to

my late father, Alphonse Kabasele Mwamba Mbele,

who would be proud to see his son's dream become true today.

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Abstract

This study investigates the influence of previous languages in the acquisition of an L3. It tests the claims of Cumulative Enhancement Model, the 'L2 status factor', and the Typological Primacy Model on how L1 Lingala, L2 French speakers acquire the L3 English. I circumscribe two linguistic phenomena: the past completed events (PCE), and the past until now events (PUNE). The PCE context offers the scenario in which the morphosyntactic similarity between the L1 and the TL expectedly results in positive transfer, while the morphosyntactic similarity between the L2, and the TL results in negative transfer. English uses the simple past in the PCE, while French, and Lingala use the *passé composé*, and the remote or recent past, respectively. The study further investigates the case of the absence of any morphosyntactic similarities between the previous languages and the TL in the context of PUNE.

Data were collected in both implicit (interview), and explicit (Written Elicitation Task and the Acceptability Judgment Task) mode of accessing the linguistic knowledge. The software 'R' was used for the statistical analysis.

The study circumscribes the tense similarities, and differences between the three aforementioned languages. The research questions run as: Which previously acquired language between the L1, L2, or both L1 and L2 takes precedence in L3 syntactic transfer? Is the L2 the privileged source of syntactic transfer even when the L1 offers some syntactic similarities with the L3? Do participants transfer more when they access their implicit linguistic knowledge as opposed to explicit linguistic knowledge?

The findings of the study show that morphosyntactic similarity may be the most dominant factor that determines the source of transfer in the context of PCE. Participants made positive transfers from the L1 Lingala which shares verb tense morphosyntactic similarities with

English. This finding confirms the predictions of the TPM by Rothman (2010, 2011). This implies that on a hierarchy of factors that impact the acquisition of an L3, the morphosyntactic proximity takes precedence over the L2 status.

In the absence of the morphosyntactic proximity, both previously acquired linguistic systems may fairly compete. Several capital factors may determine the source of transfer. For instance, participants may establish psychotypological similarities based on the functions of the targeted pair of verb tenses. Linguistic proficiency, and linguistic security may also play a deterministic role in the process. Participants used the simple past tense in the context of past until now events which is not surprising since in the USA, and Canada the simple past tense is most often used in this context. I attribute the use of the simple past to what I dub oblique transfer. Participants transferred more when they were in explicit mode of knowledge than when they were in implicit mode.

Table of Contents

List of abbreviations

Adj: Adjective
Adv: Adverbial
AFDL: Alliance for the Democratic Liberation of Congo
AJT: Acceptability Judgment Task
Aux: Auxiliary
CEM: Cumulative Enhancement Model
CG: Control Group
CLI: Cross-linguistic Influence
Conj: Conjunction
CP: Complementizer Phrase
Det: Determiner
DR of Congo: Democratic Republic of Congo
DP: Determiner Phrase
EFL: English as Foreign Language
EG: Experimental Groups
FT/FA: Full Transfer, Full Access
Hab: Habitual
Im.Pst: Immediate Past
KL: Kinshasa Lingala
L1: First Language
L2: Second Language
L3: Third Language
MDH: Markedness Differential Hypothesis
MONUSCO: Mission de l'Organisation des Nations Unies pour la Stabilisation de la République Démocratique du Congo
N: Noun
NGO: None-Governmental Organization
NP: Noun Phrase
Num: Numeral
PCE: Past Completed Event
PUNE: Past Until Now Event
PP: Past Participle
Prep: Preposition
Pro: Pronoun
Q: Quantifier
SADC: Southern African Development Community
SLA: Second Language Acquisition
SOV: Subject Object Verb
SVO: Subject Verb Object
TL: Target Language
TPM: Typological Primacy Model
UG: Universal Grammar
V: Verb
WET: Written Elicitation Task

List of tables

List of figures

List of Maps

Chapter I

General Introduction

The concern on the linguistic system which serves as source of transfer in the acquisition process of an additional language beyond an L2 is still controversial. Some studies (e.g. Bardel and Falk 2007) claim that the L2 plays an important role in the acquisition process of an L3; in their 'L2-Status Factor' Model they argue that in the process of the acquisition of an L3 transfer comes exclusively from the L2. This entails that the L2 is assumed to block access to the L1 system.

The Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004) claims that transfer in the process of L3 acquisition is the result of cumulative linguistic knowledge from both the L1 and the L2. Hence, according to the CEM model, a multilingual learner's reliance on the previously acquired linguistic knowledge is restricted to transfer which has a noticeably rewarding impact in the learning process of the subsequent language. In other words, the CEM denies the occurrence of non-facilitative transfer as a possible option in the L3-acquisition (Rothman, 2014: 5). Therefore, language transfer may only play two main roles: It may either positively impact the acquisition process of the L3, or it may remain neutral.

The third possibility is based on the predictions of the Typological Primacy Model by Rothman (2010). The TPM predicts that the linguistic source of transfer is determined by the morphosyntactic proximity to the target language. This implies that the previously acquired linguistic system which offers morphosyntactic proximity to the target language is linguistically qualified to serve as the source of transfer in the acquisition process of an L3. Unlike the CEM, the TPM advocates that transfer may be either positive or negative. Negative transfer is the result of psychotypology; it reflects a morphosyntactic mismatch between a previous linguistic system and the target language.

In view of the claims in the existing literature, this study seeks to determine and/or identify the source of transfer in the process of L3 acquisition by testing the predictions of the three aforementioned morphosyntactic models of L3 acquisition. By no means I claim that the models that deals with the acquisition process of an additional language are only restricted to the three that are selected for this study. However, the scope of investigation of this study is strictly limited to three aforementioned models of additional language acquisition beyond the L2. The data of the study come from the combination of three languages of which the L1 is a Bantu language, Kinshasa Lingala, which offers morphosyntactic similarities with the target language, English. French is the L2 in this combination.

This study addresses a gap in the existing literature to determine the source of transfer in the acquisition process of an L3. The dissertation presents a new combination of languages of which the L1 is a Bantu language, the L2 is a Romance language and the L3 is a Germanic language. Furthermore, the study does not only test the main claims as predicted by the main theories in the existing literature: the 'L2-Status Factor' Model by Bardel and Falk (2007), the Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004), and the Typological Primacy Model by Rothman (2010).

This Doctoral Dissertation (PhD) is an elaboration of my Master's thesis. It has replicated some of my Master's research questions and predictions in order to overcome some of the limitations that were observed in the Master's thesis. For instance, in the Master's thesis, I worked with a limited number of participants—twenty-five— which I suspected had affected the statistical power in the research. I therefore extended the number of participants from twenty-five to 120 participants. Also, the Master's thesis included participants who were exposed to French at age younger than 3 years which compromised their status as pure L2 learners of French. This

limitation had to be addressed and fixed in this study in order to argue for the combination of Lingala as L1, French as L2, and English as the TL or the L3. Otherwise, doubts could be raised on whether the study was dealing with two simultaneously acquired L1s in the acquisition of English as an L2 rather than an L3. This limitation has been seriously addressed in this study. The Master's thesis overlap with this current Doctoral Dissertation in that I replicated some of the previous research questions, I used an interview which has the structure and logic, I used the same Written Elicitation Task for the written production study, and the same cloze test was used to determine the proficiency levels of the participants.

This Doctoral Dissertation has largely extended its scope in that, unlike in the Master's thesis in which participants' home language in the USA was basically and predominantly Lingala, the study has considered participants who predominantly use English at workplace, in shopping, and also at home as they interact with their family members such as their children. This aimed to reflect the ongoing process of language acquisition of English through emersion even if it was in the initial stage. These differences are of paramount importance since they have an incidence on the findings of the study.

On the other hand, this current Doctoral Dissertation introduces and tests an important novel prediction which concerns the case where there is no morphosyntactic proximity between either of the previously acquired linguistic systems and the target language. These tests present an original contribution to the existing research on L3 acquisition. The study thus provides new grounds for testing existing hypotheses which are found in the literature. For example, the claims of the TPM are solely based on morphosyntactic similarities between either the L1 or the L2 and the TL, while my new linguistic phenomena offer room to test new predictions—with the same combination of languages—which are not based on any morphosyntactic similarities with

the target language. The current study has added beyond the language production aspect, the investigation of the morphosyntactic transfer in language comprehension and judgment. The Acceptability Judgment Task was therefore used to elicit data from the participants. In doing so, this Doctoral Dissertation has not only investigated the case of morphosyntactic transfer language production, but it has also integrated and discussed the case of linguistic transfer in language comprehension and judgment. These novel aspects of the study reflect the novelty and originality of this Doctoral Dissertation.

In addition, another aspect of the originality of this Doctoral Dissertation is on the fact that it provides new research routes on the ranking of the linguistic, psycholinguistic, and sociolinguistic factors which have been identified and attested in the existing literature as interacting with the acquisition process of an L3. It further breaks similarity into form and function, and tests them to determine the one which takes precedence in case of competition. It also tests the impact of the existing attested linguistic similarity as opposed to a psychotypological one to further determine the factor that takes precedence in the process of an L3 acquisition.

As mentioned above, this study is twofold. It investigates two cases of linguistic events: past completed events and past until now events. The research tests the three models of morphosyntactic transfer in L3 by circumscribing the morphosyntactic proximity, the L2 factor, and the cumulated knowledge in the context of both past completed events and past until now events. The data are elicited in the contexts of both language production and language comprehension and judgment.

I predict that if transfer is a function of the morphosyntactic proximity as the capital factor in the combination of these three languages, transfer will come from the L1, Kinshasa Lingala. This prediction is motivated by the morphosyntactic similarity that exists between

Kinshasa Lingala (KL) and English in the context of past completed events. That is, Lingala is morphosyntactically similar to English in that both languages form the simple past tense by appending a suffix to the verb stem, and they both use the simple past tense to talk about past completed events.

My second prediction is in relation with the 'L2-Status Factor' Model (Bardel and Falk 2007). I predict that if the L2-status determines the source of transfer in the process of L3 acquisition, the L2, which is French in this study, will serve as the source of transfer. In this case no transfer will come from the L1 since the L2-Status factor blocks access to the L1 linguistic system. In this case, participants will use the present perfect tense to talk about a past completed event in English. The choice of the present perfect tense is motivated by the fact that French uses *le passé composé* in this context which offers a structural similarity with the present perfect tense in English.

Finally, if transfer in the combination of these languages is a factor of cumulative knowledge, transfer may come from either the L1 or the L2. Nevertheless, no negative transfer will be observed since the CEM does not endorse any negative transfer in the process. Transfer is expected to be either positive or neutral in which case the simple past is expected.

In the context of past until now event, the test considers factors such as the absence of any morphosyntactic similarity with the target language, the L2-Status Factor, and the cumulative knowledge from the two previously acquired linguistic systems as variables. I predict that in the case of absence of morphosyntactic proximity with the target language, both previously acquired linguistic systems will compete.

In the absence of any structural/morphosyntactic proximity it may be the language which offers similarity in terms of the function/use of the tense and/or the language which offers

less linguistic 'insecurity' which may serve as the source of transfer in the L3 acquisition process (Labov 1966, 2006, Bucci and Baxter 1984, Wolfram 1991, Eckman et al. 2013, Daftari 2016). Linguistic insecurity should be understood as a subjective factor that can, however, be measured with a carefully designed research instrument of the nature of the semantic differential with some psychometric scales or a Likert scale (Labov 1966, 2006, Wolfram 1991). Bucci and Baxter (1984) paraphrased by Daftari (2016) say of linguistic insecurity that "it might happen if the speaker compares his or her phonetic and syntactic characteristics of speech with those characteristics of what is perceived to be the 'correct' form of the spoken language" (p. 118).

I further predict that if transfer is a result of the L2-Factor Status' in the context of past until now event, transfer will come from the L2 French, which is expected to block any access to the L1. Therefore, no transfer from the L1 should be observed in the data. Any observed transfer from the L1 Lingala will rule out the predictions and claims of the 'L2-Status Factor' Model in this context of the study.

This study endeavors to answer questions on the previously acquired language(s) that dominate in L3 transfer. Is the L1 or the L2 more dominant? Or are both the L1 and the L2 equally dominant in the process of an L3 acquisition? Is the L2 the privileged source of transfer even when the L1 offers local similarities with the L3? Do participants transfer more when they access their implicit linguistic knowledge as opposed to explicit linguistic knowledge? Is the syntactic sentence judgment influenced by the subjects' level of proficiency? Does gender play any role with regards to linguistic transfer? Answers to these questions have shed light to my concerns.

This Dissertation has operated with enough tokens for each task and for each context: PCE and PUNE. Therefore, there was no need to have the same number of items in all the

tasks and in every context. Since the three tasks were time consuming and my participants were recruited in countries where 'time is truly money', I had to provide fairly limited number of items for the WET and the AJT in order to gain more time for the interview. The limited number of items in both the PCE and PUNE contexts in WET and AJT could easily be compensated by the large number of participants in the research.

The findings of the study show that morphosyntactic similarity may be the most dominant factor that determines the source of linguistic transfer in the context of past completed events during the acquisition process of an L3. Participants made more positive transfers from the L1 Lingala which shares morphosyntactic similarities in terms of verb tense with English. This implies that participants predominantly used the simple past tense to talk about a past completed event in English. The participants tapped into their previous linguistic knowledge from Lingala in this context. This finding informs us that on a hierarchy of factors that impact the acquisition of an L3, the morphosyntactic proximity of a previously acquired linguistic system with the target language takes precedence over the L2 status.

Participants transferred their linguistic knowledge from the L1 Lingala in the context of past completed events in English. This viewpoint is supported by the statistical differences in the use of the simple past tense and the use of the present perfect tense in the context of past completed event in the study. The attested positive transfer is in alignment with the predictions of the TPM by Rothman (2010, 2011) who argues that transfer comes from the language that offers some morphosyntactic proximity with the TL.

The performance of the advanced proficiency group shows that morphosyntactic proximity plus language proficiency play an ameliorative role in the process of the acquisition of the target language. These two capital variables combined together in the process of the acquisition

of an additional language boost the linguistic capacities of the learner to process the linguistic system of the target language and further facilitate the process of the acquisition of the target language.

Contrary to what is claimed in the 'L2 Status Factor' Model (Bardel and Falk 2007), the participants of this study seemed to have access to their L1 morphosyntactic system. If the L2 had blocked access to the L1, they would have produced the present perfect tense in the context of a past completed event in English. However, this was not observed in this study. The majority of the participants used the simple past tense in the required context. Besides, participants had access to both their L1 and L2 in the context of past until now events. Negative transfers came from the L2 with the use of simple present tense, while positive transfer came from the L1 Lingala with the use of the simple past tense in the context of past until now events. It should be noted that both the use of the present perfect tense and the use of the simple past tense in the context of past until now events were considered as correct since in both the USA and Canada the simple past tense is used in this context. The use of the simple past tense in this context of past until now events by participants was deemed positive effects of what I have dubbed oblique transfer (see page 223). Oblique transfer, like any other linguistic transfer, is observed whenever a linguistic feature from a given language explicitly plays either a positive or negative role in the acquisition process of another language, such a role is considered linguistic transfer.

In the absence of some facilitative factors such as the morphosyntactic proximity, the results have shown that participants may have had access to both previously acquired linguistic systems. Therefore, the source of transfer could vary depending on several factors such as function similarity, proficiency, and linguistic security.

The findings of this study have further shown that there were more transfers when participants were in an explicit mode of knowledge than when they were in an implicit mode (for the differences between an implicit as opposed to an explicit mode of knowledge, see section 2.4, pp. 93-103). As discussed below, explicit knowledge was accessed in different written tasks during which participants had an ample amount of time to perform the required tasks, while in the implicit mode of knowledge participants worked under time constraints, such as the time pressure during an oral interview.

Nevertheless, rather than observing more transfer as a result of the implicit mode of knowledge which could be explained through time pressure as a capital factor, it was the opposite which was observed. That is the more time the participants had to perform a task and probably go back to readjust their answers, the more they showed a systematic dependence on a previously acquired linguistic systems. As a result, they tapped more into the linguistic system that they primarily relied upon.

Apart from this current introduction, the study is organized into eight chapters. Chapter two discusses the background information on transfer phenomena with respect to both the L2 and the L3. Chapter three describes the status of Lingala, French, and English in the Democratic Republic of Congo. The chapter provides both the historical perspective of the three languages and their sociolinguistic status in both Kinshasa and the Democratic Republic of Congo. Chapter four provides an overview of the linguistic phenomenon that constitutes the core of this study. It discusses the similarities and differences that exist among the target tenses in the three languages: the recent and remote past in Kinshasa Lingala, the *passé composé* in French, and the simple past in English. Chapter five discusses the methodology of the study. It presents the research sites and provides demographic information on the participants. It further presents the participant sampling

technique that was used, the procedures for data collection on each sampling unit, and introduces the different relevant forms that were used in the study for administrative formalities. Chapter six discusses the cloze tests that were used in the study. It also presents the participants' linguistic background. Chapter seven and chapter eight are related to the study proper. Chapter seven investigates the morphosyntactic transfer in language production, while chapter eight examines morphosyntactic transfer in language comprehension and judgment. Finally, chapter nine provides the findings of the study; it presents the general discussion, and concludes the study.

Chapter II

Transfer Phenomena in both L2 and L3 Acquisition

This section provides a description of transfer phenomena in both L2 and L3 acquisition/learning. In section 2.1, I provide definitions of both positive and negative transfer in different subdomains of the language system; i.e. phonology, morphology, syntax, semantics, pragmatics. I highlight that there is a difference between the core linguistic features of a language and so-called interface representations, which are differently affected by linguistic transfer (e.g. Gabriele and Canales 2011). In the context of the current thesis, the emphasis is on morphosyntactic transfer. Therefore, I will present and critically evaluate five different proposals that have been made within the nativist-generativist framework about language transfer from the L1 (and/or L2) and the possible role of universal linguistic principles (Universal Grammar) in such a transfer.

In section 2.2, I engage with factors which underlie language transfer in L2 and L3 acquisition/learning. For the sake of this study, I present a classification of those factors adopting the five categories, which were suggested and discussed by Jarvis and Pavlenko (2010). My choice to adopt their categories is motivated by the consistency and rationale which underlined their categorization. The five categories that are discussed by Jarvis and Pavlenko (2010) and that I adopt are: (1) Linguistic and psycholinguistic factors, (2) Cognitive, attentional, and developmental factors, (3) Factors related to cumulative language experience and knowledge, (4) Factors related to the learning environment, and (5) Factors related to language use.

I begin this section with the discussion of the linguistic and psycholinguistic factors which highlights the role of cross-linguistic similarities, typological, and/or psychotypological similarities in the acquisition or learning of an additional language. I outline the role of 'actual and perceived' typological similarity between a learner's primary language(s) and a target language in

the context of language transfer. To this end, I define and critically discuss the concept of typological similarity. The area of language acquisition and use is the second variable I discuss in this section. I deliberate transfer in relation to the subdomains of linguistics, which range from phonology, orthography, lexis, semantics, morphology, and syntax, to discourse, and pragmatics. Phonological transfer, for instance, is related to the transfer of the sounds of an L1 into the linguistic system of an additional language while semantic transfer is concerned with the transfer of semantic features or the meaning of a lexical item in the L1 into an L3. Besides recency and salience, I analyze the role of frequency of use of a linguistic item or of a syntactic structure in one of the languages that is involved in the process of the acquisition of an additional language. Markedness and linguistic context are the two last linguistic factors, which are discussed under the heading of the first factor category.

The second factor category that interferes with the acquisition of an additional language encompasses cognitive, attentional, and developmental factors. I provide a discussion on the role of cognitive factors in the learning/acquisition of an additional language. I also discuss the role of attention and developmental factors that interfere in the learning/acquisition of an L2 or L3. I further deliberate, to shed light on, such factors as the level of cognition and the conceptual maturity at the time of language acquisition/learning.

The third category is made up of factors that are related to cumulative language experience and knowledge. The onset age of language acquisition/learning, the length of exposure to the target language (TL), and the use of the TL in its native setting are the relevant variables that I discuss at length under the heading of the aforementioned category. Proficiency and the number and order of acquired languages are other important variables that interfere with the acquisition and/or learning of an additional language.

Factors that are related to the learning environment are presented as the fourth category. I provide variables such as the role of the teaching method, classroom setting, and teacher's attitude and the nature of classroom activities, which could interact with the learning of an additional language.

The fifth category contains factors that are related to language use. I discuss the language mode as a primary variable that impact the use of the TL. The existing literature claims that overt language transfer does not occur when a bilingual learner is in a monolingual mode (Grosjean 2001).

An extra final category that has not been discussed among the categories of factors that Jarvis and Pavlenko (2010) propose is the educational and socio-cultural background of the language learner. I highlight the role of the learner's sociocultural setting in the process of a language acquisition and learning. Likewise, the educational background and linguistic awareness are two further important variables that I discuss here in connection with the learning of an additional language in a formal setting.

In the third part of this chapter I present three syntactic models of L3 acquisition/learning and evaluate their advantages and disadvantages against the background of current research findings in the area of L3 acquisition. I discuss the claims and predictions of Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004), the 'L2 Status Factor Model' by Bardel and Falk (2007), and the Typological Primacy Model (TPM) by Rothman (2010, 2011). The three morphosyntactic models of linguistic transfer find their genesis from the claims of Universal Grammar (UG) (Chomsky 1976) whereby four proposals were put forward: (1) no transfer, (2) absolute L1 transfer, (3) absolute L2 transfer, or (4) L1 or L2 transfer (Rothman, 2014: 4). The L2 Status Factor Model is related to (3) absolute L1 transfer while the CEM and the

TPM are related to (4) L1 or L2 transfer. I further present a synoptic paragraph that summarizes the comparative characteristics of the three models, and formulate some concerns in relation to the three-morphosyntactic models, which are discussed in this chapter.

The fourth part of the chapter discusses the differences between implicit versus explicit knowledge (access) in the case of an additional language acquisition or learning. This part of the chapter aims to shed light on the type of knowledge that bilingual learners predominantly tap into when transferring knowledge or linguistic items from a previously acquired language. The part is relevant in that it is related to two main ways in which the data of this study are collected: implicitly and explicitly. Knowledge of the distinction between implicit versus explicit knowledge in this study will help to discuss the findings of the study in the light of whether learners have predominantly transfer implicit or explicit linguistic knowledge from the previously acquired languages. The chapter ends with a summary of the insights and an outlook on the empirical design that underlies my data collection and that is informed by the theoretical insight gained.

2.1 Transfer in Second Language (L2) Acquisition

Odlin (1989) offers the most comprehensive definition of transfer in SLA; he refers to it as, "[t]he influences resulting from the similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired" (p. 27). Transfer encompasses the influence of any previously acquired language in the acquisition of an additional one. Rothman (2014) generally defines transfer as, "[p]erformance behavior in a target language that can be reasonably likened to influence from previous linguistic experience" (p.3). Transfer as seen by Rothman (2014) encompasses the composition of functional features and categories and their morphological, semantic, and syntactic reflexes from previously acquired linguistic systems

that are considered by the learners in formulating their initial hypotheses of the L3-acquisition (p. 3-4).

Research in cross-linguistic influence in second (L2) and third language acquisition (L3) has shown that the first language (L1) or any other previously acquired language may not only have a negative impact, but that it/they could also positively contribute to the acquisition of an additional language. Transfer hence involves both positive (Cook 2002, Jarvis and Pavlenko 2010) and negative (Ringbom 1987, Cook 2002, Jarvis and Pavlenko 2010) impacts.

Positive transfer is when the linguistic influence from an already acquired linguistic system yields a facilitative effect in the acquisition of an additional language. Del Mar Ramon (2009) claims that positive transfer is observed when the linguistic influence from a previously acquired language helps to acquire an additional language and when both languages show a few similarities in terms of their syntactic systems. Positive transfer results from the similarities, which are observed or perceived between two linguistic systems.

Positive transfer is likely to favor easier and faster learning or acquisition of a linguistic feature, which maps into both linguistic systems that are involved in the acquisition process. It is the familiarity with an aspect of a language that is similar to the linguistic system of the TL, which renders the acquisition of that linguistic feature easier and faster to learn.

An example of positive transfer could be the case of the acquisition of the word ‘bible’ by a French speaker learning English. In fact, the acquisition of the aforementioned word would be rather easy for this learner since the word ‘bible’ is both orthographically and semantically identical in French and English.

Syntactically, two languages, which have similarities in terms of word order in a phrase or a sentence, could offer faster possibilities of learning and mastering the syntactic system

of the target language in contrast to two languages whose syntactic organization is far different. Languages, which distribute their determiners in the same way, that is, whose determiners pre-modify, say the head of the noun phrase (NP) would be easier to learn when one of the pairs of languages is the target language. For instance, an L1 French speaker acquiring English would find it easier to learn the distribution of determiners within a noun phrase in English than if s/he were learning the distribution of determiners in Lingala. The facilitative effects would be observed in learning the distribution of determiners in English because in this case both the L1 French and the target language English have the determiner modifying the noun within the NP as illustrated in table (1). However, if the same subject had to acquire Lingala, which distributes its determiners differently, we would expect more errors, thus, negative transfer in the learning of the distribution of determiners in the NP. This prediction is justified by the fact that Lingala, unlike French and English, postposes its determiner in a NP. That is, in Lingala the determiner is placed after the noun within a NP. The following table illustrates this case.

Table (1)

Distribution of determiners within a NP in French, English, and Lingala

Distribution of determiners within a NP in French, English, and Lingala					
FRENCH		ENGLISH		LINGALA	
NP		NP		NP	
Determiner	Noun	Determiner	Noun	Noun	Determiner
Un	livre	A	book	Mukanda	moko
A book		A book		< Book a > A book	

As illustrated in table (1), *un* which is a determiner in the French linguistic system is distributed before the noun that it determines within the NP; this is also the case with the

determiner *a* in English. In Lingala, however, the determiner *moko* (meaning one or a) is placed after the noun it determines. Considering two cases where in case one French is the L1 and English the TL and in case two Lingala is the L1 and English the TL, I can predict positive transfer in case one because of the linguistic similarity in terms of the distribution of determiners in both linguistic systems while in case two negative transfer would be predicted because of the difference in terms of the distribution of the determiners in both linguistic systems. In the latter case, the learner could be expected to place the determiner after the noun within the English NP as a result of Lingala influence during their initial stage of learning English.

Negative transfer is the result of linguistic mismatches that exist between two systems whose influence generates erroneous forms/use in the TL. Negative transfer which entails non-facilitation in the learning process of a target L3 is observed when "A transferred mental representation results in an initial hypothesis for the L3 that is in disaccord with the actual target representation" (Rothman, 2014: 2). Negative transfer has a blocking, delaying, hindering, or inhibiting effect on the acquisition of an additional language (Meisel 1983, Jarvis and Pavlenko 2010). Unlike positive transfer, negative transfer is the result of the differences between a previously acquired language and the TL.

Consider three combinations of languages such as Swahili, French, and English and look at the distribution of descriptive adjectives in an NP. In this example, I posit that English is the L1, French the L2 and Swahili is the target language (TL). In English and French the descriptive adjective pre-describes the noun it is related to within the NP. That is, the descriptive adjective is placed before the noun. In Swahili, however, the descriptive adjective post-describes the noun. Table (2) illustrates the distribution of descriptive adjectives within an NP in the three selected languages.

Table (2)

Distribution of descriptive adjectives within a NP in French, English, and Swahili

Distribution of descriptive adjectives within a NP in French, English, and Swahili					
FRENCH		ENGLISH		SWAHILI	
NP		NP		NP	
Adjective	Noun	Adjective	Noun	Noun	Adjective
Petit	livre	Small	Book	Kitabu	Kidogo
Small book		Small book		< Book small > ‘Small book’	

In this example where English is the L1, French the L2, and Swahili the L3, I predict that the learner will make negative transfer while acquiring the distribution of descriptive adjectives in Swahili. The negative transfer will occur because of the difference in terms of the configuration of the descriptive adjective within an NP. Moreover, I predict that there would be positive transfer for an L1 English-speaking subject when acquiring the distribution of the descriptive adjective in French. I posit that an English-speaking learner who is learning the distribution of the descriptive adjective in Swahili would produce such NPs as **Kidogo kitabu*, however, if the L1 English-speaking learner was learning French his/her NP would be *petit livre.*

Five approaches to language transfer emerge within the nativist view (Clahsen and Muysken 1986, Bley-Vroman 1990, Cook and Newson 1996, Epstein, Flynn, and Martshardjono 1996, Schachter 1998, and Cook 1998). They are (1) Full transfer/partial access to UG, (2) No transfer/partial access to UG, (3) Full transfer/full access to UG (FT/FA), (4) Partial transfer/full access to UG, and (5) Partial transfer/partial access to UG. The term *access* in UG refers to the availability of the Universal Grammar (UG) when acquiring a language. For instance, full access

implies that the whole of UG is available to second language learners when acquiring a language. In this case, the availability of UG to a L2 learner is the same as when learning an L1. Partial access, as the adjective *partial* implies, means that only parts of the UG are available to the learners. That is, the learner is not able to fully benefit from the UG, some parts are no longer available, thus, the learner can no longer access them. The proponents of the no access hypothesis to the UG advocate that there is a critical period when the UG is available for second language acquisition. After the period of puberty or critical period, the UG becomes inaccessible (Schachter 1990).

I start this discussion by briefly introducing the concept of Universal Grammar. The discussion of UG and transfer is relevant in that it helps understand the claims of different proposals on the role of the two aforementioned terms in the process of the acquisition of an additional language.

Chomsky (1976) defines UG as "[t]he system of principles, conditions, and rules that are elements or properties of all human languages […] the essence of human language" (p. 29). The generative framework of Chomsky's UG (1965, 1968, 1975, 1981, 2002) considers that humans are endowed with an innate language faculty whose core component is UG. Cook and Newson (1996) argue that UG is made up of two main components which are the universal principles and language-specific parameters (p.2). This implies that every normal human being possesses linguistic knowledge of a set of universal linguistic principles and the knowledge of parameters which are language-specific. Lenzing (2013) argues that "[t]he UG is assumed to impose specific constraints on L1 acquisition" (p.12).

This means that within the framework of generative grammar, the UG has been identified as the only main factor that restricts the acquisition of an L1 through a set of universal

principles and language-specific parameters. White (1998) says the UG "[p]laces limitations on grammars, constraining their form (the inventory of possible grammatical categories, in the broadest sense, i.e., syntactic, semantic, phonological), as well as how they operate (the computational system, principles that the grammar is subject to)" (p. 1).

Crucially, as already indicated, the availability as well as the influence and role of UG in the acquisition of an additional language is subject to controversies. A number of competing views on the status and role of UG in the process of the acquisition of a subsequent language have been put forward.

The leitmotif that nourishes the debate on the status and role of the UG in the acquisition of, for instance, an L2 is based on a twofold question: "[w]hat early learners begin with in L2 acquisition and what kind of resources they can draw on in this process" (Lenzing 2013: 12). The claims of different proposals on the role of the UG and transfer in the initial state of the acquisition of a subsequent language vary around two main points. The first point of divergence is on the extent to which a L2 learner has access to UG and the second point concerns the role and contributions of L1 (transfer) in L2 acquisition (White, 2000: 133).

The partial access view claims that only the innate human predisposition to language, i.e. Universal Grammar (UG), plays a role in the L2 acquisition. The L1 does not influence the acquisition of an additional language. During the acquisition process an interlanguage grammar is created based on UG. The proponents of partial access such as Cook (1988) claim that "[a]dult L2 acquisition is only constrained by UG insofar as universal properties can be accessed via the L1 grammar" (White, 2005: 16).

Proponents of partial transfer account assume that only lexical categories can be transferred from a previously acquired language to a target language but not the functional

projections in X-bar syntax, i.e. only lexical heads such as nouns, adjectives, verbs, and prepositions are likely to transfer but not functional heads such as the complementizer 'COMP' (CP), inflectional suffixes on a verb 'INFL' (IP), or determiners 'Det' (DP).

The difference between lexical categories and functional categories can be well defined through contrastive features. Lexical categories have substantive meaning and assign theta roles to their arguments while functional categories lack substantive meaning and do not assign any theta-roles. Also, lexical categories are open classes and permit indefinite recursion on X' whereas functional categories are closed classes and do not permit recursion on X' (e.g. Cowper, 1992: 173).

This viewpoint is partially contradicted by the Weak Transfer Hypothesis. Eubank (1993) claims that both lexical and functional categories are transferred. However, the values, which are associated with functional categories are not transferred. A similar weak transfer account is found in the Minimal Trees (MT) approach by Vainikka and Young Scholten (1994, 1996), which also hypothesizes that the properties of functional categories do not transfer, be it either from L1 to L2 or from L2 to L3 (Leung, 2007: 119). In line with their hypotheses on the initial state of L2 learners and the early development of functional projections Vainikka and Young Scholten (1996: 25) claim that:

(1) a. L2 learners transfer their lexical projection VP from the L1.
b. The headedness of the VP is switched if it does not correspond to that of the learner's L1.

(2) Functional projections gradually emerge, independently of the learner's L1.

(Lenzing, 2013: 117).

The above quotation implies that only the lexical properties, but not the functional projections can be transferred in L2 acquisition. Evidence supporting the claims by Vainikka and

Young-Scholten (1996) came from their study, which dealt with longitudinal and cross-sectional production data of adult L2 learners. All subjects were L2 learners of German with L1s which were typologically different: Turkish, Korean, Spanish, and Italian. Using the Minimal Trees Hypotheses, the authors predicted that the headedness of the VPs in the L2 would reflect the headedness of the VP in the participants' L1s. In other words, Vainikka and Young-Scholten (1996) hypothesized that learners whose L1 is a head-initial language would produce head-initial syntactic structures in the L2. However, learners whose L1 is head-final would produce syntactic constructions with head-final patterns in the L2. Vainikka and Young-Scholten (1996) came to the conclusion that "[o]nly lexical categories are present at the earliest stage of both first and second language acquisition, and that during acquisition functional projections develop in succession" (p.2). These findings were supported by the fact that only the VP was transferred from the aforementioned languages and "[s]ubsequently posit[ed] head-initial functional projections" (p.2).

It was, however, observed that the CP emerged at a given point in the development. For instance, Vainikka and Young-Scholten (1996) observed no transfer of the Korean wh-in situ; they therefore "[p]redicted that A-movement, A'-movement, and head movement develop in L2 acquisition in a fashion similar to L1 acquisition, as the appropriate functional projections become available in the syntax" (p. 15). It was found that functional projections are not transferred during L2 acquisition (Vainikka and Young-Scholten, 1996: 15; Lenzing, 2013: 117).

The Full Transfer/Full Access Hypothesis, seeks to answer two main controversial questions in L2 acquisition. Those debated questions aim to determine the linguistic features that constitute the initial state of L2 acquisition. Conradie (2005) paraphrases the first of these questions by inquiring into what the nature of the mental grammar that the learner starts out with at the onset of L2 acquisition could actually be. In other words, does the learner start with a blank

state, which is only restricted by the principles of Universal Grammar and is hence no different from an L1 learner in that full access to UG is still available? This idea stands in stark contrast to approaches, which state that the L2 and L3 learner only has partial access to UG because its initial state is no longer assessable after the language specific parameters of the L1 were set during the process of L1 acquisition.

The second question seeks to determine whether parameter resettling is possible in L2 acquisition in cases where the value of a certain parameter differs between a learner's L1 and the target language (Conradie, 2005: 90-91). FTFA claims that L2 learners are influenced at their initial stage of L2 language acquisition by the L1 linguistic system. The L1 grammar is therefore the initial state for L2. That is, a person who is learning an L2 has as his/her linguistic background the grammar and the linguistic knowledge of the L1. Schwartz and Sprouse (1996) state that "[a]ll the principles and parameter values as instantiated in the L1 grammar immediately carry over as the initial state of a new grammatical system on first exposure to input from the target language (TL)" (p.41). Leung (2007) says that "FTFA postulates that the entire L1 grammar (excluding lexical items and their phonetic matrices) will transfer to the L2 initial state" (p.118). Leung notes that FTFA both lexical and functional categories and all related properties could transfer into L2. This predicts a strong role of the L1 in the acquisition of a subsequent language and it indicates that full transfer from L1 contributes into the TL acquisition process.

According to Conradie (2005), FTFA's answer to the second question is that "L2 learners have access to UG in its entirety and, hence, that parameter resetting is possible in situations where the value of a certain parameter differs for the learner's LI and the target L2, if the necessary positive evidence is available in the L2 input" (p. 91). It is (the late) interaction between the L2 input and access to UG, which helps to restructure the L2 linguistic system. This

view recognizes the role played by the UG in constraining the L2-acquisition (Schwartz and Sprouse 1994, 1996). Schwartz and Sprouse (1996) admit that the restructuring process which varies in pace (either done rapidly or done over a longer stretch of time depending on the learner) may reflect separate and different intermediate systems which in turn depict distinct Interlanguages (intermediate grammars). The authors identify different variables such as the initial stage of acquisition, the L2 input, the apparatus of UG, and learnability as factors that determine the development process of L2 (Schwartz and Sprouse, 1996: 41).

Ringbom (1987), for instance, in his study of native speakers of Finnish and Swedish learning English found the following: (1) language distance has an impact on cross-linguistic influence, (2) the influence of an L1 is greater at early stages of L2 learning than at later stages, (3) the influence of L1 is stronger at lower levels of proficiency and (4) the influence of the L1 tends to be stronger in more communicative tasks as compared to drills and structure-based tasks.

Overall, this section on transfer has presented the types of transfer that are observed when acquiring an additional language. The transfer might be either positive and thus facilitating the acquisition or negative and therefore rendering the acquisition process heavy and slow. A sketch of the UG viewpoint on transfer has shown that transfer may be full or partial depending on the proposed availability of the Universal Grammar when acquiring a language. Beyond UG, there are further factors, which have been proposed to constrain transfer in the acquisition of an additional language. The following section discusses different factors, such as linguistic and psycholinguistic factors that constrain the occurrence of transfer in the acquisition of an additional language.

2.2 Factors that underlie Language Transfer in L2 and L3 Acquisition/Learning

According to the ignorance hypothesis (Newmark and Reibel 1968), learners express what they do not know in the TL by using the previously acquired linguistic knowledge of their L1. Krashen (1983) refers to the observation that learners may transfer their previous knowledge of L1 when new knowledge is lacking in the TL as "padding". Several factors affecting the acquisition of an additional language were identified in previous studies (among others Jarvis 2000, Pavlenko 2000, Odlin and Jarvis 2004, Gass and Schachter 2004, Jarvis and Pavlenko 2010) and those interact in the acquisition process of any additional language. Some of these factors favor the occurrences of transfer while others constrain the occurrence of transfer.

Those previous studies on transfer have laid a solid foundation in terms of the constraints that govern the occurrence of transfer when acquiring an additional language. Researchers such as Kellerman (1983), Odlin (1989), Murphy (2003), Odlin (2003), and Jarvis and Pavlenko (2010) for instance, discuss two main constraints, namely psychotypology and transferability which I discuss in the following paragraphs.

As mentioned above, psychotypology refers to the actual or imagined similarity a learner perceives between an L1 or L2 and the TL. Transferability refers to the likelihood of transfer occurrence (Jarvis and Pavlenko 2010). Andersen (1983) proposes a principle known as "transfer to somewhere". The principle of "transfer to somewhere" claims that the linguistic features of a previously acquired language are susceptible to transfer if and only if they are perceived as having a counterpart in the target language.

Recent transfer research (Jarvis and Pavlenko 2010) has put forward a number of classifications of factors that motivate transfer in the acquisition of an additional language. For the sake of this study, I present a classification of those factors adopting the five categories, which

were suggested and discussed by Jarvis and Pavlenko (2010): Linguistic and psycholinguistic factors, Cognitive, attentional, and developmental factors, Factors related to cumulative language experience and knowledge, Factors related to the learning environment, and Factors related to language use (p. 175).

My choice to adopt these categories is motivated by their underlying consistency and rationale.

2.2.1 Linguistic and Psycholinguistic Factors

This section discusses the psycholinguistic factors that interact in the acquisition of an additional language. It elaborates on the influence of cross-linguistic similarity and language learning in the context of the acquisition of an additional language. It discusses what is meant by psychotypology and typological similarity and provides illustrations with some specific cases of errors as underproduction and overproduction, which characterize the nature of CLI. It also presents some cases of illustrative studies that have discussed those factors.

The section discusses the impact of both the areas of language acquisition such as lexical, morphological, syntactic, phonological, and semantic domains of language and aspects of language use as additional capital factors that interfere in the acquisition of an additional language. The section mentions frequency, recency, and salience as further linguistic factors that plot with transfer in L3. Finally, markedness is presented as playing a great role in determining the cause of transfer in an L3. The following section discusses the influence of cross-linguistic similarity and language learning in acquiring an L3.

2.2.1.1 Cross-linguistic Similarity and Language Learning

Caffarel, Martin and Mathiessen (2004) define typology as, "[…] the general study of similarities and differences across languages—covering not only typology in a strict sense as elaborated by,

for example, Greenberg (1966, 1978), but also descriptive frameworks embodying generalizations developed to support the descriptions of a range of different languages (e.g. Comrie 1981, Shopen 1985, Payne 1997, Whaley 1997)" (p. 1). Moravcsik (2013), however, defines language-typology as "[…] studying similarities and differences among languages that do not stem from shared genetic relationship, language contact, or shared environmental conditions" (p.1).

Typology understood in the sense of Moravcsik (2013) refers to the description of languages by depicting comparable sketches of the morphosyntactic features of the selected linguistic systems. The typological studies of a pair or a set of languages may focus on particular linguistic features by comparing a range of linguistic domains within the selected languages. A typological analysis may also be very specific in comparing and contrasting a specific linguistic entity such as tense and aspect (Bybee, Perkins, and Pagliuca), mood and modality (Palmer 1986), or transitivity (Hopper and Thompson 1982) to name just a few. Language typology may also refer to a comparative study of the grammar of words (morphology) with its focus on word structure (Caffarel, 2004: 2). The work by Greenberg (1966), for instance, illustrated the cross-linguistic implicational universals of morphology and word order (Caffarel 2004).

In the context of this study, I endeavor to highlight some morphosyntactic similarities and differences between Lingala, French, and English. The focus is on tense and aspect in the three selected languages. A particular attention is further paid to verbal morphology in the three languages as well as the linear structure of the verb tense and its function in one particular language as well as across languages.

An example of the typological similarities and differences between French and English illustrates what has been discussed in the literature (see e.g. Soroli 2012). The present perfect tense in English is similar, in terms of its structure to the *passé composé* in French. Both

tenses are made with the structure 'have/avoir + the past participle/ *participe passé'*. While the structures of these verb tenses are similar in both languages, they still differ in terms of their functions. The present perfect tense in English is used to talk about a past until now event, while the *passé composé* in French is used to talk about a past completed event.

The study of typology is interested in the linguistic differences that arise from one language to another. Rijkhoff (2007) says "[t]ypology is concerned with cross-linguistic variation; more specifically, it investigates the range of possible grammatical phenomena that are attested in human language and informs us about the way these phenomena hang together (tendencies, correlations)" (p. 2). Typologists use the basic word order to divide languages into types and the word order is determined from the order of the subject (S), object (O), and verb (V) in a declarative sentence (Rijkhoff 2007). Three types of language groups emerge, SOV, SVO, and VSO whereby the statistical universal captures the linguistic characteristic that subjects in the majority of languages tend to precede objects (Croft 2003).

Psychotypology is understood as the learner's perception of the linguistic distance or similarities that exists between an L1 and a target language, or the L2 and a TL (Kellerman 1979). According to Kellerman (1979), psychotypological distance or proximity is always a subjective judgment of the learner that is based on how s/he perceives the congruence of linguistic form between his native language and the TL (p. 47).

Cross-linguistic similarity, which has also been called language distance, or typological proximity, is one of the relevant factors that have been subject of attention by a number of studies (Foote 2009, Rothman 2010).

Psychotypology judgment may result in either positive or negative effects in the process of language acquisition. The positive effects facilitate the acquisition of the TL, while the

negative effects impair the acquisition process (Rothman 2010). It is advocated and documented that transfer is likely to occur when two languages display congruent linguistic features, because the brain processes such features as old information which may be retrieved from long term memory (Ortega 2009, Rothman 2010). However, when there are mismatches of forms, this is processed as new information and it requires more effort in order to be processed and stored in the long term memory (Ortega 2009).

Perceived similarity results in positive transfer (Ellis 1994); i.e. perceived structural proximity yields positive effects which facilitates the learning process of the target language. Ringbom (2003) argues that two languages with a good number of cognates may be perceived as similar and this psychotypological effect may favor transfer between the two languages.

Actual language typology is one of the variables that dictates the likelihood of language transfer in the context of a third language acquisition. It is one of the most prominent factors, which have been observed as a cause of cross-linguistic influence in acquiring an additional language beyond L2. It is documented that transfer is likely to be high when the languages that are involved offer a high degree of similarity in their use and mostly when learners perceive those languages as similar (Jarvis and Pavlenko 2010).

Odlin (1989) also thinks that language distance is one of the salient factors, which determine the amount of time a learner needs to reach proficiency in a TL. When two languages offer more linguistic similarities, more positive transfers are observed in the learning process and it, therefore, takes the learner less time to master the TL. However, when there is an attested distance between an additional language that is being acquired and a previously acquired linguistic system, cross linguistic influence (CLI) is identified in the form of negative transfer, which in turn

may manifest in form of production errors, underproduction, overproduction, and misinterpretation (Odlin 1989).

The four aforementioned problems in language learning "production errors, underproduction, overproduction, and misinterpretation (Odlin 1989)" are thus commonly attributed to interference from a prior language. Errors that are due to a negative influence from a previously acquired language are called interlingual errors, transfer errors or interference errors (Odlin 1989). Interlingual errors are related to learner's interlanguage. Corder (1971) referred to the notion of learner interlanguage as "idiosyncratic dialect" while Nemser (1971) called it the learner's "approximate system". Interlanguage which is nothing but a continuum between the native (L1) and the target (L2) language in the context of second language acquisition is defined by Selinker (1992) as: "A psychological structure which is latent in the brain, activated when one attempts to learn a second language" (Selinker in Richards, 1992: 33). Interlanguage is otherwise understood as a transitional language that contains features that do not belong either to the L1 or to the target language linguistic system but that result from the misinterpretation of the target language (TL) on the part of the learner.

The four aforementioned consequences of negative transfer, i.e. underproduction, overproduction, production error, and misinterpretation error, need to be more clearly defined in order for them to be expedient in a maximally insightful way.

Underproduction occurs as a result of the learner avoiding particular structures in the target language that s/he deems different from those in his/her L1 and thus difficult (Odlin 1989). For instance, Odlin (2003) says that Schachter (1974) found that Chinese and Japanese learners of English avoid producing English relative clauses (underproduction) as a result of the "[…] great differences between the target and the native languages in relativization" (p. 444).

Overproduction, however, is when a learner tends to frequently use some target language structures which are not so frequent or even marked in the TL (Jarvis and Pavlenko 2010). The frequent use of such structures may be due to the empirical observation that a learner may feel more confident in using them than other structures in the TL.

The term "production error" is an umbrella term, which encompasses both substitutions and calques (Wang and Liu 2013). The latter term refers to errors that reflect high similarities with a prior language structure. Rugo and Ordulj (2015: 3) say "[c]alques represent given elements of syntactic structures that usually get literally translated from a native language." Cortés (2005) provides the following English sentence which is a word by word translation from Italian to illustrate the case of calque: "He tenido mi pelo cortado → I have had my hair cut" (p. 37).

Rugo and Ordulj (2015) refer to substitution errors as those which are related to the linguistic choice that is made by the learners when they replace a linguistic element with another and this is quite often achieved through the use of native language form in the target language (p. 3). Substitution errors are quite often observed with lexical items; they happen when a learner uses a form from a previously acquired linguistic system in the TL. An illustration of the substitution error is the case of 'serioso' (meaning *serious*) which is frequently inserted into their English utterances in its original Italian form by Italian learners of English (Cortés 2005).

At last, misinterpretation errors occur when a structure in a prior language influences the interpretation of a target language discourse/text resulting in an incorrect inference of the intended meaning. An instance of the misinterpretation error is observed in the case of false cognates in French and English. For instance, the French word 'chance' means 'luck' in English, while the English word 'chance' means 'opportunity or occasion'. A learner may misinterpret a

sentence such as “I did not have any chance to meet the President yesterday” as “I did not meet the President because I did not have luck.”

Jarvis and Odlin (2000) recognize the facilitative role that typological closeness and congruent linguistic features of L1 and L2 offer in the acquisition process of the latter. Jarvis (2000), Poulisse (1990) as well as Debot (1992) have shown that language typology dominates over other relevant variables in the speech production of an L3 learner. For instance, the authors observed that language typology overrides variables such as the amount of L2 exposure and proficiency. Ringbom (1986) found that typology was more influential than both the amount of exposure to and the frequency of use of the TL.

Ringbom (1986) reached similar results in his comparative study which investigated L1 speakers of Finnish and Swedish while learning English as L3 in a setting where Finnish was natively spoken by the majority of the populace. The study reconfirmed that typology prevailed over the amount of exposure to a language and the frequency of its use. Ringbom found that L1 Swedish speakers did not transfer any L2 Finnish lexical items in their L3 English production while L1 Finnish speakers heavily transferred from their L2 Swedish which is typologically related to English.

Cenoz (2001) conducted a comparative study with children learning English as an L3 who had Basque as L1 and Spanish as an L2. She showed evidence that lexical transfer preferentially happened from the language that was typologically closer to the TL and which shared the same status as a “foreign language” with the TL. Clearly, Spanish is typologically closer to English than Basque; and it shared with English the same status as a foreign language. Hence in her study the children transferred features of Spanish into English and not features of Basque.

Jarvis and Pavlenko (2010) discuss two main consequences of cross-linguistic similarity in relation to transfer in language production. First, they argue that "[l]earners of a recipient language that is similar to the source language show far more instances of overt transfer in the production of the recipient language than do learners whose source language is very different from the recipient language" (p.177). Jarvis and Pavlenko further discuss the second consequence in relation to exposure to TL outside the classroom context. They argue that "[a]t least in foreign language learning situations where learners have little contact with the foreign language outside of the classroom, there is a greater gap between comprehension and production in learners acquiring a similar language than there is in learners acquiring a very different language" (p. 177).

It was established in the aforementioned studies that the closeness of language typology between an L2 and an L3 positively influences the acquisition process of the additional language regardless of the learner's length of exposure to the TL and her/his proficiency in the TL. Obviously, typological closeness and congruency between L2 and L3 trigger positive transfer and thus facilitate the acquisition of the L3 (Ecke 2001, De Angelis and Selinker 2001).

Perceived cross-linguistic similarity is based on psychotypology as briefly outlined at the beginning of this sub-chapter. Importantly, cross-linguistic similarities and differences can be identified as objective or subjective. This distinction is important because it can shed more light on the understanding of this issue. Jarvis and Pavlenko (2010) define objective similarities (and differences) as, "[t]he actual degree of congruence between languages" and they define subjective similarities (and differences) as, "[t]he degree of congruence the L2 user believes or perceives to exist" (p.177). I lend support to Jarvis and Pavlenko (2010) who claim that subjective similarity is always conditioned by the following elements: The L2 user's failure to recognize some of the objective similarities that actually exist, the L2 user's misperception of the nature of some of the

similarities that exist across languages, and the L2 user's assumption that there exist some similarities between the two languages that really do not exist. Subjective similarity which is otherwise referred to in this study as psychotypological similarity plays an important role in determining the source and nature of transfer in the acquisition process of an additional language.

Subjective similarities may result in a misalignment of the linguistic elements of the source language with those of the recipient language. The mismatch of both systems may then result in negative influence while producing the TL. Subjective similarity points toward one direction and can thus be characterized as asymmetrical. Subjective similarity changes over time as a result of improvement of language proficiency (Ellis 1994).

Objective similarity is constant and may go both ways and can thus be identified as symmetrical. Eckman (2004) refers to objective similarity as the one that can apply equally to the two involved languages exerting influence from language A to language B and vice versa (p. 40).

It is documented that language learners usually look for the similarities that exist or may exist between a source language and the recipient one (the TL) that they are acquiring. It is the similarity that conditions and triggers transfer. Jarvis and Pavlenko (2010) claim that the subjective cross-linguistic similarities learners find or assume to exist, "[a]re the basis on which they form interlanguage identifications which serve as the genesis of most types of CLI" (p. 179).

While subjective similarity favors transfer in the acquisition of an additional language, subjective difference plays an inhibitory role. Subjectively perceived differences lead to an avoidance of linguistic items or structures from a prior language in a TL; Jarvis et al. (2010) argue that learners accurately or not identify and recognize those differences at the outset of the learning process. Schachter (1974) paraphrased by Jarvis and Pavlenko (2010) claims that "[s]ubjective differences can also lead learners to avoid L2 structures they perceive as being

difficult because of how different they seem to be from L1 structures, and this would indeed be a CLI effect" (p.179). Learners tend to avoid structures they deem difficult in L1 because of the analogy they make assuming that this difficulty in the L1 will obscure the understanding of the equivalent structure in the TL. Likewise, any structure that presents differences with the linguistic system of the TL would be processed as new information and would require more effort than structures that offer similarity with its counterpart in the additional language.

Subjective similarity, which plays a relevant role in transfer, may be divided into two different types: perceived similarity and assumed similarity.

Perceived similarity is defined with reference to conscious or unconscious judgment that the L2 learner makes with respect to the TL. Jarvis and Pavlenko (2010) claim that "[a] perceived similarity is a conscious or unconscious judgment that a form, structure, meaning, function, or pattern that an L2 user has encountered in the input of the recipient language is similar to a corresponding feature of the source language" (p.179). Perceived similarity is hence based on the perception learners make which in turn is the result of subjective judgment.

Assumed similarity is, however, based on a hypothesis that learners formulate about the similarity of a particular structure in a source language to a particular structure in the TL and which is tested as learners use the counterpart structure in the recipient language. Jarvis and Pavlenko (2010) go on defining assumed similarity as "[a] conscious or unconscious hypothesis that a form, structure, meaning, function, or pattern that exists in the source language has a counterpart in the recipient language, regardless of whether the L2 user has yet encountered anything like it in the input of the recipient language" (p. 179).

Should it be noted that there is not always a clear-cut distinction between perceived and assumed similarity? All perceived similarities originate in assumed similarities but this

relationship does not work in the opposite direction for all cases as there may be assumed similarities that do not lead to perceived similarities.

It is obvious in the existing literature that both perceived and assumed similarities which may exist between the source language(s) and the additional language(s) serve as relevant driving forces behind the mental associations that trigger CLI. Two main effects of CLI are thus positive and negative transfer. Jarvis and Pavlenko (2010) postulate that "[p]ositive transfer occurs when assumed similarities are compatible with objective similarities, whereas negative transfer occurs when assumed similarities conflict with objective differences" (p. 182).

This section has shown that typology and psychotypology are highly relevant factors in the acquisition process of an L3. Typological similarity and psychotypological proximity between two structures of two languages results in positive effects which yield positive learning of the TL. Typological distance, on the other hand, results in negative transfer, which may undermine the learning process of a target language. It should be noted that the effects of typological similarity obtain regardless of the order of acquisition. This means that typological similarity positively influences the acquisition of an additional language regardless of the fact that the language that offers that similarity with the TL is an L1 or an L2 (Rothman 2011).

2.2.1.2 Area of Language Acquisition and Use

The area of language acquisition and use is one of the factors that may influence transfer, which has probably received the least attention in the field of transfer research. This factor encompasses the analysis of language transfer at the different levels of the language system, i.e. transfer in the areas of phonology, orthography, lexis, semantics, morphology, syntax, discourse, and pragmatics. Some of these language subsystems are more amenable to transfer while others allow less transfer or resist transfer altogether (Jarvis and Pavlenko 2010).

The existing literature on language transfer identifies phonology, semantics, lexis, discourse, and pragmatics as linguistic subsystems which are the most open to transfer (Jarvis and Pavlenko 2010). Syntax is referred to as the linguistic subsystem which is the least exposed to cross-linguistic influence (e.g., Jarvis and Pavlenko 2010).

However, there have been a number of studies, which investigate morphosyntactic transfer in L3 acquisition (Flynn, Foley, and Vinnitskaya 2004, Bardel and Falk 2007, Shooshtari 2009, Falk and Bardel 2011); this research has offered very promising findings which can help to partially account for the occurrence of morphosyntactic transfer in L3 acquisition.

Lexis is so far the most investigated subfield of language transfer (Jarvis and Pavlenko 2010). Studies in this area have investigated a great variety of different combinations of languages and have identified interesting further factors which condition transfer in the acquisition of an additional language/additional languages (Cenoz 2003, Maria del Pilar and Garcia Mayo 2003, Jaensch 2009, Jarvis and Pavlenko 2010). As previously highlighted, one main factor is the similarity between a previous language and the target language (Foote 2009, Rothman 2010).

Research on cross-linguistic influence differentiates lexical transfer concerning the two main categories of lexical items: function words and content words. The transfer of content words into the TL is often considered as conscious transfer; which is used to fill in a lexical gap in the TL during speech production (Poulisse and Bongaerts 1994). In contrast, the transfer of function words is considered the outcome of an unintentional transfer (Faerch and Kasper 1986). However, the notion of intentional versus unintentional language transfer is not always obvious because it seems that both content and function words can be unintentionally transferred (Jarvis and Pavlenko 2010). In such cases, it is crucial to note that content word transfer can be monitored

whereas function word transfer seems to be inaccessible to monitoring; i.e. in the former case the learner can self-correct when a wrong linguistic form is produced (Poulisse and Bongaerts 1994).

Ringbom (1986) claims that semantic transfer is very often achieved through content words and the semantically based transfer goes from L1 to L3 while function word transfer goes from L2 to L3. Several studies have confirmed the claim that function words transfer tends to have L2 as the source language. Inversely, semantic transfer tends to originate from L1 (De Angelis and Selinker 2001, Hammarberg 2001, Cenoz 2001).

These observations are mirrored in the closely related field of morpheme transfer. Bound morphemes, which are akin to function words in that they predominantly carry language specific morpho-syntactic information, have been found to transfer in a different way to free morphemes, which carry conceptual-semantic information. Free morphemes (like content words) are claimed to be more amenable to transfer than bound morphemes (which are akin to function words); likewise, L1 tends to serve as the more dominant source of free morpheme transfer than an L2 (Kellerman 1983, Andersen 1983, Gass 1984).

Jarvis and Odlin (2000) examined written L2 English data that were collected from L1 Finnish-speaking and L1 Swedish-speaking subjects and analyzed how participants described spatial relationships in a silent film which was used in the experiment as a prompt for the writing task. Evidence for morphological transfer was attested in the sentences that contained descriptions of the protagonists' locations in the film. For example, in one scene the protagonist is located in an area that is covered by rather high grass. To describe the protagonists' location in relation to the grass in this scene, the L1 Finnish-speaking participants used the preposition 'on', which is a case of negative transfer into English. However, the L1 Swedish-speaking participants predominantly used the preposition 'in', which reflects positive transfer from Swedish. The L1

English-speaking control group predominantly used the preposition 'in' in the given context. Jarvis and Odlin (2000) concluded that "[t]he fact that the Finns and Swedes spatial reference patterns in English are different from each other but similar to their respective L1 patterns 'suggest a strong role for semantic transfer in learners' spatial reference and […] shows that Finns, in particular, are capable of making interlingual identifications between post-posed bound morphology in Finnish and preposed free morphology in English" (p. 550; Jarvis and Odlin, 2010: 93).

Transfer of bound morphemes into an L3 production always results in a hybrid lexical form. Such a form is called "lexical invention" by Dewaele (1998: 476). Instances of the composite form, that is, a hybrid lexical item made up of the stem from one language and the inflectional morpheme from the other are legion (Fuller 1999, Hammarberg 2001, Angelis and Selinker 2001). Several reasons were attributed to the occurrence of bound morpheme transfer. Some (Fuller 1999, Angelis and Selinker 2001) claim that bound morpheme transfer is motivated by unconscious learning strategies combined with low L3 proficiency (Fuller 1999). Angelis and Selinker (2001) attribute bound morpheme transfer to a concomitant activation of a word stem in one language and a bound morpheme in the other language. Faerch and Kasper (1986) attribute the occurrence of bound morpheme transfer in the production of an L3 to a 'looseness' of constraints on function words as opposed to content words. They are not clear on how the constraints on function words are loosened, however.

Jarvis and Pavlenko (2008) define transfer in terms of directionality and divide transfer into four types: forward transfer, reverse transfer, lateral transfer, and multidirectional transfer. Forward transfer proceeds from L1 to L2 to L3 (Boratywska-Sumara, 2014: 138). It is documented that forward transfer is frequently observed in the subsystems of phonology, lexis, semantics, discourse, and pragmatics. Jarvis and Pavlenko (2010) argue that forward transfer is

more moderate in the domains of orthography and morphology than in any of the other domains and that "[i]t seems to occur least of all in the area of syntax" (p.183).

Reverse transfer refers to the linguistic influence that goes from L3 to L2, or from L2 to L1, or from L3 to L1. Reverse transfer is documented as the most widespread type of transfer which is observed in all areas of language use with specific effects in phonology, lexis, and semantics (Cooks 2003, Schmidt et al. 2004).

Lateral transfer, however, refers to linguistic influence that involves languages that have been acquired beyond the native language. The combination of languages in this type of transfer excludes the native language. Wrembel (2015) defines lateral transfer as, "any influence of a non-native (or post-L1) language on another non-native language" (p. 43). Therefore, lateral transfer involves the combination and directionality such as L2 <-> L3, or L3 <-> L4 (Wrembel, 2015: 42). Dewaele (1998), Cenoz (2001), and Ringbom (2001) found that transfer in the lateral direction was frequently observed in relation to lexis when the L2 and the L3 were similar.

Finally, Wrembel (2015) says, "bidirectional or multi-directional transfer refers to the cases in which two or more languages from the multilinguals' repertoire function simultaneously as source and recipient languages" (p. 42). In these types of transfer, the directionality points to both languages that are involved in this relation of influence such as L1 ↔ L2, and/or L2 ↔ L3 (Jarvis and Pavlenko, 2010: 22).

In sum, this section has shown that transfer in third language acquisition may be influenced by several factors. A learner may perceive similarity (actual or imagined) between the L1 or L2 and the TL. Such psycholinguistic factors may result in positive or negative transfer in the TL. The actual similarity between a particular structure of a previous language (L1 or L2) and

the TL may trigger positive transfer. Transfer does not only go from previously acquired languages to a TL. It may be reversed, or lateral.

2.2.1.3 Frequency, Recency, and Salience

Kellerman (1983) claims that an infrequent linguistic item is likely to be less transferable than a frequent item because the former is (considered) psychologically 'marked'. Faerch and Kasper (1986) maintain that L1 linguistic items with a high frequency of occurrence are likely to trigger unintentional lexical transfer as a result of their permanent activation in the short-term memory, which makes their retrieval easier in the early stage of L2 learning. This is attested in the acquisition process of an additional language when learners tend to use highly frequent L1 lexical items in their TL production. This L1 lexical item use in a L2 utterance is the result of the non-retrieval of the equivalent word in the TL. Therefore, the most L1 activated linguistic item is retrieved and used to fill in the linguistic gap in the L2 utterance (Faerch and Kasper 1986).

An interesting example is the case of some kindergarteners in Kinshasa, the Democratic Republic of Congo who were learning French at school and I was present in the room. Upon the presentation of a picture to the class, the instructor asked the children in French to name what was on the picture; he said: *Ca c'est quoi?* ('what is this?'). One student straightforwardly shouted *Le soso*, which is a code-mixed phrase made up of the determiner from French *le* and the noun from Lingala *soso* meaning *a coq or a hen*. I suspect that *soso* was selected because it is one of the most frequent words that children use in their daily interaction indicating that it was probably more activated than the French word *coq* which has a low frequency in the children's daily interaction. The word *soso* was combined with one of the most frequently used French determiners, the definite article *le*. In fact, learners are always taught lexical items in French together with the appropriate article to teach them gender at the same time. Since the article *le* is frequently used, it

may have been activated at the same time as *soso* in Lingala so that both words were used in the same determiner phrase.

Selinker (1992) lends support to Faerch and Kasper's (1986) finding that high frequency structures in the L2 have a greater chance to be integrated into the learner's interlanguage than lower frequency ones. Poulisse (1999) justified this choice by correlating highly frequent words with the automaticity of their production. Poulisse (1999) quoted by Jarvis and Pavlenko (2010) claimed that "[t]he mental procedures underlying the selection of frequently used L1 words are so highly automatized that they are difficult to suppress while the person is using the L2" (p.184). This would imply that the most automatized linguistic item could also be prompt to transfer.

Poulisse and Bongaerts (1994) observe that for Dutch native speakers who were learning English, the L3 frequency effect prevailed over language activation in their L2 TL production. It was deduced from the study that frequency effects favor unintentional transfer when the learner has a relatively low proficiency in the TL and has had limited exposure to the TL.

Recency is another conditioning factor in triggering linguistic transfer. Poulisse argues that the most recent linguistic system that a learner has used is most amenable to transfer because it "[t]ends to bear a high level of activation in the person's mind" (Jarvis and Pavlenko, 2010: 184). As an instance Williams and Hammarberg (1998) found in their studies that multilingual learners who were speaking English, German, and Swedish happened to switch more into German which was the most recently acquired language amongst the three even if English was the most frequently used language. This finding shows that in case of competition of frequency and recency, the latter takes precedence, that is, recency as a transfer-conditioning factor dominates over frequency in the case of linguistic transfer. Hammarberg (2001) claims that

recency is related to the active use of a language and it is attested that learners tend to resort to a language as the source of transfer when the latter has actively been used as compared to a language that has not been used actively.

Some other researchers who deal with language transfer research prefer the terms 'L2 status, talk foreign or foreign language mode' (Jarvis and Pavlenko, 2010: 184). It is argued that learners tend to transfer from a recently acquired linguistic system, which is identified as a foreign language by the learner. This foreignness identity readily influences the TL that is being acquired provided that the latter is also considered as foreign.

Considering the L3 context, it was repeatedly noticed that the specific status of the L2 overrides the combination of frequency effect and high language proficiency which are characteristic of the L1 (Murphy 2003). Williams and Hammarberg (1998) lend support to this claim maintaining that "[p]rovided the factors of proficiency, typology, and recency are at a sufficient level, L2s appear more likely to be activated than the L1 as supplier language during the early stages of L3 acquisition" (p. 323). This claim confers a privileged role to the L2 regardless of the higher level of proficiency of the learners in L1 and the superior degree of activation of the L1 as compared to the L2.

These findings concur with Jarvis and Pavlenko's (2010) postulation that "[l]earners often show interference from one nonnative language when using another due to a learning constraint that makes it difficult to fully compartmentalize post-L1 languages" (pp.184-185). It is clear that this account does not only consider recency of use as a conditioning factor but rather emphasizes that learners must identify the most recently used language as foreign. However, Dewaele's study (1998) demonstrated that recency is still a valuable factor that conditions transfer. Dewaele found that "[t]he language that was learned just prior to the TL is the most likely

candidate for transfer" (p.185). This notion of recency may thus be interpreted in relation to the order of acquisition of languages.

Furthermore, salience is an additional relevant factor in determining the source of transfer. Jarvis (2002) found that more perceptually salient structures such as the definite article in a previously acquired language were readily able to transfer into the TL. A salient feature is readily noticeable and easy to remember. Such a feature is highly activated and prone to transfer. It is documented that the effects of frequency, recency, and salience are twofold. First, they have a direct impact on language learning in that they favor fast integration and thus learning of the linguistic items that are identified as the most frequent, recently used, or acquired, or the most perceptually salient. Second, the most frequent, recent, and salient linguistic items of the L1 and L2 are most amenable to transfer because of their high mental activation in the learners' mind (Long and Sato 1983, Doughty 1991, Poulisse 1999).

2.2.1.4 Markedness

Markedness is an important factor that influences transfer in acquiring an additional language (Jarvis and Pavlenko 2010). Markedness is a concept that has been defined in different ways depending on the framework and linguistic subsystem one is operating in. Phonology is one of the linguistic subsystem in which markedness has been extensively dealt with (Eckman 2004).

In phonological theory, the notion of markedness refers to the commonality of a sound or sound pattern across the languages of the world (Jarvis and Pavlenko, 2010: 186). Typological markedness which is the term that is often used in the SLA literature is defined by Eckman (2004) as "[a]n asymmetric irreflexive and transitive relationship between linguistic representation across the world's languages, such that the presence of one structure in a language implies the presence of another structure, but not vice versa" (p.4). The notion of typological

markedness can further be defined through the relationship of +/- presence of a specific linguistic entity or feature within or across a linguistic system(s); or through the relationship of +/- high distribution within or across a linguistic system(s) (Ekman, 2004: 4).

The terms markedness and unmarkedness in SLA need some defining prior to continuing with this debate. Ortega (2009) says in SLA the term unmarkedness denotes, "a closed set of possibilities within a linguistic system, where the given possibilities rank from simplest and most frequent across languages of the world" (p. 37). She, however, defines the term markedness as those linguistic forms which are the most complex. An unmarked linguistic form is the one that is the most expected, the most common and the most ordinary while a marked linguistic form is rare, less common and irregular. Dressler, Wolfgang, Mayerthaler, Oswald and Wurzel (1987) discuss a number of diagnostics in relation to unmarked structures which they claim to be more natural. They say less marked structures: Are processed more easily in perception, give rise to fewer speech errors, are less likely to be affected by aphasia, are acquired earlier, occur more in child-directed speech, are cross-linguistically more prevalent, tend to be the dominant structures within languages, and are more likely to be reinforced and less likely to be eliminated in language change (pp. 13-14).

Fertig (2014) discusses the main characteristics of a marked structure saying that a marked structure could be: Indicated by a morphological marker, e.g. English plural –s, as opposed to the "unmarked" singular, semantically/functionally more specific (or more complex), that is, distributionally more restricted, inherently more difficult for humans to process or learn or produce, and irregular, abnormal, anomalous as opposed to the "unmarked" which are regular forms/ patterns (p. 5).

Unmarked structures are those which are easier to learn and they are frequently used in a language while the marked structures are difficult and infrequent in the terms of language use (Dressler, Wolfgang, Mayerthaler, Oswald and Wurzel 1987). A frequent linguistic item, in contrast, would be psychologically 'unmarked' and its likelihood of transfer is thus high.

The notion of markedness should be understood as a binary entity with at most two linguistic items which are in diametrical opposition; the two elements are referred to as unmarked' and/or 'marked'. The term 'unmarked' as opposed to 'marked' is used to refer to a linguistic entity whose distribution and/or syntagmatic structure and/or paradigmatic complexity is consistently distributed and simpler (Eckman 1997). A marked element is thus a linguistic feature or entity that is cross-linguistically rare while an unmarked linguistic element refers to the one, which is cross-linguistically frequent or largely distributed. Eckman (2004) refers to the latter privileged member of the opposition (between marked and unmarked) as having a wider distribution both within a given language and/or across languages (p.3). The unmarked entity is just identified as simpler, more basic, and more natural.

It should however be noted with Battistella (1990) that "[m]arkedness relations are not fixed, but rather depend on the language-internal evaluation of the terms of an opposition" (p.4). Battistella's point implies and suggests the idea of dynamicity in identifying an entity in relation to markedness.

Eckman (1977, 1991) suggested two hypotheses that are related to L2 phonology using the construct of typological markedness: The Markedness Differential Hypothesis (MDH) (Eckman 1977) and the Structural Conformity Hypothesis (SCH) (Eckman 1991). The Markedness Differential Hypothesis was formulated to reinforce the claims of Contrastive Analysis Hypothesis

(CAH), which accounted for L2 learning difficulty only on the basis of the differences that were observed between the Native Language (NL) and the Target Language (TL).

The Markedness Differential Hypothesis (MDH) took a completely different approach claiming that it was not enough to try to account for the L2 learning difficulty on the basis of the Native Language - Target Language differences. MDH postulates that typological markedness was the relevant aspect, which needed to be incorporated in order to fully account for the L2 learning difficulty. Eckman (1977) argued that "[w]ithin the areas of difference between the NL and TL, marked structures are more difficult than the corresponding unmarked structures" (p. 6). MDH shifted the basis of difficulty from the difference observed between the NL and TL to the relative degree of markedness.

The Markedness Differential Hypothesis (MDH) as initially proposed by Eckman (1977) has to do with universal markedness since it refers to the markedness relation's cross-linguistically. MDH looks at the markedness relations between two languages independently of individual linguistic system. The notion of markedness may be universal or language specific. Battistella (1990) argued that "[l]anguage–particular values are those assigned on the basis of the facts of an individual language system" (p.61).

Eckman (1977) proposed the MDH on the basis of his elaborated definition of the term markedness. The latter was defined by Eckman (1977) as "[a] phenomenon A in some language is more marked than B if the presence of A in a language implies the presence of B; but the presence of B does not imply the presence of A" (p. 320). Eckman (1977) stated the Markedness Differential Hypothesis in terms of these predictions:

(1) Those areas of the TL which differ from the native language and are more marked than the native language will be difficult;

(2) The relative degree of difficulty of the areas of the target language which are more marked than the native language will correspond to the relative degree of markedness;

(3) Those areas of the target language, which are different from the native language, but are not more marked than the native language, will not be difficult (p. 321).

The predictions (1) to (3) claim that the less commonly used/distributed linguistic entities in the TL which presents differences with the NL will be difficult to learn/acquire. The difficulty to acquire a specific structure of the TL can be attributed to its difference with the corresponding structure in the native language. Also, this learning difficulty can be attributed to the fact that it is less commonly used in the TL which implies that learners will have less opportunities to encounter such a structure in their natural speech and thus have less chance to use it in their interaction. The third prediction specifically shows that what matters the most is not the difference between the NL and the TL, but it is the relative degree of markedness. A linguistic entity from the TL may be different from the NL but if it is unmarked meaning more distributed, there is a high likelihood for the learner to encounter it and use it as frequently as possible and this frequency of use reduces the risk of learning difficulty to make it easier to learn or acquire.

The markedness effects on transfer in the linguistic subsystem of morphosyntax have indicated that L1 marked structures, that is, structures that are rare or less commonly used across the languages of the world do not usually transfer (Jarvis and Pavlenko, 2010: 187). This non-transferability is mostly observed in the case in which the corresponding structure in the TL is unmarked or very common (Jarvis and Pavlenko, 2010: 187).

Studies that addressed the issue of markedness, for instance, in phonology showed that sounds, which are characterized as common, are considered to be basic or unmarked. However, marked sounds or sound patterns are those that are less common. A number of studies such as those of Eckman 1977, 2004, Anderson 1987, Stockman and Pluur 1992, have shown that unmarked structures are easier and faster to acquire than marked ones. Eckman mentioned voiceless obstruents, oral vowels, and open syllables as instances of unmarked linguistic entities while voiced obstruents, nasalized vowels, and closed syllables were identified as instances of marked linguistic entities (p. 3).

Jin (2008) explored the difficulties L1 English speakers experience in acquiring Chinese word order. The study used the markedness theory, specifically the Markedness Differential Hypothesis (MDH) to formulate the predictions of the study. Learners were asked to judge the grammaticality of four categories of sentence types in Chinese of which reference was made to topic comment, pro-drop, locative inversion, and canonical SVO order. The findings of the study showed that English L1 learners experience a lot of difficulties in acquiring the topic–comment and pro-drop sentences in their L2 Chinese supporting thus the Markedness Differential Hypothesis which claims the typological markedness between English and Chinese as the conditioning factor.

These findings lend support to Hu's (1992) study in which two different groups of subjects were involved: One group was made up of L1 English speakers learning Chinese and the other L1 Chinese speakers learning English. His results showed that L1 English speakers learning Chinese as an L2 experience a lot of difficulties using topic-comment construction as cohesive device. Hu investigated L1 Chinese learners with reference to the use of cohesive devices in their

writing. The study further showed that Chinese speakers learning English faced difficulties in using English articles and pronouns.

It was found that the more universal a linguistic structure, item, pattern, or feature is the most likely it can transfer across languages. Conversely language-specific structures are less likely to transfer. This observation also accounts for the asymmetrical characteristic of transfer across languages; i.e. it sheds light on why some structures easily transfer from a language A to a language B and why the direction of transfer may be unidrectional.

The relevant prediction of the MDH states that "[l]inguistic representation in the TL that is both different and more marked than corresponding structures in the NL will cause learning difficulty' (p.9). This prediction raises a number of concerns, which need to be addressed. One concern with this prediction is to determine how objective one can measure learning difficulty. The unsatisfactory explanation, which was provided in relation to this concern, was that the degree of learning difficulty could be determined from the perspective of error occurrence. It was observed that the more learners made errors in producing a particular type of structure the more difficult to learn the structure was estimated to be. This explanation is not satisfactory since learner errors were identified as not being the most reliable measure of learning difficulty (Schachter 1974, Eckman 1977). Learner errors should not be readily associated to learning difficulties, because errors could also reveal the wrong hypothesis the learner has formulated on the structure of a TL, without reflecting any difficulty. Once a learner's testing of the hypothesis shows that it was erroneous, s/he can formulate new hypotheses which may match the linguistic realities of the TL (Krashen 1982).

Another documented weakness of the MDH is that it can make predictions only when the marked and the unmarked structures present differences (Lin 2008), however, in the

absence of any differences, it was not possible to formulate any predictions (Lin 2008). In the context of the current thesis MDH partially meets the aim of the study. However, the predictions of this research are bigger than those assumed in the MDH. The predictions of this study take into consideration both the cases of differences and similarities of the targeted morphosyntactic structures.

2.2.2 Cognitive, Attentional, and Developmental Factors

Jarvis and Pavlenko (2010) postulate that "[c]ognitive and developmental constraints refer to the specific level of cognition and conceptual maturity at the time of language acquisition and use, the natural and universal principles of cognitive and linguistic development that govern how a person processes and stores new knowledge about language, and the special cognitive abilities that individuals possess to acquire a language" (p.190). Cognitive and developmental constraints are concerned with the level of language use one displays in social interaction, his/her level of cognitive language process and language storage. "Cognitive" here refers to the ability to acquire and process a linguistic system. Cognitive development would be illustrated with the case of learners who are slow in the process of language learning and those who need extra work after class to meet the expectation of the language class. This aspect of language is related to biological and physiological endowment.

In this section, four main factors are discussed with specific attention to transfer. They are: the level of cognitive maturity, developmental and universal processes of language acquisition, cognitive language learning abilities, attention to and awareness of language.

2.2.2.1 The Level of Cognitive Maturity

Cognitive maturity was identified in a number of studies (e.g. Cenoz 2002, Weist 2002) as a relevant factor which may determine transfer in language acquisition. Cognitive reasons have been

mentioned as the main cause of differences between individuals in terms of learner performance (Cenoz 2002). It was attested that older learners were semantically better and more precise than younger learners in story telling: the frog story (Cenoz 2002). Cenoz (2002) found in his study that adult learners (16.2 as age mean) have linguistic advantages in telling stories when compared to younger learners (13.1 as age mean). Those linguistic advantages were partially attributed to the attested cognitive maturity that adult learners demonstrated.

Jarvis and Pavlenko (2010) argue that "[p]eople who are at different levels of cognitive maturity simply do not produce the same patterns of words or structure, and thus any transfer patterns they show will naturally differ qualitatively" (p. 191). It should logically be expected of more cognitively mature learners to produce utterances with more qualitative patterns than the less mature or the immature learners.

Weist (2002) found in his study related to language comprehension that L2 learners' ability to comprehend concepts was improved as a result of cognitive maturity. The latter also improved their ability to "[…] abstract important conceptual, lexico-semantic, and morphosyntactic information from the new words they encounter" (Jarvis and Pavlenko, 2010: 191).

The question to raise would be to determine whether cognitive maturity has any positive implication with respect to transfer occurrence. Do more cognitively mature learners tap into linguistic knowledge from their previously acquired languages more than less cognitively mature learners? Are there types of transfer that could be correlated to one of the aforementioned categories? Answers to these kinds of questions could help to shape our understanding of cognitive maturity in relation to transfer.

2.2.2.2 Attention to and Awareness of Language

Like age, attention and linguistic awareness play an important role in the acquisition of an additional language. Attention can be related to what is being provided as input in the process of an additional language, and it can relate what has been learned in a previous linguistic system to what is being presented in the TL as input. Attention defined in terms of Posner (1992) as paraphrased by Schmidt (1995) is understood as "[…] three separate, but interrelated networks: alertness, orientation, and detection" (p. 9).

The three aforementioned components of attention are here correlated to the process of language transfer in the context of the acquisition of an additional language beyond the L2. This correlation aims to show the role attention plays in the process of the acquisition of a language and mostly its impact in the process of language transfer.

Alertness is defined by Schmidt (1995) as "[representing] a general readiness to deal with incoming stimuli" (p. 9). The encounter by a learner of a morphosyntactic structure from the TL may alert the brain to readily establish a morphosyntactic match with a previously acquired structure in previous language(s). The new target language structure acts as a stimulus that activates the previous morphosyntactic features/structures of one of the already acquired linguistic system.

Orientation is defined by Schmidt (1995) as referring "[…] to a specific aligning of attention (e.g. to language form or to meaning" (pp. 19-20). Considering attention in relation with transfer, the latter is established through alignment of the morphosyntactic features/structures of a previous language with that of the TL. This alignment may establish a true similarity that exists between the two languages, or a perceived similarity which may or may not obtain in terms of

transfer. This process is called *detection* which is defined by Schmidt (1995) as "[…] the cognitive registration of sensory stimuli" (p. 20).

Once this match or the perceived match is made available in the cognitive system of the learner, it may result in either positive or negative transfer into the TL. Therefore, consciousness may be an important factor in the process of language transfer, even if transfer may also be unconscious at other times. Consciousness as argued by Velmans (1991) requires focal-attentive processing (Schmidt, 1995: 2). This focal-attentive processing is sometimes observed in the process of language transfer. This is done in a way that the mental representation relates one morphosyntactic form to the other in the languages involved to result in a hypothesis that supports the similarity between the two morphosyntactic forms in both languages.

This morphosyntactic match can sometimes be subjective. However, once the learner notices this morphosyntactic similarities between structures of two languages transfer becomes probable. This could be supported by the 'noticing hypothesis' by Schmidt which states "[w]hat learners notice in input is what becomes intake for learning" (p. 20). If a learner notices the form and function of a linguistic structure in the TL and establishes a morphosyntactic proximity with the structure of an already acquired linguistic system, transfer becomes possible and the positive transfer in this case plays the most facilitative role in the acquisition of an L3.

Another important factor that conditions transfer is awareness. Awareness of the existence of a linguistic pattern between two morphosyntactic forms from two different languages may result in transfer and, thus, condition the learning process. Studies such as that of Hartman, Knopman, and Nissen (1989) have documented the importance of awareness in language learning in that subjects who were aware of the patterns performed much better than these who were unaware (Schmidt, 1995: 21-22).

Curran and Kecle (1994) also documented the importance of awareness in the process of language learning which I extend to the process of language transfer in the acquisition of an additional language. Curran and Kecle noticed that "[s]ubjects who expressed less awareness showed less learning than those who expressed more awareness […]" (p. 192). Likewise, transfer is assumed to be triggered when the learner is more aware of the morphosyntactic structure of both the previous language and the TL. Therefore, subjects who are less aware of the structures of both languages are likely to transfer less or to negatively transfer on the basis of the perceived typology. Transfer becomes more evident when a learner is aware of the similarities that exists between two morphosyntactic forms of the two languages.

Linguistic awareness is the variable, which is strongly related to metalinguistic knowledge of the previously learned languages. It is knowledge that a learner has acquired through formal instruction/education about language. Linguistic awareness is raised as a result of paying attention to a certain linguistic pattern in the TL. This awareness encompasses structural, semantic, morphological as well as pragmatic features of language (Mattingly 1972).

Linguistic awareness of a language alerts a learner to specific linguistic features of the language, which s/he can use to contrast with the linguistic features of the TL (Anderson 1983). Mattingly (1979) calls linguistic awareness "[…] a specially cultivated meta-linguistic consciousness of certain aspects of primary linguistic activity" (p. 135) whereby speaking and listening are referred to as primary linguistic activities. The learner refers to her/his meta-linguistic knowledge of a previously acquired language that s/he contrasts with the target language in order to identify the similarities and differences which exist between the two systems. The similarities may be identified at the lexical level, e.g. between French and English in the case of 'table' «table» in French which is pronounced as [teibəl] in English. Lexical similarity may trigger positive

transfer in English as the TL. However, a case of French-English false cognate such as 'sensible' in French which means 'sensitive' in English, may be transferred to also mean 'sensible' in English, and thus result in a negative transfer. It is the outcome of this contrast which sheds light on the learning hypotheses of the learner; these hypotheses may result in either positive or negative transfer in L3 production.

The illustrations provided above show that learners make predictions in form of transfers, which are stated in terms of principles. Such predictions can be looked at as constraints on transfers. Anderson (1983) for instance, states in his 'Transfer to Somewhere Principle' that learners make interlingual identification by consistently transferring a grammatical form in interlanguage only when the grammatical form presents typological similarities in both languages. For instance, to talk about a physical description in both French and English we use the 'auxiliary verb to be + a descriptive adjective' such a structural similarity may generate positive transfer. If a learner is aware of the structure in the phrase 'il est beau' and identifies 'il' as the personal pronoun subject, 'est' as the auxiliary verb, and 'beau' as the descriptive adjective, s/he can establish the structural similarity in English and produce the same structural form in English with the aid of positive transfer; such a phrase would be 'he is handsome' in English.

Kellerman (1995) suggested the 'Transfer to Nowhere Principle', in which he advocates that cross-linguistic influence can still be observed even when there are no obvious similarities between the two languages. This is what Kellerman (1983) called psychotypology which has been discussed in detail in section 2.2.1 point 1. The Transfer to Nowhere Principle may be illustrated when learners assume that similarities exist between two different morphosyntactic structures which in reality present no proximity at all. This implies the notion of perceived similarity which results in negative transfer. For instance, the structural similarity between the

passé composé in French (*auxiliaire 'avoir'* + *participe passé*) and the present perfect tense in English (auxiliary 'have' + the past participle) may result in a negative transfer in terms of the function of the present perfect tense in English. Since French speakers use the passé composé in French to talk about past completed event, they may use the form 'have + past participle' to talk about past completed events in English which will result in negative transfer in English.

Linguistic awareness of a bilingual speaker learning an additional language is generally richer than that of a monolingual speaker who is learning a L2 (Mora 2001). Metalinguistic knowledge increases during the course of formal learning (Mora 2001) and it may be proportional to the number of additional languages a learner acquires in course of time (Mora 2001). The more languages one adds, the richer her/his metalinguistic knowledge gets and the more her/his linguistic awareness expands (Cook 1995). The more linguistic awareness expands, the more the latter is amenable to transfer. The expansion of linguistic awareness results in cumulative language experience and knowledge which is discussed in the following section.

2.2.3 Factors related to Cumulative Language Experience and Knowledge Age

Age as a variable in cross-linguistic transfer plays a relatively important role (Garcia Mayo and Garcia Lecumberri 2003, Singleton 2003). Studies on cognitive maturation are important because, theoretically, they address questions on the way children learn a second language as compared to adults (Garcia Mayo and Garcia Lecumberri, 2003: vi). Garcia Mayo and Garcia Lecumberri (2003) circumscribe the relevance of cognitive maturation through the effort to answer questions such as "[i]s there still room for an innate faculty to continue its work in adulthood?" Singleton (2003) argues in the same line claiming that questions on the age factor in language development keeps on being at the core of the discussion in the field because, theoretically, "[t]here is an interaction between the notion of maturational constraints on language acquisition and the idea

that language development is underpinned by special bioprogramming" (p.3). This evokes the notion of a critical/sensitive period (Snow and Hoefnagel-Höhle 1978, Mayberry and Kazmi 2002) which conditions the effectiveness of the learning of an additional language to the proficiency level of a native speaker of the TL.

Garcia Mayo and Garcia Lecumberri (2003) further show the importance of cognitive maturation in second or third language acquisition through the question about the age at which children should start attending formal education. An empirical answer to this question may help to show the relationship between a more developed previous linguistic system and transfer into the TL. That is, the aforementioned question needs an empirical answer in order to determine whether a there is a direct correlation between the frequency of transfer into the TL and the complexity of a previous linguistic system. Furthermore, such research could assess the role of the maturational state of unfolding cognitive abilities.

Singleton (2003) raises the point of the optimal starting age for an additional language learning beyond L1 in school setting. The existing literature claims that "[y]ounger L2 beginners have an advantage over older beginners" (Singleton, 2003: 3). It is documented that exposure to a subsequent language at a younger age results in a higher level of proficiency as compared to late exposure during adolescence age or adulthood (Singleton, 2003: 3).

Three common views meet the agreement of different scholars of SLA on the interpretation of the critical/sensitive period which could help formulate predictions in terms of transfer. Singleton (2003) formulates them as follows: After a certain maturational point, the L2 learner is no longer capable of attaining native-like levels of proficiency, after a certain maturational point, successful L2 requires markedly more effort than before this point, and after a

certain maturational point, L2 learning is no longer subserved by the same mechanisms [ ] that subserve child language acquisition (p. 3).

The first point implies that age constrains the acquisition of any additional language beyond the L1. When an additional language that is acquired beyond the critical period which varies around age three (Wiesel and Hubel 1963, Lenneberg 1967, Oyama 1976, Tahta, Wood, and Loewenthal 1981, Davies 2003), the TL is not mastered at the proficiency level of native speakers. This entails that the learner can attain the advanced proficiency level and can be fluent in the language, but s/he will still fail to perform at the level of a native speaker. This failure could be explained through a certain level of dependency on the previously acquired linguistic system which may interact with the TL system (Tahta, Wood, and Loewenthal 1981).

The second point conditions the learning of an additional language to more effort for people who are in their adolescence or adult learners than children who are younger than three years old (Tahta, Wood, and Loewenthal 1981). This point is of seminal importance for language researchers and practitioners because it implies that adult learners in a formal learning setting need more practice than younger learners (Penfield and Roberts 1959). However, referring this point to transfer, learners need to conjugate a lot of efforts in order to stay away from the previously acquired linguistic system when speaking the TL.

The third point admits the differences in terms of learning between a child and an adult which are attributed to the availability/non-availability of the UG. Such a difference should have implications in terms of the nature of the classroom materials used for adolescent or adult learner groups, the teaching techniques to implement, and the needs of the learners, to name but a few. Singleton (2003) argues that "[t]he notion of a critical period inherently carries with it a claim regarding a marked qualitative charge in learning capacity at a particular stage of maturation, all

interpretations of the CPH predict that at the maturational stage in question a sharp decline in L2 learning potential will be observable (which is of its nature different from the more gradual age-related declines in the organism's general learning capacity)" (p. 8). This decline may result in frequent linguistic transfer from previous languages. In this sense, we expect older learners (i.e. learners who are exposed to the TL at an age older than 11) to depend more on their previous linguistic system than younger learners. This viewpoint was supported by Penfield and Roberts (1959) who claim that "when languages are taken up for the first time in the second decade of life, it is difficult […] to achieve a good result […] because it is unphysiological" (p. 255).

The critical age which defines the starting point for an effective learning of an additional language is still controversial. Some researchers set the upper limit age at which learner can attain the native speaker proficiency level in the TL at puberty. Some of them set this age in relation to a specific domain of the TL. Scovel (1988), for instance, claims that learners who are exposed to an L2 at an age after 12 years "cannot ever pass themselves off as native speakers phonologically" (p. 185). Long (1990), however, argues that "[t]he sine qua non for the acquisition of the L2 morphology and syntax to native levels is exposure to the L2 before age 15" (p. 274). In the two aforementioned studies, it is noticed that the upmost age for the critical/sensitive period varies depending on the linguistic domain that is being targeted. This implies that learners who are exposed to the TL at an age which falls within the sensitive window of acquisition which ranges between birth and 11 years olds (Long 1990) are expected to produce the TL with less transfer because they are less dependent on any previous linguistic system. However, learners who are exposed to the TL at a post-pubertal age tend to depend more on the previous languages and this dependence results in more transfer in the TL. An example of such a case is observed in the

phonology of the TL. Most people who have acquired the TL at an adult age tend to make phonetic-phonological transfer in producing the speech sounds of the TL (Long 1990).

A number of studies which examined the effects of age in the acquisition of an additional language such as English provided challenging findings. They showed that adult learners were able to attain a native speaker proficiency in grammaticality-judgment task (Birdsong 1992), some attained "[…] the levels of performance close to native norms across a range of areas (Ioup et al. 1994), while others were able to attain English pronunciation ratings with the same range as those attained by native-speaker control" (Bongaerts et al. 1995, Singleton 2003).

Lenneberg (1967) argued that "[a]utomatic acquisition from mere exposure to a given language seems to disappear [after puberty], and foreign languages have to be taught and learned through a conscious and labored efforts" (p. 176). Lenneberg (1967) showed that an effective acquisition of an L2 is possible through mere exposure when the learner is within the critical window of language acquisition, and that the process becomes tedious when the subject is in post-pubertal age. This viewpoint is reinforced by Hyltenstam and Abrahamsson (2000) who support Lenneberg (1967) by claiming that "[y]ounger learners acquire second languages automatically from mere exposure, while older learners have to make conscious and labored efforts" (p.152). Long (1990) found that there is a straightforward positive correlation between age and failure to attain native-like proficiency in the TL. These findings are supported by studies that have tested the role of critical period in the acquisition of an additional language.

This conscious and labored efforts sometimes consist in comparing the previous system with the target language and establishing some similarities which may or may not meet the

linguistic system of the TL. This may result in negative transfers which sometimes characterize the speech production of the learners.

Cognitive maturation is advocated by the proponents of the Universal Grammar (UG) tradition. Some scholars (e.g. Schachter 1988, Bley-Vroman 1989, Cook and Newson 1996, Dekeyser 2000, Singleton 2003) who believe in the UG account claim that children and adults have different mechanisms of language acquisition at their disposal (Singleton, 2003: 11). For the proponents of the UG, some of them advocate the no access hypothesis (Schachter 1988, Bley-Vroman 1989, Cook and Newson 1996) since learners do not have access to the UG after post-pubertal age. This position implies that transfer is likely to occur with learners who have been exposed to a subsequent language in the post-pubertal age. Inversely, learners who are exposed to the TL at a younger age, between birth and 11 years of age are predicted to have access to the UG, and less or no access at all to the other linguistic system which results in no transfer at all.

Scholars like Dekeyser (2000) argue that maturational effects and constraints pertain only to implicit language-learning mechanisms as opposed to explicit learning. Explicit as opposed to implicit language learning are two other variables that are of great interest in this study. They are two additional factors that I will test and control in the interview, acceptability judgment task, and the written elicitation task that I will run in this study. It should however be noted that some scholars such as Singleton (2003) claim that "[t]he case for fundamental differences between children and adults in respect of the language-acquiring/processing mechanisms that are available to them is not by any means proven" (p. 13). He admits the differences that exist between child and adult's cognitive system and brain, but further claims that "these differences have yet to be shown to be specifically related to language and/ or to have a specific bearing on language learning capacity" (p.13).

I do not support the claim by Singleton (2003) who seems to mix up the substance of the Critical Period Hypothesis (CPH) with language-learning capacity. The critical window for language learning has more to do with proficiency level that a non-native speaker of a TL can actually attain if s/he is exposed to the language at a certain age. This does not deny him/her the capacity to learn an additional language. The learner will learn the language, but after a certain age; the mere exposure to the TL does not allow him/her to be as proficient as a native speaker of the target language, since the learner has missed the exposure to the TL during the critical window of effective additional language learning. This point is supported in Krashen et al. (1979) in which they claim in terms of language exposure that "in naturalistic exposure, generally speaking the earlier exposure to the TL begins the better (see e.g. Oyama 1976, 1978, Patkowski 1980, Johnson and Newport 1989, Hyltenstam 1992) although in the initial stage of learning older beginners tend to outperform the juniors—at least in some respects" (Singleton, 2003: 14).

In the context of this study, in which learners of English are exposed to it at a post-pubertal age, specifically at an adult age, I expect them to tap into their L1 and L2 when acquiring English. I believe that transfer is inevitable in this case since learners have been exposed to the TL at an adult age and have access to both previously acquired languages.

It is equally observed, with those scholars who advocate the Universal Grammar that child second language acquisition is triggered by and is based upon Universal Grammar (Cook 2009, Flynn 2009). Younger learners with little metalinguistic knowledge and little exposure to formal learning are hardly able to consciously draw from their previously acquired languages and to intentionally use transfer in their subsequent language production (Cook 2009). As such, any previously acquired language plays minor role in the second language acquisition process. It

should be noted that transfer may, in the case of younger learners occur unintentionally in the process of the acquisition of an additional language.

As an instance, the findings of the study by Cenoz, Hufeisen, and Jessner (2001) on cross-linguistic influences of Basque and Spanish on English as a L3 showed that younger learners (7 years) were less influenced by cross-linguistic factors than older learners (14 years). Younger learners are a category of language learners who have access to the UG and constantly rely on the TL input, which feeds their learning process of L3 (Selinker and Lakshmanan 1993). Therefore, their native language plays a minor role in their L3 acquisition; the likelihood of transfer from the L1 is thus very limited.

The study by Cenoz (2001) comparing children of different levels ranging from 2, 6, to 9 grade confirms this observation. In fact, the study found that older children (14 years) were transferring the most and this transfer was attributed to their metalinguistic awareness. Less transfer was observed with younger learners (7 years old) confirming the observation that this category of learners is neither able nor metalinguistically mature enough to draw from their previous languages and apply the previous knowledge in their L3 production as a filling-gap learning strategy.

However, recent studies that have investigated the role of experience in the acquisition of a subsequent language have revealed new tendencies. Gass (1997), Dekeyser (2000), Ellis (2002), Yang (2002), O'Grady (2008), Montrul (2008, 2010), and Cuza and Frank (2015) to name but a few, have found that linguistic experience and onset age of bilingualism play a significant role in the acquisition of the L2 morphosyntactic patterns when the latter are absent in the morphosyntactic system of the L1.

Cuza and Frank (2015) have investigated the knowledge L2 English speakers learning Spanish have of double complementizer questions (DCQ), that is, the embedded wh-questions introduced by non-ask/wonder verbs. Demonte and Fernández-Soriano (2009) offer an interesting illustration of the double complementizer questions (DCQ) in Spanish as illustrated in (1).

(1) Spanish

Preguntaste [**que quién** había llegado a las tres de la mañana].
you. asked that who had arrived at the three of the morning
'You asked who had arrived at 3 o'clock in the morning.'

Cuza and Frank (2015) compared the L2 learners' knowledge with previous data from intermediate and advanced heritage speakers of Spanish. Adult L2 learners were exposed to intensive Spanish learning while heritage speakers were exposed to Spanish since birth. The authors considered age of onset of bilingualism and language experience as main variables.

Cuza and Frank (2015) aimed to answer the following research questions in their study:

(1) Do advanced L2 learners of Spanish acquire the syntactic and semantic constraints regulating the production and interpretation of double complementizer questions?

(2) Will L2 learners of Spanish show similar or divergent representation of DCQ structures vis-à-vis Spanish heritage speakers? (Cuza and Frank, 2015: 5).

Cuza and Frank (2015) argue that "[g]reat exposure to the minority language during the age of primary language development might give heritage speakers an advantage over post-

pubescent L2 learners regarding syntactic ambiguity, comprehension, language activation, and overall linguistic processing" (Ullman 1999, Ellis 2002, Diessel and Tomassello 2005, Diessel 2007, Cuza and Frank, 2015: 5).

Cuza and Frank (2015) proposed that "[i]f L2 learners show similar patterns of difficulties as the heritage speakers, their degree of difficulties would not be attributed to age-related constraints" (p. 23).

The findings of the study show significant differences between the L2 learners and the heritage speakers. The results favour age-related constraints to native-like attainment (Cuza and Frank, 2015: 23). The findings support the view that heritage speakers benefit from their earlier exposure to the TL when compared to L2 adult learners (Cuza and Frank, 2015: 23).

2.2.3.1 Length, Frequency, and Intensity of Language Exposure

The point by Cuza and frank (2015) discussed above indicate that the length of exposure to a native language when acquiring a TL might be an important variable in language learning. The amount of exposure time to the TL has a positive influence on the use of the language. Both the exposure to the TL and use directly influence a speaker's proficiency in the TL.

It is however the use of the TL in its native setting which matters the most (Maneva, 2004) Passive language exposure as opposed to active language use does not act in favor of the TL production (Maneva 2004).

Longer exposure to the TL has a positive effect; this effect may, however, depend on the nature of the exposure. A learner with longer exposure to aural-oral mode of communication in the TL will easily develop both listening and speaking skills (McKenzie-Brown 2006). However, reading and writing skills are literacy-based and require exposure through an instructional mode in a formal language learning setting (McKenzie-Brown 2006)

Literature on cross-linguistic influences (e.g. Tremblay 2006) claims that the effects of age as opposed to L2 exposure has minor influence when compared to what the influence of an L1 transfer causes in a TL. Along the same line, it is documented that the influence of exposure in the acquisition of additional language is similar in L2 as in L3 (Tremblay 2006). Longer exposure of a learner to the target language and the frequent use of the target language reduce the likelihood of switching to the previously acquired linguistic system(s). This implies that the positive effects of longer exposure to and frequent use of the TL inhibit the tendency to transfer linguistic materials.

2.2.3.2 General Level of Proficiency

Proficiency is one of the most important learner-based variables, which interact with the acquisition process of a third language. The degree of proficiency, either high or low, may determine the likelihood of transfer from one code to another (Poulisse and Bongaerts 1994). Literature on cross-linguistic influence agrees that the likelihood of transfer is very high when a learner has a low level of proficiency in the TL (Odlin 1989, Poulisse and Bongaerts 1994, among others). The probability of linguistic interaction between a previously acquired language and an additional one is high when the acquisition of the latter is still shaky and the system not fully mastered. Ringbom (1987) said the "transfer load" at an earlier stage of a second language acquisition is prominent. At this stage, the L1 and any other previously acquired language tend to trigger the occurrence of cross-linguistic influence in speech production. In essence cross-linguistic influence is prominent when a learner is not (yet) proficient in the TL (Ringbom 1987).

Inversely, higher mastery of a TL linguistic system inhibits transfer (Arbona and Chireac 2014). Obviously, transfer is used by the learner as a learning and productive strategy in order to fill either a lexical or syntactic gap in the TL (Fuller 1999, Ringbom 1986). This fill-in-

gap strategy is regarded as a result of incomplete learning; it is also considered as sign of linguistic paucity in the learning process of an additional language (Fuller, 1999: 558).

Poulisse and Bongaerts (1994) explain the correlation between low proficiency in the additional language (L2) and transfer as the result of a high activation of L1 morphemes during the processing of the additional language (L2). The high activation of L1 morphemes is the result of their high frequency of use and recency and therefore they are easily and readily selected in the production of the TL (Poulisse and Bongaerts 1994)

Odlin (1989) established a correlation between low proficiency in TL and negative transfer. Shanon (1991) claims that language transfer, particularly lexical borrowings which are not morpho-syntactically adapted into the linguistic system of the TL, often occurs from the most recently acquired language which acts as the source language. Yet when a multilingual learner whose L1 is typologically closer to the TL than the most recently acquired language is, it is the most similar language to the TL which acts as the source language of transfer (Shanon 1991).

2.2.4 Factors related to Language Use

Experienced language learners may be able to freely switch between language modes. Grosjean (2001) defines language mode as "[t]he state of activation of the bilingual's languages and language processing mechanisms at a given point in time" (p. 2). Grosjean (2001) represents language mode on an axial continuum, which ranges from monolingual language mode to bilingual language mode to depict the degree of activation of each language in the process of speech production (p. 3). The matrix language is totally activated, as it is the language that dictates its morphosyntactic frame on the language processing. Its full activation varies from the monolingual mode to the bilingual mode. It also ranges from the lexical, semantic, and pragmatic, through the morphosyntactic aspects of the language. The embedded language, however, is weakly activated

at the monolingual mode and its activation can be almost total at the end of the continuum, within the bilingual language mode area.

Figure (1)
Language mode continuum

Monolingual				Bilingual
Mode				Mode

The green color represents the matrix language and its higher activation levels, while the red color depicts the weaker activation levels (which is gradient with light red being weaker than the dark red) of the embedded language. The full activation of the Matrix Language in the monolingual mode inhibits the speaker/learner from switching between codes (Grosjean 1999). Yet that does not imply that the embedded language is not activated at all. Rather, the initially low level of activation of the embedded language gradually increases as the speaker moves away from the monolingual towards the bilingual mode. This move results in the transfer of linguistic items from the embedded language to the Matrix language (Grosjean 1998). It is only when the embedded language is almost fully activated, which occurs only in a bilingual mode, that language contact phenomena such as code switching, and lexical borrowing are observed (Grosjean 2001).

Linguistic transfer from the L1 is not observed in the TL speech production of a trilingual learner with low TL proficiency who is in a monolingual mode; however, unconscious L2 transfers may be observed in the production of L3 (De Angelis and Selinker 2001, Ringbom 2001). The authors attribute this effect to the blocking effects of the L2 linguistic system. William and Hammarberg (1998), Fuller (1999), and Hammarberg (2001) observed in their respective studies that the native language (L1) is more easily deactivated than the L2 in the production of an

L3 when a trilingual learner is in a monolingual mode. Evidence of the observation comes from Fuller (1999) in whose study a native Spanish speaking learner who also speaks German as an L2 and who is learning English as an additional language demonstrates similar linguistic behavior in that the L1 system was deactivated. Lexical transfer from German was noticed in her English speech production while transfer from her native Spanish language was less frequently observed.

Selinker and Baumgartner-Cohen (1995) identify the negative transfer from L2 to L3 as the "talk foreign mode" (p. 122). This type of negative transfer affects only short function words. Dewaele (1998) claims that L2 is the most attested source of transfer in the L3 speech production. Research on cross-linguistic influence attributes the observation of unintentional negative transfer from the L2 to performance errors rather than to a conscious strategy (De Bot 1992, Poulisse and Bongaerts 1994, Roelof 1998, Green 1998).

Findings of different studies inform that several variables can interact in the same L3 speech production. In such a linguistic competition, some variables dominate in their impact over others. For instance, and as previously alluded to (see chapter II, section 2.3.3), Jarvis and Odlin (2000) found that language typology prevails over L2 status. This means that cross-linguistic influence will be dominant between two typologically similar languages regardless of their status.

2.2.5 Educational and Socio-Cultural Background

Every language learning process takes place in a socio-cultural setting which can influence the language acquisition process and trigger transfer into the L3 production. For instance, for a learner of English who is exposed to the variety of English that is spoken in Canada whereby there is Canadian raising of vowels (Joos 1942, Harris 1960, Chambers 1964, Pare 2014), such a sociolinguistic variable may be acquired and later be produced in the speech production of the learner. That is, s/he will be speaking with the influence of Canadian vowel raising. Canadian

raising is when, for instance, diphthongs such as /ai/ and au/ are realized as [ʌi] and [ʌu] before voiceless consonants as illustrated in (2).

(2) English

Canadian raising

/taitl/ → [tʌitl] → [tʌiɾl] (Chomsky 1964, Pater 2014).

Here, the /a/ of the diphthong is raised to [ʌ] resulting in Canadian raising. A learner who has been exposed to the variety of Canadian English may in the future be producing the diphthong /ai/ as [ʌi] and /au/ as [ʌu].

This aforementioned sociolinguistic variable may be acquired in an educational setting such as a school in Canada. Such influence implies the notion of educational background. Educational background is one of the variables that has positive influence on L3 production (Odlin 1989). Exposure to formal learning is the major source of educational influence. It intersects with other variables such as age and awareness at different developmental stages. Education develops language literacy and the latter improves skills such as reading and writing which can positively impact the acquisition of an additional third language. Some language skills that have been developed at the school setting and good habits such as reading and writing may be transferred in the acquisition process of an additional language.

Murphy (2003) quoting Odlin (1989) says that "[t]he facilitative effects of high L1 literacy may be the result of transfer-of-training as much as, if not more than, language transfers" (p. 12). The claim here is that learners tend to transfer their L1 learning strategies and experience in learning an additional language at a rate that matches the amount of language transfer that is actually observed under the influence of this variable. Educational background is like a forest, which hides trees. In a better way, it could be referred to as an umbrella variable which encompasses several relevant linguistic values which are likely to trigger positive transfer in an

L3. An instance of such values are the cases of literacy and linguistic awareness that are also the result of formal language learning exposure. Generally, the cognitive development achieved through formal learning is a physiological predisposition, which is very likely to facilitate learning of an L3.

In sum, the aforementioned factors are identified in the literature as the variables that influence the acquisition of an additional language. One or more factors may impact the quality of the acquisition of an L3. They may play a primary or secondary role in the process. For instance, the L2 status factor may be identified as the primary variable that has impacted and triggered transfer while the order of language acquisition may be the secondary factor. Likewise, typological proximity may be the primary factor that has triggered transfer in the acquisition of an additional language while language proficiency may play a secondary role in favoring the acquisition of the additional target language. In the following section, I discuss transfer and the morphosyntactic models that account for the acquisition of an additional language. The three models respectively highlight the importance and role of the cumulative knowledge, the role of the L2 factor, and the importance of typological primacy in the acquisition of an L3.

2.3 Transfer and Models in Third (L3) Language Acquisition

As outline in paragraph 2.1 and 2.2 transfer in L3 acquisition varies depending on the domain and the two languages which are identified as potential sources for transfer: The L1 or the L2. For the lexical level, it is documented that transfer may come from either one of the previously acquired languages (Bartelt 1989, Cenoz 2001). However, in terms of morphosyntactic transfer, the research is much less conclusive.

In order to address the role of morphosyntactic transfer from the L1 and/or the L2 in L3 acquisition/learning, the current dissertation tests the claims of Cumulative Enhancement

Model (CEM) by Flynn, Foley, and Vinnitskaya (2004), the 'L2 Status Factor Model' by Bardel and Falk (2007), and the Typological Primacy Model (TPM) by Rothman (2010, 2011, 2013, 2014). All these models are applicable in the context of multilingual language acquisition and they are related to the acquisition of any language beyond the second one. These three models agree upon the influence of, at least, one previously acquired language. They, however, depart from one another by the way they formulate their predictions.

2.3.1 Cumulative Enhancement Model (CEM)

The CEM (Flynn, Foley, and Vinnitskaya 2004) proposes that language learners rely on the cumulated linguistic knowledge of both their L1 and L2 when acquiring an additional language. This claim identifies language acquisition in a multilingual context as a cumulative process. Rothman (2014) commenting on the CEM argues that "[l]anguage acquisition is viewed throughout the lifespan as a collective process whereby experience with any prior language acquisition can facilitate subsequent language acquisition precisely because the mind avoids repetition" (p.5). Hence, according to the CEM model, a multilingual learner's reliance on the previously acquired linguistic knowledge is restricted to only transfer which has a noticeably rewarding impact in the learning process of the subsequent language. In other ways, the CEM denies the occurrence non-facilitative transfer as a possible option in the L3-acquisition (Rothman, 2014: 5).

Supporting and reinforcing the claim of the CEM, Flynn et al. (2004) ascertain that "[l]anguage acquisition has a scaffolding effect" (Rothman, 2010: 110). This means the potential role of any previously acquired linguistic knowledge is defined as follows: It can either enhance the acquisition of an additional language or remain neutral.

The CEM favors a positive contribution of previously acquired languages as it recognizes and differentiates the substantial contribution of both the L1 and the L2 in the learning/acquisition of the L3; i.e. the model's focus is on specific language learning resources that each previously acquired/learned language makes available to the learner. The CEM claims that the developmental acquisition patterns are inherently not redundant (Rothman, 2014: 5). This explains why the brain refers to both the previously acquired linguistic systems.

Flynn et al. (2004) affirm the impact of both L1 and L2 in the L3 learning/acquisition process while at the same time attesting that L2 contribution only supersedes that of L1 when the syntactic features which are in play are not available in the L1 linguistic system.

Flynn et al.'s (2004) model is based on their findings from Kazakh, Russian, and English as L1, L2, and L3 respectively of which Kazakh was postulated the default language for the subsequent acquisition of Russian and English. Typological difference was postulated as the only feature which determined the observed development patterns. The study investigated the production of restrictive relative clauses by the L1 (Kazakh)/L2 (Russian)/L3 (English) speakers and it circumscribed the directionality of the head complementiser clause (CP) in the languages involved.

The CEM made the following predictions: L1 is the privileged source of transfer and typological differences are the only factor that influences developmental patterns. Hence, the acquisition of English as L3 by L1 speakers of Kazakh should resemble the acquisition of English as L2 by L1 speakers of Japanese given that Kazakh and Japanese are both head-final languages.

Flynn et al. (2004) further hypothesized that L1 Kazakh speakers who have Russian as their L2 and are subsequently acquiring English as their L3 should present similar acquisition

patterns to L1 Russian speakers who are acquiring English as their L2 because—like the Russian learners who are acquiring English as their L2—the Kazakh learners are also acquiring a grammatical system with a new CP.

The findings of Flynn et al. (2004) revealed that previous L2 CP development could positively influence the development of CP structure in the acquisition of an additional language. They further concluded that the linguistic knowledge from both L1 and L2 could be used in the acquisition of an additional language.

However, the insistence of the CEM on the sole beneficial effects of previous linguistic knowledge in the acquisition of an additional language implies a denial of negative transfer from previously acquired languages. Yet literature on second language acquisition attests that previous linguistic knowledge may also negatively impact the acquisition of a new language (Odlin 1993, Camilleri 2004, Calvo Cortes 2005). Sometimes, previously acquired linguistic knowledge even impairs the learning of a new language. Such is the case of fossilization errors, which are observed in the TL as a result of negative transfer (Selinker 1972, Selinker and Lamendella 1978). Phonological fossilization is a good instance to illustrate the case of fossilization in L2 learning. Wei (2008) discusses the case of phonological fossilization by native Chinese speakers who are learning English as L2 as presented in example (3).

(3) English

The incorrect acquisition of L2 pronunciation

Thank [θæŋk] → Thank [snk]

Wei (2008: 128)

This example shows a case of the incorrect acquisition of L2 pronunciation, which is affected by L1 phonological system. In fact, the sound /θ/ does not exist in Mandarin; when native speakers of Mandarin learn English, they tend to substitute the sound /θ/ by /s/ as illustrated

in (3). Wei (2008) claims that "[w]hen such phonological errors are repeatedly made and eventually stay stable in the incorrect manner, phonological fossilization occurs" (p. 128).

This case of phonological fossilization can still occur in L3 acquisition (Wei 2008). If a learner who has Chinese as his L1 and Japanese as his L2 and is learning English as L3, the aforementioned error in (3) can still be observed in his speech production (Wei 2008). Therefore, the prediction made by the CEM that the cumulative linguistic knowledge from the L1 and the L2 will only lead to positive transfer does not seem warranted. Despite the cumulative knowledge of Chinese and Japanese phonological system, I still envisage such an error to occur in the speech of my hypothetical learner. Hence, I assume that CEM offers some weaknesses in terms of its predictions.

2.3.2 The L2 Status Factor Model

The 'L2 Status Factor' Model (Bardel and Falk 2007) is the model, which overtly and straightforwardly privileges one of the already acquired languages by exclusively attributing it the status of the sole source of linguistic transfer in the process of multilingual acquisition. The L2 is seen as the only linguistic system, which imposes its features onto the subsequent language(s). Bardel and Falk (2007) claim that L2 is the most important and linguistically benefactory language during the acquisition process of an L3. The acquisition of an L3 is qualitatively different from those of the previously acquired languages because the linguistic knowledge of L2 plays a substantial role in facilitating the process (see also Hufeisen 1998, Cenoz and Jessner 2000, Cenoz 2001, 2003).

The L2 blocks out access to the L1 linguistic system because of its difference from the L1 in terms of its representation and storage in the mind (Bardel and Falk 2007). The claim that L2 is the strongest source of transfer in L3 acquisition is formulated on the basis of Bardel

and Falk (2007). In their most recent paper, Falk and Bardel (2011) studied the placement of object pronouns in German L3 syntax and their findings confirmed the privileged role of L2 in acquiring an L3. However, it should be noted that Bardel and Falk (2007) do not deny the empirical observation that structural similarity may bypass the filter imposed by the L2 in L3-acquisition (Rothman, 2014: 4).

Bardel and Falk originally investigated the issue of syntactic transfer from L2 to L3 with the aims to, first, evaluate the Developmentally Moderated Transfer Hypothesis (DMTH) by Hakansson et al. (2002), which argues against syntactic transfer from L2 to an additional language such as an L3 and, second, to provide counter evidence to DMTH that supports syntactic transfer from L2 to L3. Bardel and Falk (2007) compared learners with different previously acquired L1 and L2 who acquire Swedish and Dutch as the target languages. The linguistic phenomenon that motivated the study was the placement of negation in the initial state of L3 Swedish and Dutch. Negation in both Swedish and Dutch is sentence post-verbal in the main clause (Bardel and Falk, 2007: 461). Bardel and Falk (2007) argue that "[t]his placement is the result of the raising of both thematic and non-thematic verbs to a complementiser head, giving rise to the so called verb second (V2) rule, a word order rule shared by all Germanic languages except English" (p. 461).

Two groups of participants were involved. The first group had five participants of which three participants had Dutch (a V2 language) as L1, English (a non-V2 language) as L2 and two participants of which one had English as L1 and German/Dutch (V2 languages) as L2 and another one had Hungarian (a non V2 language) as L1 and Dutch (a V2 language) as L2. They were acquiring Swedish as L3. Their language combination and characteristics are presented in table (3).

Table (3)

The learners and their knowledge of V2 languages, data collection A

Learners	L1	L2	L3
EN1	Dutch +V2	English	Swedish + V2
EN2	Dutch +V2	English	Swedish + V2
EN3	Dutch +V2	English	Swedish + V2
D/G1	English	German/Dutch + V2	Swedish + V2
D/G2	Hungarian	Dutch +V2	Swedish + V2

(Source: Bardel and Falk, 2007:471)

The second group had four participants of which two had Swedish (a V2 language) as L1 and English as L2 and the other two had Italian and Albanian (non V2 languages) as L1 respectively. German/Dutch (V2 languages) and German (a V2 language) were as the L2 respectively. The L1 Italian speaker was acquiring Swedish (a V2 language) as L3 while the other three subjects were acquiring Dutch (a V2 language) as L3. Table (4) presents these details.

Table (4)

The learners and their knowledge of V2 languages, data collection B

Learners	L1	L2	L3
EN4	Swedish + V2	English	Dutch +V2
EN5	Swedish + V2	English	Dutch +V2
D/G3	Italian	German/Dutch + V2	Swedish + V2
D/G4	Albanian	German + V2	Dutch +V2

(Source: Bardel and Falk, 2007: 472)

Bardel and Falk (2007) tested four hypothetical situations: (1) The non-transfer hypothesis: There is no transfer from any previously known language. (2) The L1 transfer hypothesis: Properties of the L1 are transferred. (3) The L2 transfer hypothesis: Properties of the L2 are transferred, and (4) The positive transfer only hypothesis: The Cumulative Enhancement Model makes the correct predictions.

The non-transfer hypothesis predicted no difference between the participants with L2 English, Dutch or German while dealing with word order in Swedish. The L1 transfer hypothesis predicted that learners with V2 in their L1 will not experience any difficulty placing negation post-verbally since the L1 and the target L3 have the same word order in terms of negation in the main clauses. The L2 transfer hypothesis predicts that learners with Dutch/German as L2 will have no problem placing negation post verbally but learners with L2 English will have such problems since the latter teases apart thematic and non-thematic verbs when placing negation. Finally, the cumulative knowledge transfer, as hypothesized by Flynn et al. (2004) held that any previously acquired linguistic knowledge would contribute in the acquisition of the target language. Bardel and Falk (2007) predicted no differences between the participants, "[s]ince all know a language with post-verbal negation, either L1 or L2" (Bardel and Falk, 2007: 474).

The data confirmed hypothesis 3. It was observed in most of the selected languages that sentence negation was post-verbal in the matrix clause as both thematic and non-thematic verbs rose to a complementizer head resulting in verb-second (V2) rule. Bardel and Falk (2007) found that "[t]he Dutch/German group, who do not have a V2 L1, outperform the English group in producing post-verbal negation" (p. 479). Bardel and Falk thus confirmed the prevalence of L2 morphosyntactic transfers into the L3; they furthermore argue that L2 morphosyntactic features are the privileged source of transfer at the L3 initial state.

The properties of L2 are transferred into the target language regardless of the typological proximity that was observed between some previous languages and the target language. This obviously shows the predominant role of the L2 status factor over the typological proximity in the acquisition of morpho-syntactic features of an L3. The researchers thus concluded that the L2 Status Factor Model is confirmed, as the L2 seems to be the strongest source of transfer in L3 acquisition.

However, these findings have been criticized by recent studies, which have attributed the predominant source of transfer to the typological proximity between a source and a target language during the acquisition of an additional language. Such studies by Foote (2009), Rothman (2010, 2011) as well as Garcia Mayo and Rothman (2012) to name but a few have shown the prevailing role of the typological proximity in acquiring an additional language. The following section discusses the role and contribution of typology in the acquisition of an L3.

2.3.3 The Typological Primacy Model (TPM)

The Typological Primacy Model (TPM) (Rothman 2010, 2011) supports the contribution of all the previously acquired languages during the initial stage of an L3. TPM stipulates that "Initial State transfer for multilingualism occurs selectively, depending on the comparative perceived typology of the language pairings involved or psychotypological proximity". Garcia Mayo and Rothman (2012) claim that "[a]t the initial state upon a limited amount of exposure to the target L3, the TPM proposes that the internal parser assesses relative typological proximity and selects which system should be transferred" (p. 19). The TPM is selective and conditionally non-facilitative. This latter term implies that transfer may be positive or negative. Only positive transfer may be facilitative but not negative transfer. Should it be recalled that TPM predicts both types of transfer? Negative transfer is observed in the case of

psychotypology which produces a wrong matching between a previously acquired linguistic system and the TL. The parser selects the closest system to the TL. Any morpho-syntactic feature such as word order, tense similarity, or any other syntactic similarity depending on the case that is observed at the syntactic level may lead to the selection of one of the previously acquired languages, which compete with one another as potential source languages.

This means that in order for transfer to occur, learners have to make an interlingual identification. They must judge whether a morpho-syntactic structure in the L1 or L2 is similar to something in the TL. Hence the TPM constrains transfer from two perspectives: the actual typological proximity or the perceived typological proximity (which is also called psychotypological proximity) existing between the three grammars (Garcia Mayo and Rothman, 2012: 19).

It should be noted that not only the L1 or the L2 has to present similarity with the TL in order for the transfer to occur. The L3 must also present some linguistic features, which invites the (mis-)perception of a similarity. Transfer may occur because learners perceive an L1 or L2 syntactic structure as being similar to a syntactic structure in the TL. This entails that transfer may be triggered by psychotypological constraints.

Hence the TPM hypothesizes that both L1 and L2 may function as a potential source of transfer and neither of them is identified as the privileged source. In this sense the TPM differs from the L2 Status Factor Model; Rothman (2010) argues that the 'L2 status factor' can be nullified by "comparative typological considerations" (p. 118). In order to test such an assumption Garcia-Mayo (2012) suggests that "[s]tudies with typologically unrelated languages be carried out in order to tease apart the L2 factor from psychotypological issues" (p.140).

While the TPM seems to lend support to the CEM (Flynn, Foley, and Vinnitskaya 2004) by reconciling its claims that both L1 and L2 provide a viable source of transfer in L3, Rothman (2010) maintains that "[t]his does not always happen in a facilitative fashion". The TPM predicts that in a pair of previously acquired languages only the one, which offers typological proximity with the target language, serves as the source of transfer. However, the TPM rather proposes that transfer can be non-facilitative when psychotypology conditions the transfer by misanalysing and subsequently matching the underlying syntax of L1 or L2 with the target language syntax.

In his recent version of the TPM, Rothman (2014) argues that "[s]tructural similarity is not surface overlap per se, whereby it does not necessarily accord with conscious impressions of similarity" (p.1). In this context, structural similarity entails the overlapping of linguistic features at the level of mental representation. The linguistic parser determines the linguistic proximity at the subconscious level. Hence the identification of typological similarity is achieved at an early stage of L3 acquisition as soon as the linguistic parser has received sufficient input to draw a tableau of comparative linguistic features of either the L1 or the L2 with the target language. The previously acquired linguistic system that is identified as closer to the target language is completely transferred, as Rothman argues, "[…] as the system from which all initial hypotheses about L3 grammar are made" (p.2).

The linguistic parser makes its comparative assessment of the languages in question motivated by cognitive economy. That is, in language learning/acquisition, the brain tends to minimize the amount of effort to make by tapping into linguistic information from previous similar experience or knowledge; the more familiar, the easier to recall and learn. Rothman (2014) argues that "[h]uman cognition economically defaults to learning paths of minimal exertion […]" (p.2).

Rothman (2014) further maintains that "[b]y cognitive economy the TPM makes reference to the mind's predisposition to put the least amount of effort towards a cognitive task" (p.2).

In the following, I discuss the results of some studies which illustrate the application of the TPM with reference to morphosyntactic transfer in third language acquisition; i.e. Ionin, Grolla, Santos, and Montrul (2015), Montrul, Dias, and Santos (2011), and Rothman (2010).

Ionin, Grolla, Santos, and Montrul (2015) investigated the interpretation of NPs in generic and existential contexts in the acquisition of Brazilian Portuguese (BrP) as a third language (L3). They aimed to determine the previously acquired language that serves as source of transfer in the acquisition of an additional language in this current case BrP. The study considered learners who speak English as an L1 and a Romance language such as Spanish, French, or Italian as an L2 and they were learning BrP as an L3. The learners were administered an Acceptability Judgment Task (AJT) on the interpretation of NPs in BrP.

Ionin et al. (2015) circumscribed the interpretation of definite, indefinite, and bare (article-less) NPs in the acquisition of BrP as a linguistic phenomenon. They focused on the semantics of NPs with and without articles. Their study aimed to answer research questions such as determining the source of transfer in the domain of NP interpretation in L3-acquisition of BrP. Specifically, the study purported to determine whether learners were transferring their linguistic knowledge from L1, or L2, or both L1 and L2 or whether it was the structural closeness that played an important role in the acquisition of BrP.

Three models of morphosyntactic transfer were tested and their specific predictions and claims were compared. The L2 status factor predicts that transfer comes only from the L2. The CEM predicts that transfer may come from both the L1 and the L2 and is always positive. And the

TPM predicts that transfer comes from the language that offers morphosyntactic similarities with the target language (TL). In line with the TPM, Romance languages are typologically closer to BrP than English.

Participants were administered an Acceptability Judgment Task (AJT) of NP interpretation in BrP. They were tested the interpretation of NP in definite, existential and generic contexts. The study projected that transfer from English would result in "[…] the acceptance of bare plurals in both existential and generic contexts, and of indefinite singulars in existential contexts, coupled with rejection of bare singulars in both contexts, as well as rejection of definite plurals in generic contexts" (p. 27). On the other hand, transfer from Spanish would be attested if learners rejected bare plurals and bare singulars in both context types. Also, if learners accept indefinite singulars in existential contexts and definite plurals in generic contexts, transfer in Spanish would obtain. If positive transfer is the result of cumulative knowledge from both languages, learners would accept both bare plurals and indefinite singulars in existential contexts and both bare plurals and definite plurals in generic contexts. It should be noted that differences between learners and native speakers are expected to emerge with regards to bare singulars because native BrP speakers would accept bare singulars in generic contexts while it is predicted that learners reject them in both contexts.

The results of the study have shown that Romance languages serve as the source of transfer in the acquisition of BrP as an L3. These findings seem to rhyme with the claims and predictions of the Typological Primacy Model (TPM). The transfer effects were stronger when Spanish was the L1 than when it was the L2. It was found that transfer from Spanish exhibited a preference for definite plurals in generic contexts. The results have also shown that transfer came from English.

In general, the findings do not support the predictions of a particular model of L3-acquisition. Ionin et al. (2015) argue that "[t]ransfer from the structurally closer language appears to work in concert with transfer from the L1, as well as learners' analysis of the input, in affecting the course of L3-acquisition" (p. 42).

Montrul, Dias, and Santos (2011) examined the source of transfer and the structural relationship between languages in the acquisition of Brazilian Portuguese (Br. P). Three groups of participants were selected of which the first was made up of L1 Spanish, L2 English, and L3 Br. P speakers. The second group was composed of L1 speakers of English who had Spanish as L2 and were learning Br. P as L3. Finally, the third group was formed with native speakers of Br. P. The linguistic phenomena of interest in the study were object clitic pronouns and the related properties of clitic placement and object expression. It is observed that English does not show any similarities with Br. P in terms of object clitics while Spanish does.

The work aimed to determine whether cross-linguistic similarities between Spanish and Br. P were an important factor in the acquisition of the L3 Br. P. Adopting Dayal's (2004) proposal for genericity in Brazilian Portuguese, Ionin et al. discuss three predictions of which the first states that definiteness marking is obligatory with singular generics. In particular, Ionin et al. (2011) predict that "[k]ind (taxonomic) readings of singular NPs in Br. P should be obligatorily expressed via the definite article […] bare singular kind terms should be ungrammatical" (p. 118). The second prediction stated that "[d]efiniteness marking may be optional with plural generics" (p. 118). Ionin et al. (2011) argued that "Br. P is predicted to pattern like German (Krifka et al. 1995), with obligatory definiteness marking for singular kind terms, but optional definiteness marking for plural kind terms" (p.118). Finally, the third prediction is the "well-defined kind" restriction that applies only to definite singular generics. Ionin et al. (2011) predict that "[t]his

restriction is predicted to hold for definite singular generics cross-linguistically, in Br. P as well as in English" (p.118). In other words, the paper postulates that if typological similarity plays a role in L3 syntax, Spanish should trigger the transfer; if typological similarity plays no role no transfer would be observed from English in both group 1 and 2.

The results show that structural proximity/psychotypology plays a role in the acquisition of the L3 because the numerical results and the statistical analysis support the predictions. Ionin et al (2011) note that "[i]n both languages and both categories the sentences that were predicted to be acceptable received rating of 3.0 or more on a scale from 1 to 4, while the sentences that were predicted to be unacceptable received rating below 2.5 (the midpoint of the scale)" (p.122).

Rothman (2010) examines the L3 syntactic transfer selectivity and typological determinacy using the Typological Primacy Model (Rothman 2010). The syntactic transfer selectivity entails the identification of typological proximity by the internal parser and the election of the linguistic system to transfer its syntactic features onto the target language (Schwartz and Sprouse 1996). The paper seeks to answer the research questions related to determining the variables, which trigger syntactic transfer and to interpret the L3 transfer patterns in relation to mental constitution of linguistic systems. Its objective is threefold. First, it aims to test the Cumulative Enhancement Model (CEM) (Flynn et al., 2004); second, it aims to test the L2 status factor (Bardel and Falk 2007); finally, it tests the Typological Primacy Model (TPM) (Rothman 2010).

Rothman (2010) hypothesizes that just like early learners, late learners are able to implicitly access the previously acquired linguistic features and properties of an L1 into any additional language that is being acquired. The work further predicts that any variable that has

been attested in early L3 acquisition as the trigger of transfer is likely to do so in the case of late learners. This amounts to confirming that there is no significant difference between early learners acquiring an L3 and late learners. Hence Rothman (2010) assumes that either the syntactic transfer into L3 is triggered by typological/psychotypological similarities that exist between the previously acquired languages or the TL or it is the L2 status factor, which plays a deterministic role in acquiring the L3.

The paper investigated the syntactic word order and relative clause attachment preference in L3 Brazilian Portuguese (Br. P) with two groups of participants of whom the first was made of Italians who have English as L2 and are learning Spanish as L3 and a group of English natives who have Spanish as L2 and are learning Portuguese. The predictions of the paper are based on the claims of the selected models: Bardel and Falk's (2007) L2 Status Factor Model predicts that the order of language acquisition plays a great role and that transfer solely originates from the L2, while Flynn et al.'s (2004) CEM ignores the order of acquisition as a deterministic factor and predicts that transfer may come from both the L1 and L2. Lastly, Rothman's (2010) TPM anticipates that typological similarity triggers transfer from Spanish to BP.

The results show that transfer comes from Spanish, which is typologically the most similar to the TL; the typological similarity effect is observable whether or not Spanish is the L1 or the L2. The implication of the findings is that typological proximity between languages is the most important factor, which triggers syntactic transfer.

Findings of this study are congruent with the claims of the Typological Primacy Model (Rothman 2010) since the results of the study show robust evidence that typological proximity is the strongest factor, which triggers syntactic transfer in adult L3 acquisition process.

Typological proximity among romance languages (Italian, Spanish, and Portuguese) prevails over L2 status (English).

The literature on cross-linguistic influence in multilingualism attests different and conflicting findings on the contribution of previously acquired languages in the acquisition of an additional language (Ionin, et al. 2015). Two main hypotheses have been formulated to account for language transfer and both the order of acquisition and typological primacy were tested in those studies.

The Cumulative Enhancement Model (CEM) postulates learners rely on the cumulated knowledge from both the L1 and the L2. This entails that both previously acquired linguistic systems can equally serve as source of transfer in acquiring an additional language. The CEM predicts transfer from any of the previously acquired languages. It however constrains transfer to only positive effects otherwise it remains neutral (Flynn et al. 2004). The L2 Status Factor Model, however privileges the L2 as the only source of transfer in acquiring an additional language. The L2 is, therefore, identified as the only linguistic system that imposes its syntactic features onto an additional language. The L2 status factor postulates the L2 acts as a filter, which blocks access to the L1 linguistic system, specifically to the L1 syntactic features. This blockage is due to similarities between the L2 and the L3 acquisition. Similarities here refer primarily to the status of the L2, either as a foreign language or as a language acquired in a formal setting.

The Typological Primacy Model (TPM) claims that any previously acquired linguistic systems can serve as source of transfer provided that the linguistic system offers some typological similarities with the target language. The sine qua non for transfer to take place is the linguistic proximity between one of the previously acquired languages and the target language. Transfer occurs as a result of the internal parser identifying the language that is typologically closer

to the target language (Rothman 2011). Therefore, "[t]he elected linguistic system will transfer entirely in the sense of the Full Transfer/ Full Access Hypothesis for L2-acquisition" (Schwarts and Sprouse 1996, Ionin et al., 2015: 4)

A number of studies related to the impact of linguistic proximity, such as those by Salaberry (2005), Carvalho and Silva (2006), Foote (2009), Montrul, Prince, and Thome-Williams (2009), Montrul et al. (2011), Rothman (2010), (2011), Santos (2013) have found that typological proximity is an influential factor that selects the language, which dictates the source of cross-linguistic influence of morphosyntactic as well as semantic properties in the acquisition of an additional language. Ionin et al. (2015) say "[t]hese studies find that learners tend to transfer more from the language that is (perceived as being) closer to the language they are learning, regardless of whether it is the L1 or the L2" (p. 5).

The findings of studies that have tested one of the three aforementioned syntactic models have raised some concerns, which could be formulated in form of some relevant questions on the models. For instance, one would wonder how the cumulated knowledge operates when the previously acquired languages are completely different, that is, when they do not offer any linguistic similarity. How does one identify the influence of the cumulated knowledge from knowledge of a specific language?

Some studies have, however, supported the role of the L2 status in the acquisition of an L3. They have attributed the most prominent role of the previous linguistic system to L2. Such findings are attested in Bardel and Falk (2007), Falk and Bardel (2011), Jaensch (2011) to name but a few. More studies have also recognized the role of typological proximity in the acquisition of an additional language. A concern to address is to determine whether these variables, L1, L2 status and typological similarity are always identified as the only factor that trigger transfer.

Are there other factors such as language proficiency, or order of language acquisition that come into play in combination with say L2 status and typological proximity, which contribute into the triggering of transfer in an L3 acquisition? Does the L2 status factor play the predominant role in the acquisition of an L3 even when it is typologically different from the target language? What happens when the L2 has a status of a foreign language and the L3 is another local language that is spoken in the same region as the L1? What happens when the L2 is acquired, say in a school setting while the L3 is acquired naturally through exposure to the language?

Obviously, the aforementioned questions address the concern of knowing what happens when the L2 does not offer any similarity status as the target language. Will the L2 still behave as the privileged source of transfer in such a case? Does typological proximity play a predominant role in triggering linguistic transfer even when the previously acquired linguistic systems do not offer any similarity with the target language? What happens when both the L1 and the L2 offer some local similarities with the target language (that is potential positive transfer vs. potential negative transfer)? Does typological proximity still play a role in this case? Which type of transfer takes precedence in this case; is it positive transfer or negative transfer?

I aim in this study to tease apart the influence of some of the factors that are likely to impact the acquisition of an additional language. In the context of an experimental study like in this current research, the aforementioned factors may be elicited in one way or another. That is, I may investigate whether learners have access to their previous linguistic system implicitly or explicitly. Therefore, I also aim to determine whether learners transfer more when they are in an explicit versus an implicit knowledge mode, or whether implicit linguistic knowledge is more transferable than the explicit knowledge. The following section discusses the difference between implicit versus explicit knowledge.

2.4 Implicit vs. Explicit Knowledge

R. Ellis (1994) claimed that implicit knowledge of a language is intuitive and tacit and that it cannot directly be reported. Bialystock (1981) says "[t]he general form in which information is represented allows us to know things intuitively without being aware of the formal properties of that knowledge" (p. 34). Bialystock (1981) goes on illustrating the issue by stating that "[w]e know a great deal about language that defies mental examination, but the knowledge is demonstrated by our ability to produce correct, coherent utterances" (p. 34). One can refer to implicit knowledge when s/he knows more than s/he can tell. And implicit knowledge can roughly refer to what Polanyi (1967) called 'tacit knowing'.

Davies (2014) refers to tacit knowledge as "[t]he ability to recognize something (e.g. a person's face) even though one cannot describe in context-independent terms (e.g. without saying, 'I know that Bob looks like this') how one recognizes it" (p. 1). It should however be noted that tacit knowledge can still be communicated but using the mechanism of transmission such as performance and imitation rather than telling and understanding as that is done in the case of explicit knowledge (Davies 2014).

Tacit knowledge of language as defined and discussed in the context of Chomskyan (1986) linguistics and cognitive science could be understood as the internalized generative grammar, that is, the internalized rules or principles of a generative grammar that a person uses to express the knowledge of his/her language. This tacit knowledge is nothing but implicit knowledge of a language because a speaker with such knowledge is unable to provide a verbal statement of those rules or principles (Davies 2014).

R. Ellis (1994) divides implicit knowledge into two types: formulaic and rule-based knowledge. Formulaic knowledge consists of ready-made chunks of language while rule-based

implicit knowledge is made up of generalized and abstract structures that a subject has internalized (p. 354).

R. Ellis (1994) defines explicit L2 knowledge as "[k]nowledge of rules and items that exist in an analyzed form so that learners are able to report what they know" (p. 702). Explicit knowledge is also otherwise referred to as declarative knowledge and it can be described as knowledge of 'knowing that'. Declarative knowledge is knowledge of factual information and it can be described in terms of rules by using metalingual language.

Explicit knowledge is usually learned in a formal context and it requires conscious processes to be learned. R. Ellis (2004) further defines explicit L2 knowledge as "[d]eclarative and often anomalous knowledge of the phonological, lexical, grammatical, pragmatic, and sociocritical features of the L2 together with the metalanguage for labelling this knowledge" (p. 244). Explicit knowledge is here identified as anomalous and imperfect. This type of knowledge is not gained through natural exposure to the target language as that is observed in the case of implicit knowledge. R. Ellis (2004) also claims that explicit knowledge is "[t]ypically processed through controlled processing when L2 learners experience some kind of linguistic difficulty in the use of the L2" (p. 245).

The difference between implicit and explicit knowledge could be further elucidated through a number of features. Implicit knowledge is characterized and thus identified as unconscious, natural, slow, described as 'know how', and it is based on communication or language use. R. Ellis (1994) characterizes implicit knowledge as: Easily accessible and is the hallmark of automatic processing, unanalyzed, that is, it is memory-based rather than rule-based, abstract and structured, can be consciously analyzed and thus become explicit rules of the language, and occurs closely adhering to natural language behavior. From the aforementioned

characteristics, it is obvious that implicit knowledge is exemplar-based, that is, it is acquired through exposure, practice, and experience.

N. Ellis (2005) correlates implicit knowledge to that of L1 and he states that "[t]he acquisition of L1 grammar is implicit and is extracted from experience of usage rather than from explicit rules" (p.1). He further acknowledges that exposure to the language in its natural setting and interaction with the native speakers of the target language as they communicate in their speech community is more than enough to help one to implicitly acquire the linguistic knowledge of a language. N. Ellis (2005) ascertains that implicit knowledge reflects automatic complex knowledge of the structure that was acquired in a naturally occurring meaningful communication. Explicit knowledge, however, is conscious, artificial, fast, based on form, and could be described as 'know what/that' (Clark 2010). Explicit knowledge is learned through explicit instruction and is mostly explicitly rule-based. The results and output of explicitly learned linguistic knowledge most often show limitations in terms of L2 adult attainment when their performance is compared to native speaker norms (N. Ellis, 2005: 1).

As stated above, explicit knowledge is conscious and the roles of consciousness in SLA as it is discussed by N. Ellis (2005) include such elements as "[…] the learner noticing negative evidence; their attending to language form, their perception focused by social scaffolding or explicit instruction; their voluntary use of pedagogical grammatical descriptions and analogical reasoning; their reflective induction of metalinguistic insights about language; and their consciously guided practice which results, eventually, in unconscious, automatized skills" (p. 1).

These elements imply that subjects in explicitly learning a language have the opportunity to notice negative evidence of failure to produce the TL abiding by the norms of the native speakers of the language. This negative evidence is observed when negative feedbacks are

provided to learners. Explicit knowledge is very often learned through form; that is, form is given more importance than use and meaning (N. Ellis 2005) and this most often occurs in the context of formal learning whereby learning is based upon explicit instruction. Usually, the teaching of a language in an explicit instruction context is based upon pedagogical grammar and the language is taught using metalanguage to talk about the language. The whole learning process in an explicit instruction is conscious (N. Ellis 2005), however, learners can develop automaticity in course of time as a result of language improvement.

Implicit and explicit knowledge further differ in terms of how they were learned or acquired, and how they have been stored. Examining the way this knowledge was learned, one can discuss and contrast implicit vs. explicit learning. This section devotes substantial attention to implicit and explicit learning. It also discusses the issue from a purely Second Language Acquisition (SLA) perspective.

N. Ellis (2005) defines implicit learning as "[…] the acquisition of knowledge about the underlying structure of a complex stimulus environment by a process which takes place naturally, simply, and without conscious operations" (p. 3). Hayes and Broadbent (1988) stated that implicit learning is "[…] the unselective and passive aggregation of information about the co-occurrence of environmental events and features" (p. 251). Key elements emerge from these two definitions, notably, natural process and environment, unconscious operations, unselective and passive aggregation of information.

'Natural process and environment' implies that implicit learning takes place in a social setting in which language is spoken on a daily basis through interactions which help people to socialize with one another and to achieve their daily socio-cultural and economical activities. There is no specific setting where language is to be learned and exposure to the target language is

done through social interaction as it occurs and unfolds naturally as people meet and depart from one another. Implicit learning is unconscious operations in that the learning of the target language is achieved as one is engaged in a social interaction, which aims at socializing rather than language learning. Socialization is the main reason of the interaction but not language learning. Language learning in this context is just the result of social interaction. Finally, implicit learning is both 'unselective and passive aggregation of information' means that the language, which is presented in this context, has not been subject to careful selection for the purpose of its acquisition. One is exposed to the language as it unfolds in natural social interaction and in a raw way. There is no treatment of the language prior to its presentation to the learners.

Some studies have adopted the concept of intentionality and automaticity rather than consciousness in discussing the contrast that exists between implicit and explicit learning (Frensch 1998). These alternative suggestions were motivated by the difficulty to define what consciousness is. Intention is involved in implicit learning and automaticity is its ultimate result. Implicit learning is further defined in terms of learner awareness. Dekeyser (2003) defines implicit learning as "[…] learning without awareness of what is being learned" (p. 314). Implicit learning can be illustrated with the acquisition of an L1 whereby a child picks the language without being aware of the substance—language—that is being learned.

Most laboratory studies that aimed to compare the results of implicit and explicit learning conditions favored explicit learning because it showed more advantage. (Robinson 1997, Leow 1998, Schmidt 1995, 2001). Likewise, studies comparing explicit and implicit learning in the context of classroom revealed an advantage for explicit learning over implicit learning (Von Elek and Oskarsson 1973, Scott 1990, 1998). Time pressure has often been used as a variable to

determine the use of explicit and or implicit knowledge by learners. It is documented that time pressure makes the use of explicit knowledge difficult (Dekeyser 2001).

Literature on implicit and explicit learning provides three views of this issue: the non-interface between implicit and explicit knowledge (Krashen 1985), the interface between implicit and explicit knowledge (McLaughlin 1978, 1990, Swain 1985, Schmidt and Frota 1986, Schmidt 1995, Swain and Lapkin 1995, McLaughlin and Heredia 1996, Dekeyser 1997, 1998, Hulstijn 1995, 1999). Finally, an intermediate point of view is on 'focus on form' (Doughty and Williams 1998, Long and Robinson 1998).

The non-interface position, by Krashen (1985), claims that the gap between implicit and explicit knowledge cannot be bridged. He argues that "[l]earned competence does not become acquired competence' (p. 43). Krashen (1999) further stated that the results of explicit learning will never lead to implicit knowledge and he supports that the role of L2 instruction is to equip learners with comprehensive input for implicit learning but not to provide them with explicit rules and further systematic practice of those rules (Dekeyser, 2001: 328).

The development of the interface between implicit and explicit knowledge presents a viewpoint that supports the integration of both language use and metalanguage. This view supports the idea that explicit learning needs to be accompanied with communicative practice and social interaction which in turn will bridge the gap between explicit and implicit knowledge. Successful gap bridging may be attested through the automaticity of information accessing and processing.

The third view, which reconciles the first and second, as R. Ellis (1997) argues that "[t]he role of explicit learning is really to help learners notice the gap between input and their own production, while the goal of systematic practice is limited to item learning and the improvement

of fluency" (p. 92). This view advocates that explicit learning should raise awareness about the gap between the input and language production and language use and systematic practice should play the ultimate role of reinforcing language use in order to reach fluency. The third view puts an emphasis on communicative skills rather than accuracy; learners should be able to appropriately use the TL in different social contexts.

Leung and Williams (2013) investigated the effects of prior linguistic knowledge on implicit language learning. They worked with 30 native speakers of English and 27 native speakers of Cantonese who participated in different implicit learning experiments. The study aimed to explore any potential influences of the learners' L1 on the implicit learning of a semi-artificial grammatical system. The paper purported to test whether native speakers of English and Chinese may implicitly map animacy onto article. Participants had to remember the mapping between the articles and the distance system and the animacy of the accompanying noun. During learning process, learners were not told anything about the animacy and inanimacy features that are associated with the studied articles.

Participants' task consisted in deciding about the animacy of the object as encoded by the noun. And then, they had to indicate, as quickly as possible, the distance meaning of the articles. Leung and Williams (2013) discussing the task say: "They [the participants] were told that the articles were used to encode the distance between the speaker and the object (*gi* and *ro* for near objects and *ul* and *ne* for far objects). Therefore, *gi dog* may be read as 'the near dog', *ro table* as 'the near table', *ul mouse* as 'the far mouse', and *ne car* as 'the far car'" (p. 2867). The reaction time was recorded. Findings of the study have shown that implicit language learning is sensitive to previously acquired linguistic knowledge. Leung and Williams (2013) suggested that "[…] cross-linguistic influences may take place implicitly" (p. 2871).

Leung and Williams' findings imply that cross-linguistic influence occurs when the speaker does not have enough time to control and adjust his/her speech. The more a speaker develops automaticity in the TL, the more likely s/he is amenable to transfer. I wonder whether the opposite is not the case in the process of an L3 acquisition. I assume that enough time to conceive and produce one's speech is amenable to transfer if one is fairly dependent upon his/her previously acquired linguistic systems. The explicit mode of accessing linguistic knowledge allows one to establish one to one linguistic correspondence and identify any similarities or differences which may eventually result in a higher possibility of linguistic transfer. My investigation of the implicit versus explicit mode of linguistic knowledge will help to develop insight into this concern.

This chapter has highlighted the factors that interfere with the acquisition of an additional language. Such factors as the order of language acquisition and typological primacy have been identified in most studies as the main variables that plot with the triggering of linguistic transfer in L3-acquisition. While these factors may be identified as primary variables, further factors such as level of proficiency, language use, recency, to name but a few have been mentioned in some studies besides the primary factors. This confers them the secondary role in this case. The chapter has discussed the three models of L3-acquisition which take their genesis from the claims of UG such as the absolute L2 transfer and the L1/or L2 transfer.

It has been clarified that the L2 status claims that learners rely exclusively on their L2 language as source of linguistic transfer. The L2 blocks access to the L1 linguistic system because of its configurationally similar storage location that is similar to the TL. In this study, I test the claims of the L2 status model to determine whether French, which is the L2 in the context of this study, serves as the source of transfer in this research. If the findings of this research show

linguistic patterns that confirm that transfer is coming from French and that linguistic system of Lingala is not accessed by the learners, I will thus draw the conclusion supporting the predictions of the L2 Status Factor Model.

Otherwise, the CEM has argued that transfer should come from both previously acquired linguistic systems. This entails that transfer will come from both Lingala and French. However, the CEM denies any negative transfer in the process of the acquisition of an L3. If any negative transfer is observed in the performance of my participants, the CEM will be discarded as the source of transfer since only positive transfer with facilitative effects are possible in the CEM claims. Furthermore, in case there is no transfer, CEM predictions may be confirmed since the latter claims that transfer may only have facilitative effects or it may be neutral.

Finally, the Typological Primacy Model has argued that learners may have access to both the L1 and the L2 at the L3 initial stage of acquisition. Rothman (2014) claims that transfer may be either positive or negative depending on the case. Unlike the CEM, which denies any non-facilitative effects of transfer in L3-acquisition, TPM does acknowledge non-facilitative transfer. The TPM conditions transfer by actual structural similarity or psychotypological similarity. Rothman (2014) argues that the "[…] actual linguistic structure is what cues the parser to determine overall typological proximity as early as possible with limited L3 input" (p. 6).

In the case of the predictions of this study with reference to the TPM, a number of predictions will be formulated in accordance with local proximity. For instance, a local typological similarity between Lingala and English is projected in the use of the simple past tense. If learners produce the correct simple past form in this context, it will be confirmed that transfer is from the L1 and this will confirm the predictions of the TPM. However, if learners use the present perfect tense rather than the simple past in the context of past-completed event, it will be deduced that

learners are tapping into their linguistic knowledge from French; this will be a case of non-facilitative effects of transfer. I will therefore argue that transfer is coming from the L2, which is French. However, the claims of the L2 Status Model will not be confirmed since this model does not predict any negative transfer.

Finally, the study will determine whether learners transfer more when they access implicit or explicit linguistic knowledge. Hence the data collection of this study will be conducted in both an implicit and an explicit mode. The difference between the two modes is a function of the time pressure that will be put on the learners when completing the tasks of the study. I will determine whether the order of language acquisition and typological proximity equally influence the acquisition process in both implicit versus explicit mode. I will further try to determine whether any of the attested factors is affected by one of the language modes.

Chapter III

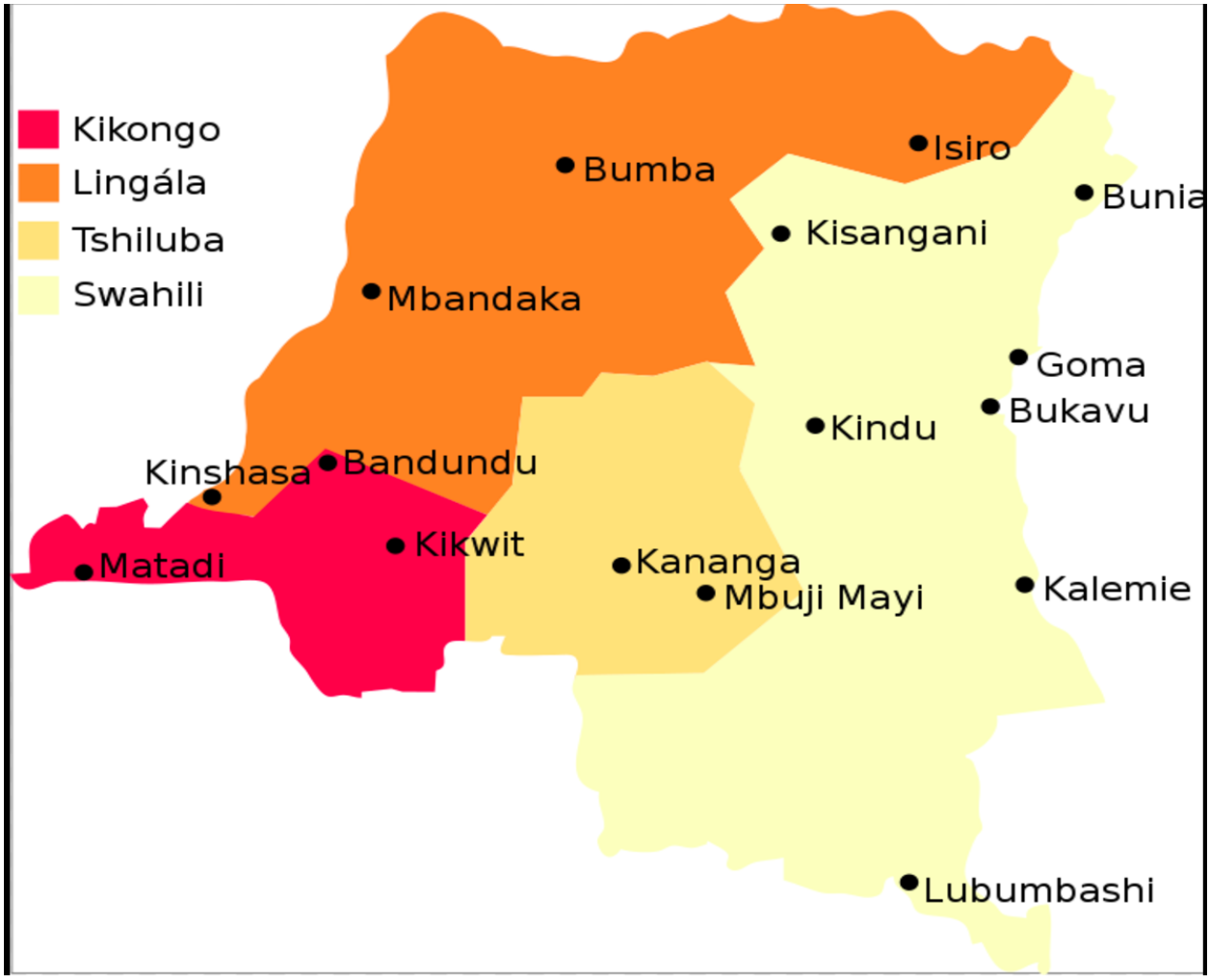
The Status of Lingala, French, and English in the Democratic Republic of Congo

3.1 Introduction

The Democratic Republic of Congo presents a complex macro-sociolinguistic triglossic structure of the linguistic configuration of its society in which languages are ranked as: French > national languages > ethnical languages (Kasanga, 2012: 49). This triglossic structure of the sociolinguistic configuration of the Congolese society attests French as an official language while regional lingua francas such as Lingala, Swahili, Tshiluba, and Kikongo are national languages. The rest of the approximately 200 to 300 active languages that are disseminated in the territory of the Democratic Republic of Congo are ethnical languages (Makomo 2012: 46). The following map (1) presents the geographic distribution of the four national languages of the Democratic Republic of Congo.

Map (1)

Geographic distribution of the four national languages of the Democratic Republic of Congo



Source: Wikipedia

Explaining the uncertainty in terms of the exact number of languages in the DR of Congo, Makomo (2012: 46) says: "La première contrainte est celle de la connaissance du nombre de langues nationales. Là dessus, nous n'avons aucune précision. Aucune étude ne peut fournir à nos jours le nombre exact de langues d'obédience congolaise. Même l'ouvrage le plus récent réalisé en 2009 par les linguistes africanistes les plus chevronnés de l'Université de Lubumbashi avec l'appui financier de l'OSISA (Open Society Initiative for Southern Africa), *L'Atlas Linguistique de la R.D.C/ Linguistic Map of the DRC,* inscrit son impuissance à trouver le nombre

de langues congolaises parmi ses difficultés" P. 46). [My translation : The first constraint is the knowledge of the number of national languages. There we have no clarification. No study can provide today the exact number of languages of Congolese obedience. Even the most recent book written by the most experienced Africanist linguists of the University of Lubumbashi in 2009 with the financial support of the Open Society Initiative for Southern Africa, the Linguistic Atlas of Linguistics Map of the DRC, insists its powerlessness to find the number of Congolese languages among its difficulties].

English should, however, be added to the list as another foreign language that plays a considerable role in the sociolinguistic context of the Democratic Republic of Congo both at the intra-national as well as at the international level. All the above mentioned languages are to a greater or lesser extent in competition with one another, however, French, Lingala, and English constitute the core of discussion in the following sections. Their sociolinguistic functions are discussed in the context of the Democratic Republic of Congo in relation to aspects of the political, social, economic, and cultural life in the country. The chapter furthermore presents a succinct historical genesis of Lingala, French, and English in the country and presents their major historical and socio (linguistic) features.

First, the chapter looks specifically at the sociolinguistic status of (Kinshasa) Lingala, which has emerged to become the 'language of the city' (Wilson 2012, 2015). It discusses Lingala's function as a main linguistic medium of social interaction at the level of nuclear family in Kinshasa, where nuclear family is used as a sociological term that represents the core members of a basic family such as the father, mother, and their children (Bengtson 2001). It highlights its role in establishing the sociocultural identities of Kinois (inhabitants of the capital city of the Democratic Republic of Congo, Kinshasa).

Second, the chapter discusses the sociolinguistic status of French in the Democratic Republic of Congo. The section on French's status focusses on its sociolinguistic status in formal settings and the public life in the DRC. The chapter presents the socio-professional advantages that French offers as a means of acquiring social mobility in the Congolese society and highlights its influence in the educational system as a medium of instruction in elementary, secondary schools, colleges and universities. Moreover, the chapter provides a brief historical view of the language as an official language, which is the legacy of colonial policy. The historical overview reveals two distinct periods of diglossic situation in the Democratic Republic of Congo whereby during the colonial period and until (1975), French was the only language, which held a high status, while the rest of the Congolese local languages had a low status (Makomo 2012). However, recently Kinshasa-Lingala and English have started to gain some of the sociolinguistic scope of prestige previously held by French in different sectors of life in Kinshasa. Such a situation puts the diglossic situation that was previously observed by Kasanga (2012: 49) into question.

Finally, the chapter provides an account of the sociolinguistic status of English in the Democratic Republic of Congo in particular. It also discusses the importance of English in Africa and the world in general. It presents the status of English as an academic language and discusses its socio-professional significance in the Democratic Republic of Congo. The section on the status of English shows that the language is gaining ground in the Democratic Republic of Congo and that nowadays economic and professional success depends on the mastery of English (Legal text from the Government: Academic Instruction No. 014/MINESURS/CABMIN/2012 08/2012 to the attention of heads of public and private higher education, university and scientific research Institutions). This implies that English is becoming the primary language of social mobility inside and beyond the boundaries of the country.

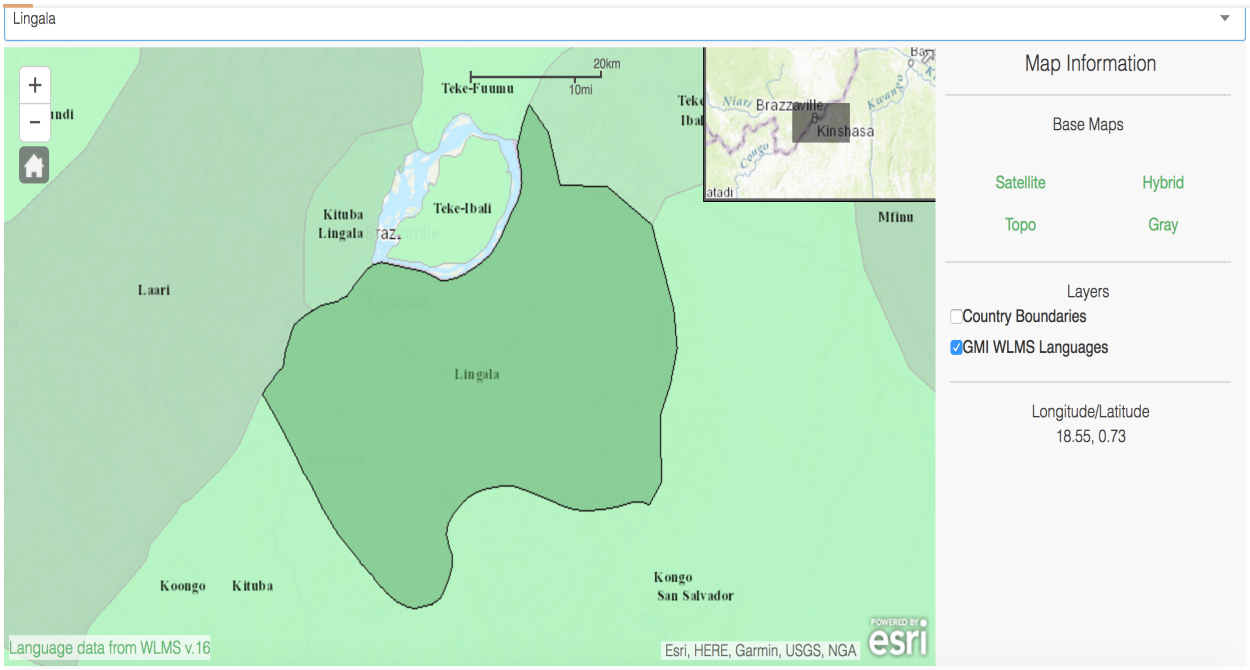
In the following section, I discuss the historical perspective and origin of Lingala and its sociolinguistic status in the Democratic Republic of Congo.

3.2 Lingala

Ethnologue classifies Lingala as a language that belongs to the Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Northwest, C, Bangi-Ntomba (C.30) family. Wiesenfeld (1999) states that Lingala has 2,040,000 speakers in the Democratic Republic of the Congo, but it has a total population of speakers in different countries that amounts to 2,141,300 speakers. Lingala has a population of 7,000,000 as L2 speakers together with Bangala (Ethnologue). As an L2, Lingala is spoken by different ethnical groups that range from Bali [bcp], Bamwe [bmg], Bolondo [bzm], Bomboli [bml], Bomboma [bws], Bozaba [bzo], Budza [bja], Dzando [dzn], Furu [fuu], Gbanziri [gbg], Gilima [gix], Gobu [gox], Ibali Teke [tek], Komo [kmw], Kpala [kpl], Lalia [lal], Ligenza [lgz], Lobala [loq], Mayogo [mdm], Mbandja [zmz], Mid-Southern Banda [bjo], Mongo-Nkundu [lol], Mono [mnh], Monzombo [moj], Ndolo [ndl], Ngbaka [nga], Ngbaka Ma'bo [nbm], Ngbundu [nuu], Northern Ngbandi [ngb], Pagibete [pae], Sakata [skt], South Central Banda [lnl], Southern Ngbandi [nbw], Tembo [tmv], Tiene [tii], Togbo-Vara Banda [tor], to Yango [yng] (Ethnologue). The following map (2) presents the geographical distribution of Lingala in Kinshasa.

Map (2)

Geographic distribution of Lingala in Kinshasa



Source: Langscape.umd.edu/map.php

Lingala is considered as the local language of communication in provinces such as Kinshasa, Equateur, and a part of Oriental Province where Lingala is spoken as a lingua franca (Kimputu, 1978: 292-302, Nkongolo 1998). The other three main national languages of the Democratic Republic of Congo, namely Tshiluba, Swahili, and Kikongo are identified with the rest of provinces. Tshiluba for instance, is spoken in both East and West Kasai while Swahili is spoken in Oriental Province, Katanga, North Kivu, South Kivu, and Maniema. Lastly, Kikongo is spoken in Bandundu and Bas Congo (Manifest de la N'sele 1982, Nkongolo 1998).

3.2.1 Historical Perspective and Origin of Lingala

Lingala, which is one of the four main national languages in the Democratic Republic of Congo, is widely identified as a creole language (Yanga 1980, Mufwene 1994). Yanga (1980), e.g., adopts a heterogeneous approach in explaining the origin of Lingala. He mentions that Lingala evolved

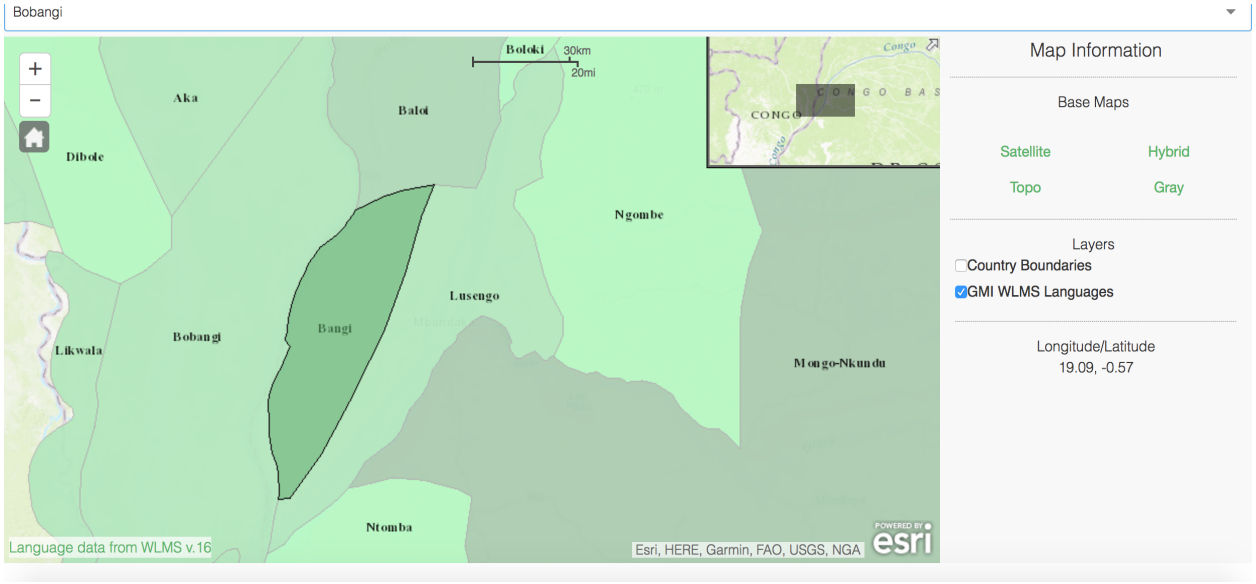
from a pidgin language due to contact between Bantu and Sudanic languages to its actual status as a creole language (p. 92).

According to Yanga (1980:109), the earliest speakers of Lingala came from the South of Sudan and had access to the Democratic Republic of Congo through the Northeast area via waterways. Yanga (1980) argues that "[t]he major routes of these early migrations were the rivers: Mbomu, Ubangi, Uele, Mongala, and Aruwimi which allowed communication and trade between the various tribal groups that have become associated with the rise of Lingala" (p. 109). Yanga argues that the genesis of Lingala speakers is in the East (Nubia), which is in the Nile area.

This position is, however, not uncontested. Some linguists and creolists classify Lingala as a semi-creole (McWhorter, 2005). Accordingly, another side of the story on the origin and development of Lingala is discussed in Meeuwis (1997, 2004). Meeuwis (2004) argues that all the varieties of Lingala evolved from the pidginization of Bobangi (which Ethnologue classifies as Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Narrow Bantu, Northwest, C, Bangi-Ntomba, C.32). Bobangi (C.32) is spoken in Equateur province: from Bolobo to Mbandaka (Ethnologue). Wilson (2012) says that Bobangi was long used as a trade language "[…] among different groups of people on the shores of the Congo River" before the arrival of Europeans (pp. 122 – 123). Map (3) illustrates the geographic distribution of Bobangi in the region of Central Africa.

Map (3)

Geographic distribution of Bobangi in the region of Central Africa



Source: Langscape.umd.edu/map.php

Bobangi, as a trade language and pidgin, was characterized by a tremendous reduction of its linguistic features to the simplification of its vocabulary, morphology, and grammar to the point that it was completely pidginized (Wilson, 2012: 123). Wilson (2012) admits that "[w]hen the Europeans, accompanied by the African helpers penetrated the Equatorial rainforest, they came in contact an already simplified form of Bobangi pidgin, which they ended up employing in order to communicate with the local" (p.123). She (2012) further postulates that "[t]he pidgin was used among riverine communities on the one hand, but also between these communities and Europeans, on the other" (p. 123).

The arrival of Europeans in Equatorial region accelerated the spread of Lingala as a result of a decision that was made by the colonizers. Meeuwis (1997: 105) argues on that respect that "[i]t is the Europeans penetration that co-shaped the spread of Lingala" (p. 105; Wilson, 2012: 123). Wilson (2012) specifies that "[i]n the yet more urgent need to communicate, missionaries

and other colonial linguists made a set of crucial decisions about which dialect to privilege, what orthography to employ, and what vocabulary to regard as 'pure'" (p. 123; Ranger, 1993: 74).

Interestingly, Meeuwis (1997) argues that "[t]hey [i.e. missionaries and colonial linguists] set out to artificially 'rebantuize' and enhance Bobangi" (pp. 107–108) "[…] as it were, along 'more correct' standards" (Wilson, 2012: 123). It is therefore clear, as stated in Wilson's that "[t]heir scientific endeavor resulted in the creation of a new language variant: Lingala" (p. 123).

From Meeuwis (1997, 2004) account of the origin of Lingala is retained that Lingala was born out of Bobangi as the result of the process of 'rebantuization' and enhancement. Meeuwis (2004: 6) attests as stated in Wilson (2012) that "Bobangi became Lingala when the linguistic expression of the pidgin was guided from above" (p. 123). Wilson (2012) argues that "[t]he purified variant started to be used in church and, to a limited degree in education" (p. 123). This is how this variety of Lingala became a literary Lingala since it was used in translating and therefore reading and teaching the Bible to the local people in Equateur province.

The purified Lingala was then taught to local people who made it their language of social interaction. Wilson (2012) claims that "[i]n their urge to stand closer to the locals, missionaries taught locals the purified language, and Lingala ya Basango became, as it were, Lingala ya mboka" (pp. 123-124). Gondola (1997) argues that the creation of the language Lingala also resulted in the creation of a new ethnicity of the Bangala which is "[…] an amalgam of people with a common geographic denominator" (Gondola, 1997: 57; Wilson, 2012: 124).

This purified Lingala, otherwise called Lingala ya Basango, meaning priests' Lingala, could not become the language of the street: "Beyond the countryside, Lingala ya Basango [Priest's Lingala] was doomed to the confinement of the church, the Bible, the various

religious publications, some news reports and sensitization campaigns, but never became the language of the street" (Wilson, 2012: 124). It was mostly used in literary domains and was related to education and intellectualism.

Lingala was brought to Leopoldville by the soldiers of the Force Publique during the colonial period (Wilson, 2012: 124). These soldiers were predominantly Bangala from the Equateur province. Wilson (2012) quoting the De Boeck (2004: 31) argues that "[f]irst looked down upon, it was mainly these soldiers who became the driving force behind the development of Lingala as the city's major lingua franca" (p. 124).

Lingala subsequently was spread and adopted in the central government, in the lowered ranked groups of soldiers in the army, and more importantly in the street of the capital city, Leopoldville. It turned out that Lingala was acquired as "[…] the mother tongue of generations of urban youngsters to come in Kinshasa." (Wilson, 2012: 124).

Wilson (2012) argues that Lingala in Kinshasa was mixed with French and other local languages that were spoken in the capital at some time before the independence to result in what is called Kinshasa Lingala today: "Just as the existing Bobangi was re-invented by expatriates into a 'new' language in the last quarter of the nineteenth century, the inhabitants of Leopoldville (now Kinshasa) would, in the years preceding independence, appropriate the 'new', albeit pidginized, Lingala, mix it with French and other vernaculars and make it fit for reflecting the realities of their city" (p. 124).

A controversial issue is on the genesis of the name *Lingala*. Did the early speakers of the language call it Lingala? If not, what was the language called and where did the name *Lingala* originate from? Was there any territory which could be identified as the local land of native speakers of Lingala?

Many specialists in Bantu languages have mentioned names such as Mangala, Bangala, Ngala, and Lingala to refer to a language or group of dialects that are spoken in the northern and northwestern area of the Democratic Republic of Congo (Yanga, 1980: 113). Guthrie (1966) refers to Mangala as the original term for Lingala. He (1948) refers to Mangala as a sub-Bantu lingua franca, which has two-class genders but lacks prefix agreement (p. 19). The Bangala literally translates as 'river people' was used in the 19th century, sometimes before the creation of Congo Free-State to different Bantu tribes, that lived along the Congo River. Their home habitat extended from Irebu, which is at the mouth of the Ubangi River, to the Mongala River.

These people spoke languages that presented a lot of similarities in terms of their linguistic features (Wilson 2012). Even though all of them spoke the Bobangi trade language, which at that time was the most prestigious language between Kinshasa and Irebu (Wilson 2012), they could still speak their different ethnical languages. The controversial origin of the word Lingala came from the confusion made by people living upstream of the Bangala in which Bobangi was mistakenly taken for language of the Bangala and therefore they called it 'Lingala' meaning 'language of Bangala' (Yanga 1980). It is at this point that the Europeans adopted and called the language Lingala. Lingala got more influence in the region when the colonial administration adopted it as a common language for the region (Yanga 1980).

Guthrie (1966) notes that the term *Bangala* is an error by Europeans who mistakenly prefixed ba- to the stem Ngala. Ngala does not bear any prefix. In fact, the nasal sound is already representative of a noun class. Such a term has been used to refer to a dialect of Lingala that is spoken in the village of Mangala by Boloki (Yanga, 1980: 115).

Guthrie (1966) claimed that the term 'Lingala' is an invention of the Europeans (p. vix). G. Van Bulk (1949, 1951) failed to find, during his two trips to the Democratic Republic of

Congo, people or tribes by the names of Bangala, Banangala, Mongala, or any local language by the name of Lingala. This finding led him to believe in the hypothesis of Lingala as a lingua franca but not as a tribal language with native speakers. He (1954), however, found most of the salient linguistic features of Lingala in Dibaale and Libinza (p.43). This doubt and skepticism on Lingala as an independent linguistic system lead to many speculations and questions on whether there were people who spoke the language as native speakers and on whether that supposed speech community of Lingala speakers disappeared as a result of the extension of its native speakers.

Yanga (1980) postulates that the term Lingala might originate from the imitation made by native speakers of languages such as Libinza, Likoka, Lipoto, Lindoto, who referred to the prefix *Li-* as it was used in their respective languages (p.122). While Yanga (1980) admits that the major linguistic role that Bobangi played in the development of Lingala, he rather suggests that the term *Lingala* existed prior to the period when Bobangi played such an important role (p. 122).

Yanga supports his claim on the origin of Lingala on the basis of evidence from both Bantu and non-Bantu languages. He (1980) argues that the linguistic contacts between Bantu and non-Bantu languages resulted in the birth of Lingala prior to the arrival of missionaries (p. 122).

The origin of Lingala and its nature as either a creole or a semi-creole (depending on the authors) helps to show in terms of language acquisition that all the languages are acquired in the same way and that even creole-based linguistic systems may also be subjects to transfer.

As previously mentioned, Lingala underwent some major external linguistic modifications which were the results of codification and lexical expansion as the Roman Catholic missionaries and other colonial linguistic experts worked on the codification of Lingala and expanded its vocabulary and syntax for the purpose of teaching and preaching (Fisherman 1974,

Yanga, 1980:122). The variety of Lingala that derived from the work of Roman Catholic missionaries and the colonial language experts is today called the literary Lingala.

Literary Lingala is used in school and church. It is also the variety that is used in print since it is associated with school and literacy. Most books and school manuals in Lingala are written using the literary variety. It is unconditionally the variety that missionaries used when translating the Bible and the New Testaments into Lingala (Yanga 1980). The contribution of the government and missionaries to the expansion of Lingala is of great importance. For instance, in the year 1908 the government sponsored the writing of many dictionaries and grammar books. Around the 1915, missionaries were involved in the translation of doctrinal liturgical and biblical texts into Lingala (Fabien, 1983: 173-174).

In their mission of Christianizing the colony, missionaries adopted to learn the local languages, of which Lingala was a part and endeavored to encode its linguistic system by moving from the descriptive treatment of the language to the prescriptive control of the language (Fabian, 1983: 177). The missionaries contributed in the development of Lingala by classifying and standardizing it and the other three regional lingua francas. They expanded the lexicon and the grammar of Lingala (Fisherman 1974, Yanga 1980: 122). This improvement aimed at using the local languages for literary functions. Fabian (1983) says "[s]uch interventionary measures also suited the colonial establishment's desire to make the vernacular languages suitable as media of supraregional communication in the domain of commerce, industry, administration, and education" (p. 180). The primary goal of the missionaries' involvement in local languages of wider use was to communicate with the local people in their native languages. Hunt-Johnson (1985) notes: "Protestants believed in using the mother tongue of their congregants and generally learned the language spoken by the greatest number of people living near the mission station" (p. 28).

On the other hand, Catholic missionaries used the lingua franca that was spoken in region to a greater extent than the Protestants. They did so in order to reduce the burden of learning a new language whenever they were moved to a different mission within the region where the lingua franca was spoken. Yates (1980) argues that "[t]he presence of people from other ethnical groups who were serving either in the army or in the public administration also urged Catholic missionaries in using the established lingua franca in the area for effective communication" (pp. 268-69).

This adoption of the lingua franca by missionaries—catholic as well as protestants—contributed in the rapid spread of Lingala in the country. This is justified by the fact that missionaries were very influential in different parts of the country and their use of the local lingua franca gave an impetus to Lingala. However, the adoption of Lingala by missionaries was not the only factor that contributed to the spread of Lingala; by 1903 Bangala spread Lingala in the colony through the occupational jobs as militia, servants, and interpreters who accompanied explorers throughout the country (Hunt-Johnson, 1985: 32). The adoption of Lingala in the army as language of communication also helped to spread Lingala in all the regions in the country. This decision was motivated by the fact that Bangala were a majority in the Free State's army.

Some internal conflicts of the missionaries over which language to adopt for the colony favored the spread of local languages as well. For instance, the conflict between the Flemish-speaking Belgian missionaries and Walloons over the use of French promoted the expansion of the local regional lingua francas in general and that of Lingala in particular (Hunt-Johnson 1985). Also, as Hunt-Johnson (1985) put it: "Missionaries, for their part, continued to believe that the use of French was ineffective for evangelization and generally inappropriate to

their goals" (p. 32). These factors could largely explain how Lingala found its rapid spread and development in the colony.

Some important decision of the administrators of the colony also contributed to promote the use of local languages in different parts of the country. Such decisions were taken in the context of the language of instruction in rural areas. Some laws also opened the possibilities of using local languages in formal settings such as schools. Such an example is the case of the fundamental law of the colony in 1908 which encouraged the spread of Lingala in the colony. The colonial charter of 1908 recognized both French and Flemish as the colony's official languages. This law however, did not put any restriction on the use of other languages (Hunt-Johnson 1985)

In 1929, the government decided to use native languages in rural schools while French had to be taught in schools located in urban centers (Yanga 1980). In 1948, local vernaculars and/or regional lingua francas were commonly used as languages of instruction in missionary schools following the policy of a new curriculum (Hunt-Johnson 1985). In most cases, regional lingua francas were taught as required school subjects and European languages were banned in rural schools (Hunt-Johnson 1985). These language policy decisions and the colonial attitude of Catholic missionaries as opposed to that of Protestants on the use of French promptly helped to the spread of regional lingua francas in general and to that of Lingala in particular.

The most influential factor in promoting Lingala may have been that Lingala is a widely used language in Congolese popular music (Bokamba 1976). Thus the creation of local recording companies and the commercialization of Rumba (Bokamba 1976), which is sung in Kinshasa Lingala, consistently encouraged the spread of the language throughout the country as Congolese Rumba is played at all the local parties and celebrations. Congolese popular musicians have played a significant role in the spread of Lingala, particularly Kinshasa Lingala. Congolese

popular musicians are pop stars with great fame and are always subject to imitation. Therefore, the fact that the youth would like to identify with them is instrumental in spreading the popular dialects of Lingala, new coinages and neologisms. Young people who are able to properly imitate their idols become famous amongst their peers (Wilson 2015).

After an attempt in 1974 to promote Lingala as the only national language (see, for instance, Bokamba 1976), Congolese educational specialists and linguists suggested to use the four aforementioned national languages in the school system as languages of instruction in their respective provinces as was dictated by the predominance of use of these languages as regional lingua francas. The policy (Ndoma 1977) was implemented only in elementary school where the national languages have henceforth been used as languages of instruction (Bokamba 1976).

There were not only positive statements in favor of local Congolese languages. There were also people who thought that multilingualism in the Congo would be a hindrance to its socioeconomic development. De Jonghe (1933) for instance was one of those who, paraphrased by Hunt-Johnson (1985) claimed that "[t]he government would do well to encourage their harmonious development with a view to eventually choosing one of them (Lingala/Swahili/Tshiluba/Kikongo) as the national language" (p. 37). Others, on the other hand, agreed on the proposition of the Congo having one national language while they disagreed on which language should serve as the sole national language.

De Jonghe (1933) for instance, opted for the selection of Tshiluba as a national language. His choice was motivated by the linguistic distribution of Tshiluba during that period. Hunt-Johnson (1985) argues: "It [Tshiluba] was a language in widespread use in the Kasai region, spoken by a number of homogenous Congolese groups who were 'endowed with a very high vitality'" (p. 38). Polome (1968) however, mentions that the government feared the adoption of

Swahili as a national language because of its spread outside the Congo's borders which they thought could seriously threaten the integrity of the colonial territory (p. 30). However, the free movement of people in the region encouraged and supported the spread of the four regional languages in the Congo (Hunt-Johnson 1985).

After the Second World War, the four regional lingua francas were tremendously spread in different urban cities in the country. This spread was motivated by massive rural exodus by people of different ethnical groups. Therefore, only a regional lingua franca within a particular urban city would facilitate social interaction across people of different ethnical background. As a result, the idea to favor and promote a regional lingua franca to the status of a national language over the other three became inefficient and unrealistic (Hunt-Johnson 1985).

The linguistic situation of Congo changed with the independence of Congo in 1960 and the advent of Colonel Mobutu in power five years after the independence as a result of a military coup. Mobutu implemented his political philosophy of 'authenticity', which instilled pride in Congolese and their country and helped them to overcome feelings of inferiority toward the European culture (Bokamba, 1976: 25). Hunt-Johnson (1985) argues: "Authenticity has also had an important influence on language planning in the post-colonial period" (p. 40). He (1985) further admits that "[i]t has not been powerful enough to eliminate French as Zaire's official language, nor to move the country any closer to choosing one of the four national languages as its replacement" (p. 40).

Lingala's status was especially high during the Mobutu regime (24 November, 1965 to 17 May, 1997) and in the aftermath thereof. During this period Lingala spread to other provinces and threatened the other national languages in their role as lingua francas (Wilson 2015) because Mobutu, who was the president of Zaire (which is now the Democratic Republic of Congo)

was a Lingala speaker and a native born of the Bangala area in Equateur. During his regime many Lingala speakers were appointed to political positions due to the fact that they were from a Bangala area in Equateur (Wilson, 2015 Such favors were also observed in the Special Presidential Division (Division Speciale Presidentielle, DSP in short). DSP was a particular case in which the Special Presidential Division soldiers were recruited among the descendants of Bangala speaking culture and Ngbandi tribe who were the most privileged making this presidential force a predominantly monoethnical organization (Immigration and Refugee Board of Canada, Zaïre). These factors granted Lingala a particular status amongst the four national languages which was furthermore promoted by the fact that the national army and the police used Lingala as the language of command until 1997 (Wilson 2015). This is attested in Wilson (2012): "Lingala in Congo has been associated to the army for decades. This association does not only date back to the Mobutu era, but is rooted in the late nineteenth century. Even during the early days of the Congo Free State, the Force Publique, or colonial army, recruited its soldiers in the area of the Haut-Fleuve, later to be renamed Equateur Province (Gondola 1997: 66)" (p. 38).

Lingala is spoken alongside other local ethnical languages in a number of provinces. Most importantly, Kinshasa Lingala is used as a lingua franca in the capital city of Kinshasa, which allows people to establish successful inter-ethnical communication among people of different ethnical groups. This variety of Lingala is the most prestigious one since Kinshasa Lingala is a language of the city and most people in the Democratic Republic of Congo want to live and speak and sound like Kinois (inhabitants of Kinshasa) (Wilson 2012, 2015). This is viewed in Wilson (2012) when she claims that "Lingala is undeniably linked to pride and prestige, and thus speaking it is a way to embody that pride and prestige" (p. 41). The national prestige of Kinshasa Lingala in the Democratic Republic of the Congo is further attested

in Wilson (2015) who, contrasting the linguistic values and reputation of Lingala and Swahili argues that "[…] Swahili is also linked with backwardness, ignorance and gullibility, while Lingala is the language of the capital and of Kinshasa's cultural and musical scene, emanating prestige, urbanity, worldliness and street wisdom" (p. 296).

In a sociolinguistic study of the Urban Youth Language (UYL) in Kisangani, which is the third largest city in the Democratic Republic of the Congo, Wilson (2012) was able to interview some Kisangani youth on the status of both Swahili and Lingala in Kisangani, and her findings are fascinating. Most youth in Kisangani admitted that Lingala procures with it social qualities such as prestige, self-respect, and self-esteem. Wilson (2012) clarifies it in these words: "If positively loaded, i.e. when vanity turns into pride, vanity is a quality to be acquired. In this sense, pride is not linked to arrogance, but to prestige, personal development, self- respect and self-fulfillment. Lingala helps, as such, to boost one's self-esteem and serves as proof that one knows about the world" (p. 42).

The forces of the economic principles of the market also play a certain role in the choice of the language of communication in Kisangani. Wilson (2012) argues: "Guided by the economical principle of the least possible effort to ensure a maximum communication, (Swahili) speakers generally choose, in the center of town, Lingala above Swahili" (p. 48). Peter, one of her informants, " […] regrets the loss of Swahili among youngsters admitting that 'Et même si tu as envie de parler et tu vois, ah non, ttt, même pour faciliter les choses c'est le Lingala'" (p. 49). (And even if you feel like speaking [Swahili] and you see, ah no, ttt, even to facilitate things, it is Lingala (Translation by Wilson 2012).

This same reality is observed when Kisangani youth conduct business in the street. It still is Lingala which is dominant as the language of trade and bargaining. Wilson (2012) argues

that "[w]hen it comes to small transactions that take place on the side of the road such as: filling petrol, changing money, buying a cigarette and ordering a taximan or toleka" (p. 49) it is always Lingala which takes precedence as language of communication between the buyer and the street vendor.

The University setting is one of the intellectual settings which does not make an exception to the rule. Lingala has succeeded to penetrate this milieu and to dominate in the communication of the students. Wilson (2012) argues that "[t]he University of Kisangani attracts students and lecturers from all over the country. Both alike agree that Lingala is more commonly used among students on campus than either Swahili or even French (the courses are nevertheless given in French)". She further notes that "[i]t is quite significant to think that even in the context of the university, Lingala is winning ground to French, the language of the Congolese intellectuals" (p 50). If in the past it was French which dominated in intellectual milieu as language of communication among students with diverse linguistic background, today it is shown in an area which is not historically Lingala-based that Lingala is replacing all the other languages including the most prestigious French. This replacement shows at which extent Kinshasa Lingala is loaded with sociolinguistic prestige.

This prestige which goes beyond the limits of the capital city Kinshasa confers Kinshasa Lingala a soon-to-become status that Bokula (2005) calls a super-vehicular language in the Democratic Republic of the Congo (p. 160; Wilson, 2012: 53). Wilson (2012) commenting on the point by Bokula (2005: 160) says: "After Independence, several factors – modern Congolese music, audio-visual media, education, commercial activities, evangelization campaigns and the like – have contributed to the development of the vehicular languages that imposed themselves as dominant and commonly used languages. In fact, in practice, some languages exercise more

functions than others and the relation between the forces could bring about profound changes in the development of their vehicular role" (p. 53). She (2012) continues arguing that "[t]his new process of the sociolinguistic development could gradually lead, on the long term, to the emergence of one super vehicular language that would become the only national language likely to carry the national signature and identity in a wide range of domains of use" (p. 53).

Furthermore, this national signature and identity is attested beyond the borders of the Democratic Republic of the Congo. In fact, when most Congolese meet abroad the first language they use to interact with one another is Lingala (Bokula 2005). Lingala confers one the identity of Congolese and the right to belong to Congo as a nation. This is even the reason why most Congolese cast doubt on the nationality of the current president Joseph Kabila because he cannot speak Lingala, but only the variety of Swahili which is spoken in Tanzania.

Wilson (2012) reinforcing this identity admits the point by Blommaert and Meeuwis (1998) that "[e]ven beyond the borders of Congo, in the Congolese diaspora, Lingala serves the purpose of communication between [Congolese] of different regional origins" (Blommaert and Meeuwis 1998: 84; Wilson, 2012: 53). The influence of Lingala is observed through its adoption by some foreign citizens such as Chinese living in some Chinese cities where Congolese do business with them (van Reybroeck, 2010: 577). Wilson (2012) says, "[i]n Guangzhou, in South East China, not only the Congolese diaspora speaks Lingala, as van Reybroeck suggests (van Reybroeck 2010: 577), but there are even local Chinese merchants who, while they have never set foot in Congo, speak Lingala fluently as well (van Reybroeck 2010: 570). Does Lingala carry the national signature and Congolese identity beyond the borders of Congo? (p. 54). The answer to this question is obvious and the spread of Lingala beyond Kinshasa

and even beyond the borders of the Democratic Republic of the Congo is no longer something to prove.

3.2.2 The Sociolinguistic Status of Kinshasa Lingala in Kinshasa and the Democratic Republic of Congo

Kinshasa Lingala is one of the languages to which Kinshasa new born are exposed in terms of language acquisition. The sociolinguistic status of Kinshasa Lingala varies depending on whether one situates himself at the macro level of the society or at the micro level (Palma 2008).

The micro level here should be considered as the societal level in which interaction at the nuclear family and interaction amongst youth of the same age or generation who live in the same neighborhood but come from families with different linguistic and ethnical background (Palma, 2008). Starting with the status of Lingala at the micro level, I first discuss the status of Kinshasa Lingala in a social setting where the interaction takes place between the father, mother, and their children and/or closer kin. In nuclear families in which both the father and mother speak Kinshasa Lingala, it is likely that the children also acquire it. Lingala acquired in this case has the status of a native language. It is however determined that Kinshasa Lingala is usually not acquired as the only L1but rather might be acquired simultaneously with one or two other local ethnical languages (Palma 2008).

Most Kinshasa Lingala speakers are multilingual with two or three simultaneous L1 or native languages (Palma 2008). This form of multilingualism is mostly observed when there is compartmentalization of language functions at home. Imagine the case of a nuclear family where both parents grew up in a bi- or multilingual family and only share some but not all of the languages in their repertoire; e.g. the father may speak Kinshasa-Lingala and Tshiluba whereas the mother may speak Kinshasa Lingala, Kitetela, and Tshiluba (maybe she spent part of her childhood in Kasai where Tshiluba was spoken as a lingua franca). Language use is compartmentalized in such

family, and in most Kinshasa families (Mutambwa 2011), in that the first parent, the father, uses Tshiluba exclusively when speaking to his mother who speaks only Tshiluba. However, he may speak Kinshasa-Lingala, Tshiluba, and French to his wife and either French or Kinshasa Lingala with his children. A similar dynamic may apply to the mother: She may interact with her children in Kinshasa-Lingala, French, Tshiluba, and sometimes Kitetela. She uses Kitetela when speaking to her mother but Tshiluba when speaking to her mother-in-law; while she may use French, Tshiluba or Kinshasa Lingala when speaking to her husband. Language choice may depend on the topic, mood and circumstances under which a given interaction takes place.

In close-knit families, language choice patterns become even more intriguing when further family members with additional language repertoires are part of the children's socialization. Imagine both grandmothers live with the family and speak their respective ethnical language to their grandchildren. In out hypothetical—yet quite representative family—the father's mother uses Tshiluba while the mother's mother speaks Kitetela when speaking to the grandchildren. When the grandmothers communicate with each other they may use Tshiluba as their shared ancestral language and as a dominant language that is used in some regions (e.g. Kasai) as a lingua franca.[1]

It is obvious that in such a family, children would in theory acquire more than one L1 simultaneously. My illustrative family case presents an instance of the exposure to more than four languages during childhood. It is the frequency of exposure and use that determines the level of proficiency in the future. However, most parents in Kinshasa do not encourage or support the learning of ancestral languages. Negative attitudes towards ethnical languages are prevalent as people associate the latter to village lives in remote rural areas. The result is alarming since most

[1] Only the mother's mother speaks Kitetela.

of those languages are not being passed on to the younger generation with the result that they are slowly dying (Mufwene, n.d.; 2004). If in the aforementioned hypothetical family Kinshasa Lingala and three additional languages are spoken side by side, in a growing number of families only Kinshasa Lingala is spoken.

A further domain at the micro level context is the domain of the children's interactions with their friends which includes cross-ethnical interactions. Children who come from different ethnical groups interact in Kinshasa Lingala. The majority of them communicate in Kinshasa Lingala while a few may choose French. Even children who come from different nuclear families with the same ethnical background use Kinshasa Lingala as the norm; switches to their ethnical languages are almost non-existent (Mufwene n.d.).

Three reasons motivate this choice. First, they do not use their ethnical language because most often they lack linguistic confidence in the language (Mutambwa 2011). Second, they feel shame to interact in their ethnical languages since this may turn subject of mockery among their friends. Third, they most often lack linguistic and communicative competence in the language (Mutambwa 2011).

Parents also intervene at the micro level of communication beyond their respective nuclear families when they interact with their neighbors and close community members. Parents of different ethnical background tend to use Kinshasa Lingala for social interaction among the community. However, in case both parent and neighbor know and are fluent in one of the ethnical languages, they may on occasion use it as a means of communication amongst them to ascertain their social and ethnical identity and to reinforce their social ties (Phenice and Griffore 2000).

Overall, Kinshasa Lingala plays a major role at the micro level of social communication in Kinshasa. It is predominantly used for social communication at any micro level

of communication. As such Kinshasa Lingala dominates all other languages as primary input during language acquisition and this constitutes the main reason for the attrition of ethnical languages (Mutambwa 2011).

The macro level considers Kinshasa in its entirety as a geo-political region. It considers the city with its linguistic diversity and with its people from all the ethnical groups in the Country. This social stratum includes social interaction at the public places such as schools, hospitals, market places, police stations, places of worship, radio and TV stations, and other professional settings in Kinshasa.

Accordingly, Kinshasa Lingala plays different social functions in Kinshasa depending on the circumstances and the public setting. It is used as the language of bargaining at commerce and market places in Kinshasa; it is a code, which determines the price of the goods that are sold by street vendors (Nkongolo 1998). During the Mobutu regime, people who spoke Kinshasa Lingala with an accent were not treated with consideration. The corrupt police during Mobutu regime used the linguistic cues to identify people from rural areas in order to 'fleece' their business money from them (Nkongolo 1998). Similarly, today's merchants and street vendors tend to demand higher prices from customers who are not able to bargain in Kinshasa Lingala. In particular customers who speak Swahili are associated with the new regime and are identified as rich (Makomo, 2012: 47).

Kinshasa Lingala has the status of a lingua franca not only in the small commerce but also in many places of worship. For example, young preachers and evangelists in Kinshasa tend to use Kinshasa Lingala in their sermon and preach, while occasionally mixing Kinshasa Lingala with Literary Lingala in which the Bible is written (Edema 2006). However, in 2000 a

Bible translation in the common Kinshasa Lingala appeared and it has since become common practice to hold the entire service in Kinshasa Lingala.

Although French is the official language in the Democratic Republic of Congo, Kinshasa Lingala is used side by side with French in different administrative offices in Kinshasa (Ilunga 2005). French is the only language that is allowed to be used in written administrative correspondence, however, Kinshasa Lingala is used in public administrative offices in the hallways and for informal interaction. Depending on the degree of relation between a supervisor and the supervisee, it is not surprising to see the former giving instructions to the latter in Kinshasa Lingala.

Schools also commonly use Kinshasa Lingala in communication with the parents of the students. While it is customary that parents interact with school authorities in French for their children's school matters, school authorities use Kinshasa Lingala in the teacher-parents conference when parents are not able to converse in French. The use of Kinshasa Lingala is thus rationally motivated to secure effective communication (Makomo, 2012: 50) and to observe politeness rules as authorities want to save parents' faces and to avoid embarrassing parents who cannot express themselves in French. Makomo (2012) refers to the resolutions of the first national seminar of Congolese linguists arguing that "Il [Le premier Séminaire National des Linguistes du Congo] définit la promotion des langues congolaises comme un effort pour que les langues congolaises occupent dans la vie nationale la place qui leur revient. L'objectif général de cette promotion, c'est l'affirmation de l'identité culturelle sur le plan linguistique" (p. 50). [My translation: It [the first National Seminar of Linguists of the Congo] defines the promotion of Congolese languages as an effort for Congolese languages to occupy their rightful place in national life. The general objective of this promotion is to affirm the Congolese linguistic cultural identity]. One way to express and affirm the Congolese identity was by allowing Congolese parents to

express themselves in a language they speak better and in a language of their own choosing. Such a language is Kinshasa Lingala in the context of Kinshasa.

Schools in Kinshasa are categorized as not so good, average, and better schools (Kabala 1989, Kabasele 1990). Most of 'the not so good schools' are characterized, among other criteria, by the use of Kinshasa Lingala at school. This entails that students may use Kinshasa Lingala to interact with other students at such schools where they may also use Kinshasa Lingala to communicate with their teachers and/or school authorities without fear of being punished or of transgressing school rules (Kabala 1989).

The use of Kinshasa Lingala at a school setting has always been stigmatized. School authorities, teachers, and students' parents altogether favor the use of French at school rather than the mix of both French and Kinshasa Lingala (Règlement d'ordre intérieur, Lycee Motema Mpiko). The use of Kinshasa Lingala at a school confers a negative reputation to the school. However, it is also true that Kinshasa Lingala has forged itself a preferable position among the languages that are used at some school setting, mostly at 'Not so Good Schools' (Kabala 1989, Kabasele 1990).

National sports teams may use Kinshasa Lingala as the language of interaction among the athletes, e.g. in the national basketball team for which most athletes are recruited locally (Makomo 2012). Even in the national soccer team—with ninety-five percent of the players living abroad and barely speaking it—Kinshasa Lingala is still used alongside European languages such as French, English, German, etc. (Ilunga 2005)

In the national army and the police, the linguistic situation is similar. All police stations, including the headquarters of the police, which are established in Kinshasa, use Kinshasa Lingala as the language of command (Tshibanda n.d., Buscher, D'Hondt, and Meeuwis 2013). Any criminal hearing at the police station or in a court for people who are not that educated is done

in Kinshasa Lingala. The article 18 of the constitution (2006) of the DR of Congo stipulates "Toute personne arrêtée doit être immédiatement informée des motifs de son arrestation et de toute accusation portée contre elle et ce, dans la langue qu'elle comprend." [Article 18: Everyone arrested shall be immediately informed of the reasons for his arrest and of any charge against him in the language he understands]. In addition, the article 88 of the Congolese Criminal Code (2004) says "L'article 88 du Code pénal congolais (2004) autorise l'emploi de toute langue prescrite par la loi, ce qui suppose les quatre langues nationales et la langue officielle." [My translation: Article 88 of the Congolese Penal Code (2004) authorizes the use of any language prescribed by law, which presupposes the four national languages and the official language]. These articles confer to Congolese the constitutional right to use one of the national languages, among other languages, including Kinshasa Lingala. Crime investigations are commonly conducted in Kinshasa Lingala; witness statements and affidavits may be written in Kinshasa Lingala alongside French rather which is the established language for drafting administrative documents (The DR of Congo 2006 constitution, article 18).

Definitely, Kinshasa Lingala nowadays competes with French, which is the official language in most of the domains of life of the capital city Kinshasa (Nwembwe et al. 2004, Ilunga 2006; Makomo, 2013: 53). Ilunga (2006) discussing the relatively recent findings of the study by Nyembwe et al's (2004) postulates "Une étude récente constate que sur le plan du status, le français occupe une place de choix (la première place) dans la situation sociolinguistique du pays. À ce niveau, la langue française a une effectivité d'usage estimée à 77,85 % devant les langues nationales. Quant à son corpus, c'est-à-dire en considérant les paramètres de sa réelle utilisation par les Congolais (mode d'appropriation, consommation et production, vernacularisation et véhicularisation, compétence linguistique et communicationnelle), on s'aperçoit que le français se

fait subtiliser sa position dominante par les langues nationales" (pp. 93-94). [My translation: A recent study finds that in terms of status, French occupies a prominent place (first place) in the sociolinguistic situation of the country. At this level, the French language has an estimated effectiveness of 77.85% in front of national languages. As for its corpus, that is to say, considering the parameters of its real use by the Congolese (mode of ownership, consumption and production, vernacularisation and vehicularization, linguistic and communication skills), it is found that French is dominated by national languages]. Referring to its sociolinguistic status, Kinshasa Lingala is used as a lingua franca at the macro level of the city in all the domains of public life while it is used as language of social interaction in nuclear families as well as the language of socialization in the residential areas of Kinshasa. The questions I raise is whether KL can equally play the same role in terms of transfer as French in the context of the DR of Congo. Could its sociolinguistic status limit or favor its role in structural transfer in the acquisition of English as a third language?

Even if Kinshasa Lingala has gained some prestige over time, it does not yet provide the same amount of social mobility as languages which allow access to a global economy. Kinshasa Lingala is therefore not widely used or valued in the formal job market (Zaline 2001). This could be attributed to the historical reasons that Zaline (2001) discusses in this way: "The language of the colonial rulers—the medium through which [the] schooling was rendered—was recognized by many colonized people as an important, and perhaps the only, vehicle for individual advancement in the society" (p. 2). More importantly though, the global economy is mainly accessible through languages like English, French, Chinese to name but a few (Zaline 2001).

However, in Kinshasa and the local economy the situation may be changing and Kinshasa Lingala may be on its way of becoming a resource in the job market. There are cases in the world of the modern Congolese music where local bands hire spokespersons who speak

Kinshasa Lingala (Wenge Musica Maison Mere; Wenge Musica BCBG; Cartier Latin). There is also a growing number of jobs related to interpretation and translation which require the mastery of Kinshasa Lingala alongside a European language (CPI web page, MONUSCO web page: job opportunities).

Kinshasa Lingala constitute a threat to local ethnical languages in Kinshasa. This threat is mainly observed in low class families where the situation is different. It is documented that Kinshasa Lingala is the primary responsible for the ethnical language attrition (Makomo, 2013: 53). Like French in the upper class families, Lingala does the linguistic cannibalism to most of the ethnical languages that are spoken by some parents in Kinshasa; as a result, Kinshasa youth completely fail to acquire ethnical languages and Kinshasa Lingala ends up being their native language. This point is illustrated in Makomo (2013) who says "Ces langues [ethnical languages] sont utilisées surtout en milieux ruraux pour l'intégration des membres. Mais, dès que ceux-ci quittent leur communauté, ils préfèrent privilégier la langue nationale en usage dans leur région estimant jouir ainsi d'un peu plus de prestige dans leur communauté" (p. 53). [My translation: These languages [ethnical languages] are used mainly in rural areas for the integration of members. But as soon as they leave their community, they prefer to privilege the national language in use in their region, considering to enjoy a little more prestige in their community]. Supporting Mufwene' s (2001) logic as presented in the ecology of multilingualism that I paraphrase as follows: A language X of a higher sociolinguistic status may be a threat to a language Y if and only if the latter is of lower sociolinguistic status and if and only if both languages in competition share the same sociolinguistic scope of operation (p. 18).

Kinshasa Lingala poses a serious threat to the rest of ethnical languages in Kinshasa because they compete in the same sociolinguistic domain of use. The threat of Kinshasa Lingala

to the ethnical languages is mostly observed within lower class families where the latter is used for social interaction within the nuclear family. The choice of Kinshasa Lingala over ethnical languages in these families is dictated and or motivated on the prestige ground. Makomo (2013) postulates "Ces gens préféreraient parler en langue nationale, face à leurs frères parlant la langue maternelle, s'estimant ainsi supérieurs à ces derniers" (p. 53). [My translation: These people would prefer to speak in the national language, in front of their brothers speaking the mother tongue, considering themselves superior to the latter]. Nkongolo (1998) has a different opinion ; he argues "Nous signalons d'autre part que le nombre de locuteurs des langues minoritaires (autres langues) décroît en faveur de celui des locuteurs des 4 langues nationales (surtout des deux super langues nationales), principalement dans le milieu urbain, où se développent davantage les langues nationales (raisons socio-économiques et socio-culturelles, plus grand brassage ethnique, etc.)" (p. 5). [My translation: On the other hand, we note that the number of speakers of minority languages (other languages) decreases in favor of the speakers of the 4 national languages (especially the two national languages), mainly in the urban environment where the national languages are getting more and more developed (for socio-economic and socio-cultural reasons, greater ethnic mixing, etc.)]. Nkongolo evokes the socio-economic, socio-cultural, and ethnic mixing as the main reasons that motivate the choice and preference of the national languages such as Lingala over the ethnic ones in urban settings.

Likewise, in families in which parents are uneducated or received little education, the use of the local language(s) prevails in such families. This is unfortunately the predominant situation in most Congolese families. Children from such family experience, in general, a lot of difficulties in terms of school integration. The linguistic difficulties that are the result of a language other than the one that is used at home creates a break between home and school and renders the

transition very difficult. However, families with less educated parents sometimes escape this hardship under some conditions.

3.3 French

3.3.1 Historical Perspective

Belgians introduced French in the Democratic Republic of Congo through colonization during the King Leopold era, which started in 1885 (Skattum 2009); hence the variety of French that is spoken in the Democratic Republic of Congo as the official language is the Belgian French.

Leopold decided to adopt French as an official language in the Democratic Republic of Congo because he was a native French-speaking Belgian citizen (Hunt-Johnson, 1985: 24) and "[t]he multilingual character of the Congo Free state's inhabitants and settlers necessitated some sort of official language policy" (p. 24). French was thus adopted to facilitate communication between the Congolese and the European settlers. Hunt-Johnson (1985) reports that "[t]he Educational Act of 1890 and the 1906 concordat between the Vatican and the colonial government required that a certain amount of French be taught to Congolese school children" (p. 24).

Unlike French colonialists who advocated a policy of assimilation to French civilization and language, the Belgians implemented a segregational educational system (Skattum, 2009: 173). During Leopold era between 1885 and 1906 there were five kinds of schools.[2] French was used as a medium of instruction only in vocational schools in which clerks were trained for public administration. Skattum (2009) argues that "French instruction was given only to those who needed it to work for the colonial administration" (p. 173). This decision was based on the fear that effectively training many Congolese and making them very competent in French would boost

[2] Yates (1980) mentions the colonies scolaires that were owned by the state but operated by catholic missionaries, vocational schools that were owned and run by the state, mission schools, commercial companies-owned schools and independent non-subsidized Protestant mission schools (p. 258).

their pride and then they would consider themselves overqualified to work as manual labor and entitled to the same privileges and rights reserved for Europeans. Yates (1980) notes that "[t]o have all Congolese study French was to risk creating a generation of declasses and anarchists, and to foster an anti-colonial outlook among the populace" (p. 272). In 1929, the government decided that native languages be taught to schools except in urban centers where French was taught. This language policy limited learners' lives to the present and did not project that due to opportunities and social mobility people living in rural areas would, in the future, move and need French as much their counterpart learners living in urban centers. The segregationist aspect of the teaching of French marked a separation between the indigenous people.

In all the rest of schools, French was merely taught as a required school subject while the main emphasis lay with the teaching of professional skills, which were in high demand in the local job market in different urban areas. The little of French that catholic schools taught was sparked by a rivalry between them and the Protestants. Each system wanted to do better in the education of Congolese in order to establish a certain reputation and to attract converts (Yates 1980). This benefitted the Congolese people because education and the mastery of French became the source of social mobility in the country.

Generally, though, missionaries were reluctant to teach French because most of them spoke French poorly and were not at ease teaching it. In fact, Catholic missionaries were from the Flemish-speaking Belgian communities while Protestant missionaries were from England. Hunt-Johnson (1985) lends support to this claim by postulating that "[a]nother factor militating against the teaching of French was the missionaries' inability, reluctance or refusal to speak French themselves" (p. 27).

In fact, the Education Act of 1890 and subsequent legislation granted Flemish the status of a second official language of the colony (Ndoma 1977). The act was never successfully implemented since French dominated in all the areas of the colony life but the Flemish-speaking Belgians mounted a serious linguistic opposition.as they tried to suppress the use and teaching of French in the colony as much as possible. However, the French speaking Walloons discouraged the teaching and thus the spread of Flemish by persuading the Flemish-speaking Belgians that "[i]t was asking too much to the Congolese to learn two European languages" (Hunt-Johnson, 1985: 33).

As previously mentioned, the British Protestants were the other group of missionaries who militated against the implementation of French in the Congolese educational system. The British initially used English as the language of instruction, which was combined with local languages. This situation was seen as a serious threat by the government as the colony might become an English colony if English happened to spread all over the country. Yates (1980) argues that Protestant mission schools started to use French in their curriculum only in the early 1890's (p. 264) after governmental interference.

French was used as the language of the central administration and colonial law. Even if most administrative documents were translated into the four prominent local languages, the records were kept in French. According to Hunt-Johnson (1985), the language hierarchy consisted of "[a] pyramid in which French was used at the pinnacle, Lingala, Swahili, Kikongo, and Tshiluba in the center, and the hundreds of vernacular languages at the bottom" (pp. 33-34).

In the years 1948, Congolese demanded a better education (Ndoma, 1977: 203). In response a model of the educational system from Belgium was implemented in the Congo in which French was used as medium of instruction. The number of intellectuals increased during this period

and those évolués became very demanding in that they wanted a standard of living that approached those of Europeans. Hunt-Johnson (1985) claims that "[i]t was this group of Congolese, then, who rallied support among the populace for an end to colonial rule and became the Congo's new elite after independence" (p. 40). However, the local languages were still used as media of instruction. Bokamba (2007) argues that "[i]n 1958, French was made the exclusive medium in all government school, but the many colonial-supported church or mission schools continued the use of the vernaculars in the first three years" (p. 223). Two years after the independence, French was adopted as the only medium of education by the presidential decree in 1962 while Lingala, Swahili, Tshiluba, and Kikongo were promoted to the status of national languages and they were then taught as school subjects in their respective regions of dominance (Bokamba, 2007: 220).

French was kept as the official language of the Democratic Republic of Congo because it was the common language of the elite. Hunt-Johnson (1985) argues that "[t]he new elite favored keeping French as the official language not only for its value as a language of intercommunication, but also because it represented authority, status, and prestige, things which had traditionally been reserved for Europeans" (p. 41).

The reasons that motivated the maintaining of French as the official language was due not because of some good sociocultural or socioeconomic reasons, but it was mostly kept in order to ensure and guarantee the supremacy of the Congolese elite after the departure of colonialists; it justified the psychological dominance of the Congolese intellectuals over the non-educated group. The educated Congolese replicated the model of the colonial society whereby the educated people are entitled to all the socioeconomic advantages over the local non-educated Congolese.

However, French was now used as the language of education in the whole country and as the language of science and new technology. The use of French in the educational system as language of instruction in the post-colonial period in the Democratic Republic of Congo encountered a lot of opposition. Some Congolese elites in the early years of independence acted on their disapproval of the education reforms of 1961-63, which designated French as the medium of instruction at all the levels of formal education, and suggested that indigenous national languages be adopted for teaching at school (Bokamba, 1976: 36). The Congolese elites considered this reform as a case of linguistic cannibalism. They feared that Congolese local languages would die as a result of French dominance over the local languages. Besides, some linguists (Ntita 2008, Makomo 2013) were already aware of the learning difficulty Congolese would face in learning the content of different school subjects only in French. However, French is still valued in the Democratic Republic of Congo. It is considered as the language of social mobility even if at a certain point it is extremely challenged by English. It is associated with education, consideration and respect.

However, the status of French may be seriously challenged by the growing importance and spread on Kinshasa Lingala which is on its way to become an influential majority L1. There is nowadays a true hierarchical relationship among the languages that are spoken in the Democratic Republic of Congo. There is a bi-dimensional hierarchy whereby French is functionally contrasted with the rest of the Congolese languages on the one hand and on the other hand there are the four regional lingua francas which are contrasted with the rest of vernaculars. Calvet (1999) calls this linguistic hierarchy an “embedded diglossia”. Embedded diglossia refers to a diglossic situation that involves more than three languages whereby the highest embedded diglossia contains another diglossic situation (Skattum, 2009: 174).

French was in a true diglossic situation with the rest of Congolese local languages at the national level in the Democratic Republic of Congo. Whereas, the four regional lingua francas that is, Lingala, Swahili, Tshiluba and Kikongo are in a diglossic situation at the provincial level and thus function as high languages in their respective provinces vis-à-vis the local languages. This situation is not particular in the Democratic Republic of Congo since Skattum (2009) notes similar embedded diglossia in Mali whereby the regional languages, Fulfulde, Songhay, and Sininke have high status in comparison to the languages that are spoken in different respective regions (p, 175).

3.3.2 The Sociolinguistic Status of French in the D.R. of Congo

The Organisation Internationale de la Francophonie (OIF) reported in 2014 that 33 million, that is, 47% of the population of Congolese can read and write in French. Reporting on the Francophone situation in the capital city of Kinshasa, the OIF report states that 67% of the population in Kinshasa can read and write French, and 68.5% can speak and understand French. This OIF report failed to state the level of proficiency of these French speakers both in Kinshasa and the Democratic Republic of Congo. For instance, when OIF reports that 67% of Kinois (Kinshasa inhabitants) can read and write in French, it does not say how well is their reading or writing. The report also failed to determine the criteria matrix that was used in describing French speakers in the DR of Congo in general and in Kinshasa in particular. Even if the DR of Congo is the African Francophone country with with the most number of French language speakers, these 33 million of Congolese French speakers do not speak it as an L1. This entails that French in the DR of Congo is only spoken as an additional language (OIF report 2014).

French is mostly used for written communication in the public administration and official communication. Its use in the public administration is in competition with local languages

in oral mode of communication. Such is the case with Kinshasa Lingala in the capital of the Democratic Republic of Congo. It is customary to hear civil servants in the office and during normal time of work interacting in Lingala. This situation is also observed when civil servants interact with customers who come to solicit any administrative service from them.

Even if French is still an official language and a medium of instruction, most youth nowadays complete their high school with a lot of difficulties to express themselves in French (Makomo, 2013: 52). The written form of communication causes a lot of trouble not only to secondary school and high school students but also to people who have even completed their college or university studies. McLaughlin (2009) says, "From a linguistic point of view, then, the official ex-colonial language in many cases no longer has the allure it once had, and its hegemony is starting to erode" (p. 4). French is thus losing terrain in that it is spoken in only very official circumstances where the use of other languages would sound strange. Those are the 'domaines reservés du Français' where Lingala is never used. Such domains are diplomacy, national meeting and conferences with international partners, weekly official government meeting (Makomo 2013).

French is also in severe competition with English mostly in the job market. Nowadays, if an offer of job requires fluency in French, it is also customary that the mastery of English will be a preference. That is, mastery of English is always a criterion that makes a difference among the candidates. There are even job opportunities, which privilege the use of English over French in some international NGOs and institutions of the United Nations (Kasanga 2012, Mission de l'Organisation des Nations Unies pour la Stabilisation de la République Démocratique du Congo 'MONUSCO' 2014).

French and the four regional lingua francas are the most used languages that dominate the graphic environment/linguistic landscape (Calvet, 1994: 72) in the Democratic

Republic of Congo. This sociolinguistic environment is not the sole domain of predilection of the aforementioned languages. English also makes its appearance as an emerging language in the linguistic landscape of the Democratic Republic of Congo (Backhaus 2007). English finds one of its niches on the walls of businesses in advertising and on language school walls, and on streamers.

Sometimes French and the four regional lingua francas play in common a certain negative function to the rest of the vernaculars. Their higher status on the linguistic pyramid in the Democratic Republic of Congo confers them the characteristics of linguistic cannibalism (Makomo, 2013: 52). They endanger the local vernacular languages in big urban cities, which result in the vernaculars' attrition (Ntita 2008).

For example, people who were born in big urban cities or who joined big urban cities at an earlier age and whose parents speak a local vernacular language as an L1 generally fail to acquire their parents' ethnical language. This happens because of the strong sociolinguistic influence of either French or any of the four regional lingua francas in a specific region and at the level of nuclear families (Nkongolo 1998, Makomo, 2013: 53). Makomo (2013) argues that "le plus grand nombre des Congolais ne maitrisent aucune des langues Congolaises, qu'elles soient nationales ou maternelles" (p. 52). (My translation: The majority of Congolese do not master any of the Congolese languages, whether national or maternal). I support the point by Vigouroux and Mufwene (2008) who advise as follows: "A careful consideration of the linguistic ecology of individual situations" (Mclaughlin, 2009: 9). However, I partially consider and agree with the point by McLaughlin (2009) who mentions that "[i]n Africa, colonial languages like English and French are not responsible for language attrition, as illustrated in the example of the Seerer family in Dakar, described in section 2: Wolof, not French is replacing Seereer for the younger, urbanized generation" (p. 10).

I partially disagree with this view because of the specificity of the linguistic configuration in Kinshasa, in the capital city of the Democratic Republic of Congo. I believe that French is responsible for indigenous language attrition in families of upper class in which French is spoken as language of social communication in nuclear families (Mufwene 2001, Makomo 2013: 53). The same language, French, is also used as language of instruction at school and thus invades the linguistic space of local vernaculars and ethnical languages to the point that French suppresses and invades all the channels of communication in which the ethnical languages could be used by the upper class.

French is a threat to ethnical languages because it is of a higher status than all the ethnical languages in the Democratic Republic of Congo. Secondly, French is a further threat to all the ethnical languages since it is steadily spoken in upper class families with stable financial situation at the level of nuclear families (Kasanga 2012). That is, French is used as language of sociocultural interaction and everyday communication within those families. French suffocates the use of the ethnical languages whenever parents interact with their children in French when they could use an ethnical language instead. In most upper class families, French is in competition not only with Lingala but also and severely with the ethnical languages.

When French invades the ethnical language's linguistic space at the level of nuclear family, the result is language attrition, which announces the probable process of language death in the next generation since most youth in the urban areas do not or hardly ever speak their ethnical language. This point is illustrated in Makomo (2013) as he argues "Ainsi les langues dites maternelles se meurent progressivement de leur mort" (p. 53). [My translation: Therefore, the so-called maternal languages gradually die (of) their death].

The use of French in families is often related to the level of education of the parents. Families with parents who are educated and who are comfortable with French use the latter as a language of social interaction. Most often, young educated couples tend to impose French on their family in order to help their children acquire the language (Speciale 2013). When children in a family speak French this is always a matter of pride for the parents and the family. The use of French at a preschool stage facilitates the children's integration at school because the children are functionally native speakers of French.

If in the family there is a member who is educated and is comfortable communicating in French at home, this helps children in this family to acquire French. Otherwise, extreme effort on the part of the first born in the family and the perseverance of the parents may help the family to emerge and compete with children who were born of educated parents.

Poor families with basic vital needs as priority organize the daily activities of their children differently. Most often the family struggles for survival. Buying books and developing the culture of reading is not a concern for the family because they just cannot afford either. Rather, children have to help their parents e.g. with informal trade in the street in order to bring bread on the table late at night. While their richer peers are attending cultural and literacy activities at for example a French cultural center, children from poor families are constrained to help their parents in making money for survival or keeping an eye on the younger siblings when the parents are away from home. This unfortunate situation has its negative consequences on the children's education in the long run (The non-governmental organization network of street children and youth educators, REJEER 2011; The United Nations Children's Fund 'UNICEF', unicef.org, 2011).

Children who have been exposed to other socio-intellectual activities on an extra curriculum basis do very well in French while those who do not have such an opportunity struggle.

Fluency in French still makes a big difference in the job market. The mastery of French coupled with knowledge of English opens doors to socioeconomic access and opportunities. People who have been exposed to French at an earlier age possess a certain advantage when they go for a job interview.

Fluency in French grants a definite consideration in the Congolese society. Makomo (2013) admittedly argues that "En terme de prestige, c'est le français qui occupe la première place, mais le Lingala est souvent utilisé par les hommes d'affaires qui s'y réfugient face aux «intellectuels» parlant le français sans avoir les mêmes moyens qu'eux" (p. 53). [My translation: In terms of prestige, French occupies the first place, however businessmen often use Lingala when communicating with "intellectuals" who speak French but who do not have the same resources that they (i.e. the businessmen) have]. This situation is similar to what was observed during the pre-colonial and colonial periods. The local belief is that people are considered intelligent when they are fluent in French rather than in their own local languages. This attitude raises a concern on whether all the French speaking people are intelligent and whether all of them are educated because they speak French fluently. This inferiority complex is still observed in a number of Congolese intellectuals. Otherwise, this attitude can be justified by the quest by the Congolese elites to perpetrate and maintain their supremacy by the fact that they speak a foreign language and a language that is associated with education, literacy and intellectualism. Should it be noted that the choice of French as language of instruction was not dictated by the good will to promote the middle as well as the lower class to access privileges of the upper class through education. One of the unfortunate reasons why French was, however, favored over the local languages was to avoid any linguistic dominance and therefore hegemony of the local language that could have been chosen for instruction over the rest of local languages. Zaline (2001) supports

this view point when he states "It [Kiswahili in Tanzania] is one of the exceptions, since in most other African countries the selection of any one language over another would be seen as politically advantaging one group" (p. 157).

Such a 'philosophy' expresses selfishness on the part of the elite and lack of interest in the real concerns of the lower class people. McLaughlin (2009) points at and denounces the African intellectuals by claiming that "African elites have also played a role in perpetuating these inequalities by keeping power in their own hands and recruiting new elites from their own ranks, in a process that Myers-Scotton (1993) has dubbed elite closure" (p. 3). This is part of the disillusion that African people experienced after the independence. The father of independence and political leaders who fought to get independence from the colonial whites promised a better life to local people after the colonizers left the country. However, in post-independence period, people realized that their own local political leaders started to replicate exactly the carbon copy of what was the colonial society during colonization. Like the white colonizers, the local political leaders were entitled to all the privileges and hence inequality in all of its forms was and still is common in the life of Congolese.

The only way to strike the balance in the Congolese society is by adopting a model of language policy and language planning which will integrate the local Congolese languages in the educational system. The model must empower those local languages in order to compete with French in the job market, political and administrative sphere. However, because there is a conflict of interest between the intellectual elite who seek to maintain their supremacy in disfavor of the lower working mass, the latter category of the population must be totally involved in the fight to retrieve their linguistic freedom. They must fight in the same way as they do to improve their standing of living and in the same way as they do when they decide to eject a dictator from power.

Only social pressure from bottom up can change the mind of the elite and the government to adopt a responsible language planning which will grant equal chance to every single Congolese. This way of doing things will help to build a new Congolese society where not only children from financially stable families will have easy access to socioeconomic advantages while the rest are kept away from such advantages only because they do not speak good French, among other criteria. The quest to gain the linguistic independence is not an impossible mission. Numerous countries in the world including, for instance, Hong Kong and Malaysia in Asia have adopted to use local languages for instruction at school (Zaline, 2001:6).

3.4 English

3.4.1 Historical Perspective

English as a foreign language in the Democratic Republic of Congo occupies little linguistic space because of the presence of French, which is a strong competitor. As previously discussed, the latter is the official language of the Democratic Republic of Congo that dominates all the formal communicative functions in the life of the state while the informal linguistic space of communication is mostly occupied by the four regional lingua francas and the local vernaculars. Hence English finds little room of operation in the social interactions of Congolese at the macro or micro levels. It is however emerging in the job market where it is considered as a valuable intellectual asset for professional communication (Sesep 1990). It has become, at the job market, a sine qua non of job selection for the international NGOs and agencies of the United Nations and most English-speaking mining companies (Mission de l'Organisation des Nations Unies pour la Stabilisation de la République Démocratique du Congo 'MONUSCO', United Nations agencies, and International Non Governmental Organizations 'NGO').

After attempts by the Protestants missionaries to establish English as medium of instruction during the colonial period (see chapter III, section 3.3), English was officially introduced in the late1950's into the post-primary public school curriculum as a required school subject (Mbaya, 1983). During the same period, English for specific purposes was introduced into the academic curriculum (Mbaya 1983).

English was taught in high school with little motivation since the language did not have any direct influence in the lives of the Congolese, it did not have any tangible economic value in the job market. However, during 1980s the Congolese realized the importance of English in science, technology, academic, and scientific communication. Consequently, interest in teaching English in high school became more and more important. Some schools started to teach English in seventh grade yet officially English was to be taught from ninth grade. The teaching of the language was teacher-centered and the learning outcome was not that impressive (Bola 2001).

The students who were exposed to English could not grasp the importance of the language then since its relevance was not directly felt in their lives. However, with the gaining influence of English at the international level in business, international communication, and in the academy and at the local as well as international job market, Congolese felt the urgent need to learn and speak English fluently. This resulted in the changing of attitude from a negative to a strongly positive attitude to English. Therefore, the need to learn English resulted in the creations of many English language schools in main urban centers (Kasanga 2012).

Kasanga (2012) notes that "[b]etter English skills were now [i.e. 2012] seen as an added value in response to emerging needs beyond the much narrower function of accessing information and knowledge which EAP (English for Academic Purposes) embodies" (p. 50).

English (in 2016) is taught five times a week as a school subject from ninth grade up to twelfth grade. The program relies heavily on the teaching of the structure of English and thus all the other basic language skills that help to develop the communicative skills are not taught. This is partly due to the lack of motivation on the part of teachers and lack of adequate materials for language teaching (Programme National d'Anglais). Makomo (2013) supports this point in saying that "Les conditions de paiement de ces enseignants (tantot une prime modique des parents tantot un salaire aussi modique de l'etat) n'encouragent pas a plus d'efficacite dans l'enseignement" (p. 53). [My translation: The payment conditions of these teachers (sometimes a modest bonus from the parents or a modest salary from the state) do not encourage more efficiency in teaching]. The "Programme National d'Anglais" (The National Program of English) itself is very old and inadequate in many respects. It defines different sections for teaching in terms of the structure of English. There is an immense need for an up-to-date curriculum at the national level.

Besides, the official textbook "English for Africa", that is used in high school is also inadequate; it presents the English language in form of short dialogues that tell the stories of some characters in African villages and cities. Moreover, these dialogues explain the culture and practices of African people in the context of Anglophone Africa. The dialogues are followed by comprehension questions and then drills on the grammatical structure of English are provided. This way of presenting the English language in a classroom does not encourage classroom interaction and it does not really help students to develop communicative skills in the target language (Tshibengabo 1999).

English is used as medium of instruction at teacher's training colleges and universities in the Department of English in the Democratic Republic of Congo. Even if the Democratic Republic of Congo is a French-speaking country where French has the status of an

official language, in the aforementioned Department of English makes an exception. Ninety-five percent of the courses are taught entirely in English. Students take courses for a period of three years for the Associate Degree and five years for the Bachelor Degree in English. They take a range of courses in English that prepare them for a teaching career of English as a Foreign Language (EFL). A similar curriculum is used in training student in English linguistics and literature at the university of Kinshasa and Lubumbashi.

The aforementioned schools, colleges, and universities are the main institutions of higher and continuing education that endeavor to develop the use of English in the Democratic Republic of Congo. Most of the instructors at the teachers' training college and universities, for instance, receive scholarships from the American or British Embassy to further their graduate studies in the USA or UK. This is how most of the qualified professors with a PhD specialization are trained to teach at the Department of English in the Democratic Republic of Congo (Kasanga 2012).

Congolese learn English in this context for instrumental purposes. They learn it for a specific purpose either for business or for job requirement. Business with neighboring Anglophone countries such as Zambia, Tanzania, Uganda, Rwanda and in the broader international market encourages the use of English. Attaining communicative fluency in English in the Democratic Republic of Congo requires a substantial amount of achievement motivation and effort since the language is not spoken on a daily basis. Students have the opportunity to hear the language or interact in English only when they are at school. The youth who have understood the benefit of the language get organized once they are out of school. They create English language groups where they meet on the weekends to speak or discuss a topic in English. Some try hard to

join churches where sermons are given in English in order to meet English-speaking people and gain fluency in the language in prevision of better career in the future.

Interest to the sociocultural activities of some Anglophone African countries was another source or motive of expansion of English in the Democratic Republic of Congo. Nigerian movies, for instance, captured a large audience of francophone speakers in Kinshasa, Bas-Congo, and some parts in Bandundu. Miller (2016) argues that "English language production is also a significant driver of Nollywood's appeal in international markets" (p. 83). The same sociocultural realities were observed in the East of the Democratic Republic of Congo with the Tanzanian movies. In Kinshasa, the Nigerian movies were broadcasted on popular private TVs channels, which are mostly run by Christian churches. The majority of Kinois (Kinshasa inhabitants) expressed a spontaneous need to learn English in order to fully comprehend the plot and story of the movies that were broadcasted. Unlike the Christian TV channels, which were broadcasting only Christian movies for the sake of evangelization, private TV channels also adopted the same Anglophone movie program types that were secular. When the need to comprehend the moral lessons of the movies became urgent, some TV channels hired English speaker fellows to interpret the movies in French or Lingala while others broadcast them with subtitles. Miller (2016) says "Nollywood is also circulated among viewers speaking non-European local languages. One way this is achieved is through screenings with a local MC simultaneously narrating and explaining the plot, the characters and even translating foods that are eaten into locally understandable equivalents" (p. 84-85). Young untrained and unskilled interpreters from small local language schools and centers in Kinshasa mushroomed on different local private TVs in Kinshasa (Krings 2010, Pype 2013, Dipio 2014).

From 1997 and mostly in 2003 with the reform of education called Pacte de Modernisation de l'Université Congolaise, PADEM, the mastery of English became a sign of pride in different Kinshasa townships at high schools, colleges, and Universities (Makomo 2013). This reform aimed to modernize DR of Congo's Universities in introducing and teaching English in all the fields of specializations at the university level and this reinforced the interest in learning and speaking English as a matter of pride (Makomo, 2013: 51). This was associated with the advent of Alliance des Forces Démocratique pour la Liberation do Congo (AFDL, meaning The Alliance for the Democratic Liberation of Congo) and Laurent Desire Kabila who was himself an English speaking President with his team of collaborators and ministers. Speaking English fluently became prestigious and more people stood out in their local communities and gained a lot of respect since they could speak English with a certain command. Kasanga (2012) notes that "[t]he soaring demand and the booming 'market for English teaching products' (Whitehead, 2011: 332), the high profile of English in the graphic environment (Kasanga 2010), the perceived growing prestige of English (Bokamba 2008), are signs of wider use of English" (p. 51). All the forenamed sociolinguistic variables that have been identified as impacting and promoting the expansion of English and its interest in the Democratic Republic of Congo could be characterized as forces that interact in determining the sociolinguistic status of English in the Democratic Republic of Congo. The next section discusses the sociolinguistic status of English in the Democratic Republic of Congo.

3.4.2 The Sociolinguistic Status of English in the D.R. of Congo

English is actually gaining ground in the Democratic Republic of Congo for a number of good reasons. The advent of Mzee Laurent Desire Kabila in power in 1997 as the president of the Democratic Republic of Congo improved the state-to-state relationship with a number of English

speaking neighboring countries. For instance, the relationship between Zimbabwe and the Democratic Republic of Congo improved since President Mugabe was President Kabila's mentor and supported Mzee Laurent Desire Kabila with army forces during the rebellion in 1996. The presence of the Zimbabwean soldiers in different provinces in the country (Compagnon 2001) impacted youth who wanted to communicate with them and who discovered another route to explore in Africa for socio-economic reasons. Some Congolese youth learned English and then were guided by Zimbabwean soldiers on how to get to Zimbabwe to manage social integration.

From 8 September 1997 onward the Democratic Republic of Congo also joined regional Anglophone organizations, like e.g. the Southern African Development Community (SADC) as Anglophone African countries offer more business and job opportunities than the neighboring Francophone African countries (Mbola Bathandwa 2008). SADC promotes free movement of people and their goods which implies the use of common dominant language in the region. Moreover, even if French, English and Portuguese are the official languages of SADC, nine of the fifteen SADC membership countries speak English as an official language; hence English is unofficially a predominant colonial language among the state members (Moyo, O'Keefe, and Sill 2013).

The presence of the world's largest United Nations' mission, i.e. the United Nations Organization Stabilization Mission (MONUC and then MONUSCO), in the Democratic Republic of Congo contributes to the promotion of English in the DR of Congo. MONUSCO, which stands for La Mission de l'Organisation des Nations Unies pour la stabilization de la République Démocratique du Congo (United Nations Organization Stabilization Mission in the Democratic Republic of the Congo) is composed of fifty-one countries and has brought a population of almost forty-five thousand speakers of English into the country (MONUSCO web page).

With a budget of $1,398,475,300 for the period running from July 2014 to June 2015, MONUSCO offers job opportunities which come with the requirement of English as the working language (United Nations Careers). This job market motivates Congolese to learn English for instrumental purpose. MONUSCO even pays bonuses to personnel who obtain a certain score in TOEFL and/or in an internal MONUSCO language test, the LPE (Language Proficiency Exam). When a UN staff successfully passes this test, s/he is ipso facto entitled to a monthly language allowance. Many international NGOs and branches of the United Nations that are operational in the Democratic Republic of the Congo and that usually offer a better salary than local institutions have similar requirements in terms of the working language (unjobs.org).

A further international job marked opened with the discovery and exploitation of new mining sites in the Eastern part of the Democratic Republic of Congo, which has favored the presence of numerous multinational mining companies from English speaking countries such as Canada, the US, and the UK (Africa Mining IQ).

Awareness of the American Diversity Lottery is another variable that has contributed to the popularity of English as many Congolese youths are learning English in the hope of winning the American green card while being aware that in the USA a working knowledge of English is a minimal job requirement.

Finally, relative affordability of the University fees in some reputable South African Universities encourage financially stable families in the DRC to find an enrollment for their children to one of the English speaking South African Universities while graduates from the local universities in the country may seek scholarship opportunities in the USA, Canada, the UK, Australia, or New Zeeland. All those countries have linguistic benchmarks (e.g. TOEFL or International English Language Testing System (IELTS)).

In sum, Kasanga (2012) notes that "[g]raduates increasingly felt the need to improve their English skills to cope with requirements of the ever globalizing job market to compete for jobs requiring the use of English at various degrees, and participate in the global scene in transglossic situations" (p. 50). It is obvious that English is spoken in the Democratic Republic of Congo as a foreign language. As such there are not enough speakers who use it as a language of social interaction or for integrative purposes. The scarcity of speech communities of native speakers of English in the Democratic Republic of Congo makes it quite difficult to learn the language at the level of native speakers, rather their variety of English is mostly 'book-based'.

However, a strong knowledge of the structure of English with limited knowledge of the basic language skills still helps many Congolese to basically operate when they are in countries where English is spoken natively and within six to twelve months they become good communicators in English (Yaba 1998). Their level of fluency depends on their background training in the Democratic Republic of Congo. Furthermore, their sociocultural integration defines and determines their future level of fluency in the target language. Those who interact with native speakers on a daily basis improve their English fast in comparison to those who create a microcosm of the society of the Democratic Republic of Congo in their host country. Such categories of speakers were also part of my participants in the study. Even if they live in the US or English-speaking provinces of Canada their level of fluency varies depending on the aforementioned factors.

Chapter IV

The Linguistic Phenomenon: Tense Similarities and Differences between French, English, and Lingala

4.1 Introduction

This chapter discusses the differences and similarities in terms of the target tenses in French, English, and Lingala. It first discusses the structure and use of the four tenses that are involved in my predictions: the simple past tense, the present perfect tense, *passé composé*, and the simple present tense in every respective language provided that the tense exists in the linguistic system of the language. Then, it presents the similarities and differences that are observed between those four tenses. The simple past exists in French, English, and Lingala while the form, 'Aux (have/avoir) + past participle' exists only, form wise, in both French and English (Kabasele, 2014: 19-20). I will therefore present the features in terms of form and function of the tenses in order to highlight their similarities and differences. However, before initiating the discussion on the aforementioned topics, I endeavor to introduce the notion of tense and aspect by briefly discussing some generalities that are related to each of them.

4.2 Tense

Definition and consideration

Cowan (2008) defines tense as the verb form that expresses the time that an action or an event occurs with reference to the moment of speaking (p. 350). Morenberg (2010) says "[t]ense determines the physical form of a verb or auxiliary, the first word in the main verb" (302). Morenberg argues that tense does not really relate to real-world time. Tense expresses three dimensions which are the present-past-, and future. Even if the question of identifying future as

tense is controversial, most English language teaching textbooks refer to it as one of the tense dimensions. Figure (2) represents the three tense dimensions.

Figure (2)

Timeline

|----------|----------|
Past Present Future
……...(Moment of speaking)……

Tonhauser (2006) defines tense as a relation between times of which one is the perspective time (p. 15). Tense parallels times with reference to each other expressing a relation of pastness, presentness, or futurity. Comrie quoted by Cover (2010) considers that tense "positions an eventuality with respect to a reference time, usually the time of utterance" (p.10). While Klein (1994) sustains that "tense positions the time that one is referring to or talking about as opposed to the time of the eventuality itself, with respect to a reference interval.

Tense could be well understood when it is contrasted with aspect as Comrie (1985) does it in his attempt to define the term tense. He argues that tense is the 'Grammaticalized expression of location in time", while aspect is defined as the "Internal temporal constituency of a situation (pp. 9-10). Klein (1994) characterizes tense by establishing a relation between two times: Topic Time (TT) and the speech time (ST) which determines the three tenses: past, present, and future (Binnick, 2012: 670).

It should not be taken for granted that all the languages of the world have tenses. In case of languages in which the absence of tense is obvious, the language resorts to temporal adverbials or "use other categories that do not overtly express, but imply time location" (Schmidtke et al., 2006:2). This is the case of Burmese which does not have any overt grammaticalized tense. Schmidtke et al (2006) stipulate Burmese, "[r]lies on an interaction of mood markers and time

adverbials" (p. 2). Such a language has not grammaticalized time location in its linguistic system. When a language does not have tenses such as Mandarin Chinese spoken in Sino-Tibetan, its linguistic system heavily relies on "[t]he close association of perfective aspectuality and past time reference on the one hand, and imperfective aspectuality and present time reference on the other hand" (Schmidtke et al, 2006:2). This linguistic association leads to the expression of only two temporal realities: the past and the present. The associations reveal a correlation between the present tense and imperfective aspectuality and between past tense and perfective aspectuality since it is more likely for a past action to be completed and a present action to be in continuation/progress.

Tense is further considered as a verbal category for some good reasons. Schmidtke et al. (2006) claim that tense is a verbal category because it specifies "[t]he temporal properties of situations, and situations are prototypically encoded by verbs" (p. 3). The universal tendency marks tense on the verbal form. Such is the case of French, Lingala, and English to name just a few. However, Nordlinger and Sadler (2004) show that there are languages in which tense is overtly marked on the noun phrase. (See Schmidtke et al, 2006:3). The case in which a tense is marked on the noun phrase is called a nominal tense. There exists also propositional nominal tense, i.e., nouns which overtly take tense marking for the whole clause. Such a case is documented in Siriono which is a language spoken in Bolivia. It would be a very good exercise to investigate the acquisition of tense in a combination of languages of which one background language displays the tense pattern on nouns rather than verb and the other background language inflects the tense markers on verbs, and so does the TL to see how learners would manage to acquire such a complex cross-linguistic tense pattern.

Time is conceived in terms of space; space-time helps to describe the meaning of the tenses (Michaelis, 2006:1). The world languages use the timeline to represent the conceptualization of time. Michaelis (2006) defines the timeline as a "[a] line (or, equivalently, an ordered set of points) that is unbounded at both ends and segmented into three parts: the past, the present and the future" (p.1).

The timeline is used in order to establish grammatical categories. Some languages use a tripartite system whereby the conceptual notion of time is divided into past, present, and future. However, there are also languages in the world which conceptualize the notion of timeline in terms of past versus non-past, or future versus non-future. Such a case is observed in an Australian aboriginal language, Dyirbal.

All the three languages that are involved in this study, i.e., French, Lingala, and English conceptualize the notion of timeline with three dimensions: past, present, and future. This conceptual similarity in terms of timeline helps to only focus on the tense marking and expression in this study without worrying about how participants conceptualize time before relating it to grammatical realities.

The specificity of past, present, and future tenses is determined through the relationship of precedence between two times. Overtly marked tense languages refer to past tense when the topic time (TT) precedes the speech time (ST). The present tense is talked of when the topic time (TT) and the speech time (ST) are contemporary while the future tense is when topic time (TT) follows the speech time (ST) (Binnick, 2012: 670). Lindfors (2003) says past tense should be identified when the event time precedes speech time; the present tense is when the event time is simultaneous to speech time, and finally future tense is when the event time follows speech time (p. 9).

Tense is expressed by an obligatory tense marker which is integrated into the grammar of a language. Most often, it is a morphologically bound morpheme, which is a grammaticalized expression, that appears in every matrix sentence to mark the tense (Binnick, 2012:670). The overt marking of tense varies depending on one language system to another. The slot in which the tense marker is appended may or follow the verb stem depending on the language.

Overtly marked tense languages indicate tense by appending a tense morpheme to either a verb or a noun. It is documented in modern syntactic theory that tense morphemes occupy the syntactic functional tense (T) node which projects its maximal projection to a TP. Jo-Wang Lin (2012) (In Binnick, ed. 2012: 670) says that tense should be considered as, "[a]n obligatory morpheme under T node whose semantic function is to constrain the topic times of utterances with respect to a reference point" (p. 670). Jo-Wang Lin's view on the reference point could be well understood through the referential theory of tense.

The referential theory of tense was first suggested and discussed by Partee (1973) and then it was further developed in Partee (1984). Partee (1984) claims that tense refers to time. She also sustains that tense are subject to binding by temporal expression and other tenses in the same way as this is observed with pronouns as they are bound by nominal antecedents. Partee has shown that, like pronoun, tense can be identified in anaphoric relation with time that has been mentioned earlier in a discourse. It is further noted that tense can also be used deictically mostly with a non-linguistic antecedent such as in the case of 'I didn't turn off the stove'.

Partee tries to correlate tense with pronoun and thus establishes a parallelism between the two linguistic entities. She has noted a number of relevant characteristics which could be summed up to the following points. It is pinpointed that tense: (1) can not only take definite antecedent, but it can also take indefinite antecedent, (2) can be used as an essential bound variable, (3) can occur

or can be used in the consequent clauses of conditionals. The case of definite/indefinite antecedent in (1) can be illustrated with respectively the use of such linguistic items as a temporal adverbial as *yesterday* and *sometime during the night*.

Dickey (2001) paraphrasing Comrie (1985) says that," [s]tructurally, tense is a morphosyntactic category which takes the form of a suffix on a sentence's verb' (p.1). Comrie identifies the semantic value of tense as the component of a sentence which locates, time wise, the action or situation that is being described (p.9). Dickey (2001) identifies two main functions of tense of which the first consists in locating, with relation to utterance, time, the situation or event that is being described as illustrated in (4).

(4)

Joe cooked rice yesterday.

In (4), the simple past tense is marked by the tense morpheme which is suffixed to the head of the VP. The tense morpheme -ed chronologically indicates that the fact of cooking took place prior to the time the sentence has been uttered. Dickey (2001) indicates that the second function helps to," [l]ocate the situation with respect to other events already described in preceding discourse" (p.1).

Reichenbach (1947) observed that the choice of the use of tense in narrative discourse is most often determined by the time that is being referred to in the discourse (Dickey, 2001:17). Enç (1987) supports the point that tenses are straightforwardly related to intervals of time as they are shaped within a specific context in a narrative. Dickey (2001) argues that the referential view of tense is important in that it can help (1) to explain temporal anaphora cases and/or (2) to explain the "[p]resupositional/ anaphoric character of the past tense" (p. 18).

The referential approach to tense has been implemented in several ways. I restrict my discussion to two dimensions. The first dimension assumes that tense is directly referential while the second deems it indirectly referential. Tenants of tense as directly referential such as Partee (1973) and Enç (1987) argue that there are salient intervals of time.

However, tenants of tense as indirectly referential such as Vlach (1993) and Abusch (1998) claim that tense is vacuous. They argue that it is temporal adverbials which provides tense with the necessary semantic force (Dickey, 2001:19). Dickey (2001) further says that such temporal adverbials get their "value directly from preceding linguistic or extralinguistic context, typically from the preceding sentence in the discourse" (p.19). Partee (1984) adopted the indirectly referential approach to tense. Tenants of the indirectly referential approach admit that tensed sentences contain reference times which are connected to them and that they have interval which reveals the truth of the sentence. The notion of tense is well understood when it is associated to the notion of aspect. The following section discusses aspect.

4.3 Aspect

Hewson (2001) defines aspect as,"[a] representation of Event Time, the time that is contained in the Event" (p.2). Languages of the world display a number of aspects which could be listed but not limited to factative, perfective, imperfective, perfect, progressive, habitual/iteractive, inceptive, situative, to name but a few. Hewson and Bubenik (1997) suggest a representation of the aspectual forms using a scheme of five cardinal positions which situate the realities of event time on a timeline (p.14) as depicted in figure (3).

Figure (3)

Representation of the aspectual forms

A[B----------C----------D]E

The different cardinal positions in (3) are identified and explained here. *A* represents the prospective event time. It points to the time before the event. *B* represents the inceptive and situative aspect. It points to the initial time point of the event. *C* represents imperfective and progressive aspect. It describes the intermediate position or the time when the event is in progress. *D* represents the perfective aspect. It points to the final position of the event. Finally, *E* represents retrospective/perfect aspect. It refers to the aftermath of the event.

The aforementioned verb aspects need some explaining in order to shed light on their understanding. This discussion on aspect is restricted to those which may have a certain direct incident in this study.

Perfective is the verb aspect that denotes complete situations. Comrie (1976) says of perfective aspect that it, "[o]ften indicates the completion of a situation when contrasted with an imperfective situation" (p.52). Perfective is attested in the case of past completed event. The perfective aspect is encoded in the case of the simple past tense. The perfective aspect is clearly illustrated with the simple past tense because the latter expresses an action/event that started and was completed in the past.

Perfect aspect which is also called retrospective or anterior, on the other hand, expresses a past until now event. Comrie (1976) says that perfect denotes, " [a] situation that started in the past but continues into the present" or " [t]he continuing present relevance of a previous situation" (p.52). Perfect involves two temporal phases: *past* and *until now*. *Past* phase is the period when an event started or took place while the *until now* phase refers to the result. Perfect puts a particular emphasis on the result which is subsequent to the situation.

Factative aspect is also otherwise called aorist or performative. Factative is observed in West African linguistic systems (Welmers 1973, Faraclas 1984, 2007, Faraclas et al. 2007).

Welmers (1973) postulates that factative "expresses the most obvious facts about the verb in question, which in the case of active verbs is that the action took place, but for stative verbs is that the situation obtained at present" (p. 346). Two main characteristics identify factative aspect. Those characters are related to both its structure and its function.

Structurally, the factative aspect is identified as an unmarked form. That is, there is no morphological form which is associated with factative aspect which could be appended to a verbal form to encode this aspectual reality. Therefore, the factative aspect is overtly realized through a zero morpheme. The question to raise is to determine the positional slot in the verb form in which the zero morpheme is conceptually supposed to be realized. Does the slot precede or follow the verb stem?

Functionally, the factative aspect encodes two different types of situations depending on the verb stem that is used. For instance, if the verb stem that is used is a dynamic or non-stative verb, the factative aspect encodes and therefore represents a past, complete, situation. However, when a stative verb is used, the factative aspect represents a current, non-past, incomplete, state which refer to either a present or future situation. It should be noted that some exceptions have been observed with both the structure and the function of factative aspect. Some languages such as Degema and Bambara overtly inflect the verbal form with an inflectional morpheme that encodes the factative aspect. Such a morpheme is appended at the FV (Final Vowel) slot. Functionally, Childs (1998:314) noted that some languages such as Maaka have expanded their use of other novel situations.

Perfective, perfect, and factative aspects display some similarities and differences in languages of Niger-Congo. For instance, if I consider perfective and perfect as a pair, both aspects encode a complete situation. The perfective is different from the perfect in that it does not encodes

any connection with the present. That is, the perfective represent a past completed event while the while the perfect represent a past until now event. Perfect is different from factative in that the former is always overtly realized, that is, it is realized through the appending of a specific aspectual morpheme. The latter, that is, the factative is morphologically unmarked, therefore it is realized covertly. Besides, perfect and factative are different in terms of the implication of the past action with the present time. Perfect puts an emphasis on the present result while factative does not. Perfect and factative are conceptually similar in the way they are used with regards to stative and dynamic verbs. Perfective and factative are the last contrastive pair that I consider side by side in this section. Perfective and factative differ from each other in the way they are semantically decoded when they are respectively used with stative verbs.

Another category of aspect is the incompletives. This category involves aspects such as imperfective, progressive, and habitual/iterative. Comrie (1998) considers imperfective in opposition to perfective. He subdivides imperfective in categories that are grouped in oppositional pairs. The habitual is opposed to continuous while non-progressive is opposed to progressive (p. 25). The conceptualization of aspect varies depending one language to the other. For instance, English has the habitual aspect, but only in the past. This aspect is mainly encoded by the use of the expression *used to + the bare infinitive*. In KL, however, the habitual is expressed by appending the suffix aka with a falling tone to the stem of the verb. While the habitual aspect is restricted to past situations in English, in KL it may point to the past, present, or future. For example, the sentence *Polo a-lamb-aka malalu* (Paul cooks well) expresses a permanent habit of Paul which reflects his cooking skills. This excellent cooking skills may have been attested in the past, present, and it still be observed in the future. However, a English sentence such as *Paul used to cook well* expresses a past habit which is no longer observed or attested in the present time. A cross-linguistic

curiosity, in the field of additional language acquisition, would be to determine how a learner whose L1 encodes only past habit would conceptualize and express habit in a language like Lingala in which the habit has a past, present, and even future interpretation. Would such a learner choose to use the simple past in the target language rather than the habitual aspect in appending the verb since the notion of habit has only a past conceptualization in his/her L1 or will s/he uses another form in acquiring Lingala at his/her initial stage of acquisition.

The habitual aspect in French is encoded through "the prescribed and most common form which is the present indicative" (Carmen L. LeBlanc, 2010:66). In this respect, French and KL display some conceptual similarities in encoding the habitual aspect in both linguistic systems. English, however, demarcates from both French and KL in that the notion of habitual aspect cannot be related to any present or future situation or event. While the habitual aspect has a particular form in both English and KL respectively, this is not the case in French. Carmen (2010) says," [i]n general, aspect does not surface as a distinct morphological form in French,…"(p.66). She claims that grammarians identify three formal expressions of aspect which are (1) embodied in tense, (2) conveyed by particular lexical or verbal phrases, (3) or encoded through the use of adverbials (p.66) as in *Maman parle souvent Anglais* (Habitual) (Mom often speaks English).

The creamy food for thought on the preceding discussion is on the differences/ absence and similarities in terms of aspect and or tense which could exist cross-linguistically. The question is how would speakers of a language that lacks a certain aspect conceptualize it when learning a language that has it. What is the strategy that is used by the learners in this case? Do they use the closest aspect in their previously acquired languages or do they use a tense which reflects the same aspectual realities as the one that is being learnt in the additional language? Answers to these

questions would help to shed light on these concerns. The attention in this study is on tenses in the contexts of past completed events and past until now events in English.

4.4 French

4.4.1 The *Passé Simple* and *Passé Composé* in French

Formation of the *Passé Simple* and *Passé Composé* in French

The *passé simple* in French is the equivalent of the simple past in English. Its formation varies depending on the grouping of the verb, that is, the ending of the verb in the infinitive form, the person and number of the subject. Le Conjugueur (2016) notes "On a 4 types de terminaisons au passé simple en fonction de la terminaison du verbe :

- 1er groupe + aller : -ai, -as, -a, -âmes, -âtes, -èrent
- 2eme et certains verbes du 3e groupe : -is, -is, -it, -îmes, -îtes, -irent
- Certains verbes du 3eme groupe : -us, -us, -ut, -ûmes, -ûtes, -urent
- Venir et Tenir + dérivés : -ins, -ins, -int, -înmes, -întes, -inrent."

[My translation: There are four types of endings in the simple past depending on the ending of the verb:

- The first group + the verb to go: -ai, -as, -a, -âmes, -âtes, -èrent
- The second group and some verbs of the third group: -is, -is, -it, -îmes, -îtes, -irent
- Some verbs of the third group: -us, -us, -ut, -ûmes, -ûtes, -urent
- *Venir* 'To come' and *tenir* 'to hold' + the derived verbs: -ins, -ins, -int, -înmes, -întes, -inrent].

However, the *passé composé* in French is structurally composed of the auxiliary *avoir* (have) plus the past participle. Rowlett (2007) notes that "[t]he auxiliary "avoir" is unmarked. However, the *passé composé* requires the auxiliary *être* (to be) with a dozen of intransitive verbs such as devenir 'to become', arriver 'to arrive', aller 'to go', and tomber 'to fall', to name but a few" (Rowlett, 2007: 40). The use of the auxiliary "avoir" in (4) is a default one. However, the use of the auxiliary "etre" in the example (5) illustrates the marked case in which some intransitive verbs require the auxiliary "etre' rather than 'avoir'.

(5) French

The unmarked case of the *passé composé*

Ils ont cuisiné la viande de beouf hier soir.

They-*Det* have-*Aux* cooked-*PP* the-*Det* meat-*N* the-*Det* beef-*N* yesterday-*Adv* evening-*N*

'They cooked beef yesterday evening.'

(6) French

The marked case of the *passé composé*

Mimie et Passie etaient allées en ville hier.

Mimie-*N* and-*Conj* Passie-*N* were-*Aux* gone-*PP* in-*Pro* town-*N* yesterday-*Adv*

'Mimie and Passie went downtown yesterday.'

Use of the *Passé Simple* and *Passé Composé* in French

The *passé simple/preterit* in French (simple past tense) is called literary (or historical) tense because it is used in written French, notably in written narrative of a classical style (Batchelor and Offord 1982, Kabasele 2014). Benveniste (1959) supports the idea that the simple past tense is used in the written form of communication while the *passé composé* is used in the oral form (p. 329). He argues that "Il y a un point ou le systeme se fait indument redundant: C'est l'expression temporelle du *passé*, qui dispose de deux formes, *il fit* et *il a fait"* (p. 238). [My translation: There is a point where the system is made unduly redundant: It is the temporal expression of the "past,"

which has two forms]. He (1959) continues arguing that "Dans l'interpretation traditionelle, ce seraient deux variantes de la même forme, entre lesquelles on choisit selon qu'on ecrit (*il fit*) ou qu'on parle (*il a fait*)" (p. 238). [My translation: In traditional interpretation, it would be two variants of the same form, between which one chooses the form (he did) in written mode or (he has done) in spoken mode of communication"]. Schogt (2015) lends support to the viewpoint that *le passé simple* (the simple past tense) is banned in the oral mode of communication in arguing that "Le passé simple, qui est à peu pres banni de la langue parlée, se rencontre tres frequement dans la langue ecrite" (p. 8). [My translation: The simple past, which is almost banned from the spoken language, is very frequent in the written language]. Schogt points that the 'le passé simple' is now only used in written mode of communication. Schogt (2015) argues that "La langue parlée a sans doute precipité l'extension du *passé composé* dans la langue ecrite au depens du passé simple" (p. 15). [My translation: The spoken language has undoubtedly precipitated the extension of the *passé composé* into the written language at the expense of the simple past]. He (2015) further recognizes that *le passé simple* may be replaced by *le passé composé*, but that the inverse is not possible (p. 15).

Batchelor and Offord (1982) note the use of *le passé simple* in written French is to express historic past as in novels and other literary works of arts. This tense is also used in very formal contexts as Batchelor and Offord (1982) argue that past historic is used, "[…] sometimes in newspapers; talks on radio and television dealing with historical topics; formal speeches, lectures" (p. 233). The simple past tense (passé simple/preterit in French) is no longer used in spoken French. Offord (2006) says the historic past "[…] is mainly restricted to the written medium." (p. 32). The example in (6) illustrates the use of *le passé simple* in French.

(7) French

The use of *le passé simple* in French

Les oiseaux nocturnes chantèrent toute la nuit pour la gloire du maître.

The-*Det* birds-*N* nocturnal-*Adj* sang-*V* all-*Q* the-*Det* night-*N* for-*Prep* the-*Det* glory-*N* of-Det master-*N*

'Nocturnal birds sang all night for the master's glory.'

Past historic is also used in formal situation in both written and oral form. Offord (2006) says "[u]sage of the past historic has tended to become restricted to certain situations. Written French—it is the past tense most often used in fairly formal and formal written French—especially the French of novels, and in some but not all journalism" (p. 59). He further argues that "[s]poken French—its use in spoken (as opposed to written) French is very much confined to very formal situations—Speeches, lectures, talks on the radio or television dealing particularly with historical matters" (p. 59). Offord attests the use of historical past in the sole context oral formal mode of communication. He, however, warns that "[…] it is completely inappropriate in normal spoken French" (p. 59). These sociolinguistic characteristics on the use of the simple past tense in French has direct implication for my subjects as I will demonstrate it in section 4.5.

Batchelor and Offord (1982) postulate *le passé composé* is" The normal tense used in all registers when referring to a past event while the past historic is restricted to R3 usage" (p. 232). *R* stands for *register* in this context. Batchelor and Offord (1982) discussing the three types of registers says "'R1' is characterized by very informal, casual, colloquial, and familiar speech; 'R2' refers to 'standard, polite, educated, equivalent of 'BBC English''; while 'R3' is the formal, literary, official, with archaic ring, language of scholars and purists, meticulously correct, reluctant

to admit new terms" (p.6). *R3* is the solely sociolinguistic domain in which *le passé simple* is allowed to be used.

The *passé composé* is the most commonly used French past tense to talk about a past completed event. The *passé composé* is remarkably used in oral communication to talk about a past completed event in French as in (7).

(8) French

The *passé composé* in French

Bob a mangé du riz hier.

Bob-*N* has-*Aux* eaten-*PP* the-*Det* rice-*N* yesterday-*Adv*.

'Bob ate rice yesterday.'

The example in (7) shows how the *passé composé* is used instead of the simple past in French to talk about an event that started and was completed in the past without any temporal connection with the present. The *passé composé* can still be used in other instances such as to express an action that was repeated a number of times and completed in the past. Even if the action was repeated several times, it is important to note that it was fully completed in the past, which falls in the temporal domain of past completed event. Example (8) illustrates this issue.

(9) French

The *passé composé* in French

Bob a chanté l' hymne national cinq fois le Lundi passé.

Bob-*N* has-*Aux* sung-*PP* the-*Det* anthem-*N* national-*N* five-*Num* times-*Adv* the-*Det* Monday-*N* past-*Adv*

'Bob sang the national anthem five times last Monday.'

4.5 English

4.5.1 The Simple Past Tense in English

Formation of the Simple Past Tense in English

English uses either the past form or the auxiliary did + the base form to make the simple past tense. English has two main verbal forms to express the past: the regular and the irregular form. The regular verb form is made by appending the verbal suffix –ed to the base form of the verb. The irregular verbal form varies depending on the verb. Cowan (2008) postulates "[…] past time is indicated by adding *–ed* to a regular verb, […], or changing the form of an irregular verb such as go, […]." (p. 350). The table (5) below illustrates the past forms of the verb in English.

Table (5)

Past form the verb in English

Type	Base form	Past form	Example
Regular verb	Play	Played	**(10).** Bob played soccer with his friends last week.
	Visit	Visited	**(11).** Joe visited Paris in 1996.
Irregular verb	Buy	Bought	**(12).** I bought my car last year.
	Speak	Spoke	**(13).** He spoke to me on the phone yesterday.

Use of the Simple Past Tense in English

The simple past tense is used in English to express an event which took place and was completed in the past (Cowan, 2008). Cowan (2008) identifies three main characteristics on the use of the simple past tense in English. He argues that the event must be in the past, it must have been completely finished, and the time of the event might be overtly expressed or implied/understood

(p. 359). Swan and Walter (2011) postulate its use is constrained by the completion of the event in a time point in the past as illustrated in the following example (14). It is often used with past time expressions such as yesterday, last week, last year, two days ago to name but a few, to emphasize the idea of past completed event (Cowan, 2008: 359).

(14) English

The Simple Past Tense in English

(a). Joe visited Paris in 1998.

(b). I drove my friend to the airport yesterday.

The act of visiting Paris took place in 1998; the act of driving my friend to the airport took place yesterday. And these events have no connection whatsoever with the present time. However, there are times when a past event may have some connections with the present time. This is when the present perfect rather than the simple past is used in English.

4.5.2 The Present Perfect Tense in English

Formation of the Present Perfect Tense in English

The present perfect tense is formed with the combination of the auxiliary 'have' + the past participle of the main verb. The auxiliary verb have encodes the tense (present) and aspect (perfect) of the verb. Only the auxiliary 'have' is inflected to indicate the subject verb agreement, in which case 'has' is used for the third person singular. Example (15) illustrates the structure of the present perfect tense in English which is illustrated by way of an example in (16).

(15)

The structure of the present perfect tense in English

Auxiliary HAVE/HAS + the PAST PARTICIPLE

(16) English

(a). Abiga, Andy, Nathan, and Allegress have visited London several times already.

(b). Bob has started eating healthily on January 1st.

Use of the Present Perfect Tense in English

English uses the present perfect tense to talk about an event which took place in the past but which has some implications in the present. Cowan (2008) admittedly postulates that "[t]he present perfect tense is the most difficult for English learners to correctly use" (p. 367). Cowan (2008: 368) discusses four main instances of the use of the present perfect tense in English. It is used:

- To express a situation that started in the past and continues to the present

This instance of the use of the present perfect tense in English just illustrates the case of an experience from the past.

(17) English

(a). Joe has lived in Kinshasa since 1997.
(b). Philo has worked for ISP/Gombe for 16 years.

Cowan (2008) argues that "[w]e therefore interpret these sentences as describing past states or activities (situations) that have lasted up to the moment of speaking and may last into the future" (p. 368). In (a), the sentence may be interpreted as the event of living in Kinshasa started in 1997 and continues up to the present and may continue up to the future. Likewise, in (b), the interpretation that is associated with this sentence is that Philo still teaches at ISP/Gombe and he might continue to teach there. The present perfect tense might also be used:

- To express an experience from the past of which no interest is shown in when the experience took place.

(18) English

The present perfect tense in English

Allegress has visited London.

This means that this "[…] event took place in the past and now I have a memory of the event" (Kabasele, 2014: 25).

Furthermore, the present perfect tense may be used in English

- To express a recently completed action.

Finally, and fourthly, the present perfect tense is also used

- To express a change or new information which reflects the completion of a recent event.

Examples (19) and (20) illustrate the latter.

(19) English

The present perfect tense in English

She has bought a house.		
Past	Present	Future
-	+	
Last month she didn't have a house.	Now she has a house.	

(Source: English Grammar, n.d.: 11)

Example (20) is connected with the past in that yesterday the killer was free, but now he is in prison.

(20) English

The present perfect tense in English

The police have arrested the killer.		
Past	Present	Future
-	+	
Yesterday the killer was free.	Now he is in prison.	

(Source: English Grammar, n.d.: 12)

When the present perfect tense is used in such contexts, the past situation is always in opposition with the present situation (Source: English Grammar, n.d.: 12). Cowan (2008) says "[t]he lexical aspect of the [accomplishment] verbs thus accounts for the actions' having been completed. The fact that they have current relevance or are noteworthy is determined by the sentence content (e.g. reading all of Shakespeare's plays is surely a noteworthy accomplishment […]" (p. 368) as illustrated in the following example.

(21) English

The present perfect tense in English

He has read all of Shakespeare's plays (Cowan, 2008: 368).

Furthermore, the present perfect tense is also used in the following cases:

- To express continuing situation.

The present perfect tense is used to talk about a continuing situation related to a state that started in the past and that continues in the present and might continue in the future. Usually, for or since is used with the present perfect tense in this context.

(22) English

The present perfect tense in English

I have lived here since 2003 (Kabasele, 2014: 25).

- To describe an action that occurred over a period of time that is complete at the time of speaking.

The following example illustrates this case of the use of the present perfect tense.

(23) English

The present perfect tense in English

(a). The value of his house has doubled over the past two years.

(b). He has grown over two inches in the past six months.

Cowan (2008) postulates "[t]hese sentences contain activity verbs that express actions involving inherent change over time. The sense of change is enhanced by the time expressions of duration" (p. 368). It should, however, be observed that the simple past tense, rather than the present perfect tense is used in the context of past until now event in North America, particularly in the USA and Canada.

4.6 Lingala

4.6.1 The Recent and Remote Past Tense in Lingala

In this section I consider Nurse (2008:10-14)'s conceptual framework in discussing tense and aspect in Bantu languages. Nurse's framework details eight main points which are to be considered in analyzing a Bantu language. They are:

1. "Tense and aspect form a system."
2. "Tense and aspect systems are cognitively based, not direct representations of events in the real world."
3. "Tense and aspect form an interlocking system."
4. "A discrete verbal TA form has a specific and unique range of meaning."
5. "The system is not inflexible or unchanging."
6. "Any given (single) verb form can only have one tense."
7. "Every finite verb form has aspect."
8. "Most Bantu languages encode tense on the left and aspect to the right."

Points six through eight in Nurse's (2008:10-14) conceptual framework is of capital importance in this study since it is concerned with the morphosyntactic structure of the verb. Nurse states that only one aspect may manifest in a verb form and only one tense can be indicated through an

appropriate morpheme. Nurse captures a generalization in Bantu languages that tense tends to be marked farther to the left and aspect farther to the right.

This verbal configuration on Bantu languages is just the opposite (Kinshasa) Lingala. In Lingala, tense markers are inflected farther to the right. Tense seems not to obey Nurse's conceptual framework as discussed in points six through eight. Figure (4) presents a linear template of verbal form in Bantu languages, as per Nurse (2008), with specific slots for the inflectional morphemes.

Figure (4)

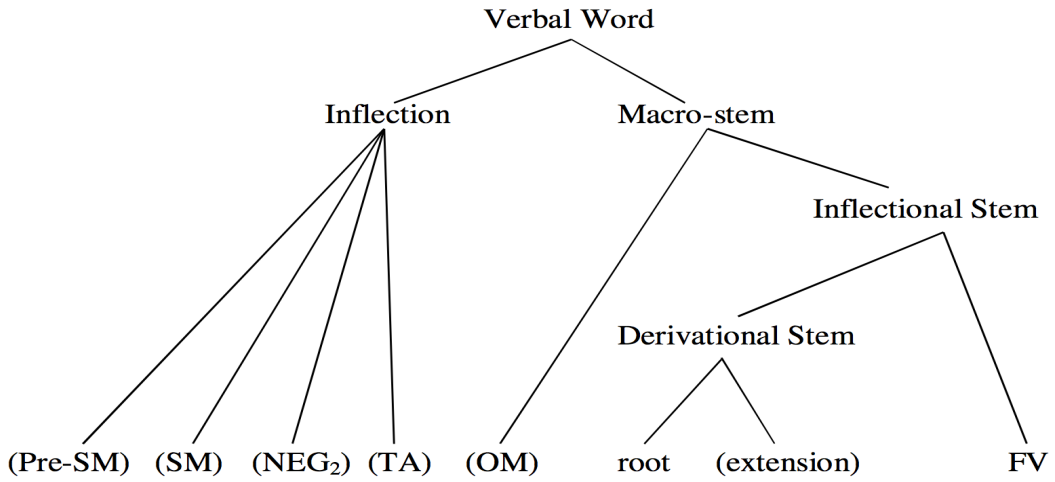
The slots on Bantu verb form (Nurse, 2008: 40)

(Pre-SM) + (SM) + (NEG_2) + (TA) + (OM) + root + (Extension) + FV + (Post-FV)

With specific attention to phonology, Nurse (2008:41) suggested a hierarchical structure of the verbal word in Bantu languages. Figure (5) presents the hierarchical structure of the verbal word in Bantu languages.

Figure (5)

The hierarchical structure of the verbal word in Bantu languages



This structure is different from the one suggested in figure (4) in that it does not involve the post-FV slot. The hierarchical structure of the verbal word further organizes the structure of a verbal stem in Bantu languages. The notion of the verbal stem can be understood with reference to the (1) the derivational stem, which is made up of the root and the extension, (2) the inflectional stem, which includes the root and the FV slot, and (3) the macro-stem which adds the object marker slot to the configuration. It should be noted that the basic Bantu language verb form is the inflectional stem without any extension appended to the verb root.

The infinitival verb form in Kinshasa Lingala is made up of the infinitive prefix marker *ko-* which is appended on the farther left position followed by the verb root and the FV slot. When a verb is inflected to the fine form in KL, its verbal configuration is drastically different from most Bantu languages in that in KL the verb structure obeys the paradigm that is presented in figure (6).

Figure (6)

The simple paradigm of the verb structure in KL

SVA + Root + Extension + Tense/Aspect

It should be noted that KL does not inflect a verb with object marker (OM). The aspect, both progressive and indicative, are encoded respectively through the use of the auxiliary verb –zal- *be* that is followed by the non-finite main verb in the infinitive form and through the FV –*a*.

A contrastive explanation of the slots presented by Nurse (2008) on Bantu languages verb and KL is necessary to shed light on the verbal form of KL. In most Bantu languages, the Pre-SM slot (Pre-subject marker) hosts the negative, relative object, tense,

conditional, and focus markers (Nurse, 2008: 32, 40). KL, on the other hand, does not allow the pre-SM slot. That is, any verbal inflection starts with the SVA (SM) slot, for any finite verb.

The SM (Subject Marker) slot which I refer to in this study as the Subject Verb Agreement (SVA) slot is one of the common points of agreement between KL and other Bantu languages. This slot encodes the morphosyntactic marker which indicates the agreement between the subject-verb by reflecting the person, number, and the nature of the noun class to which the subject belongs. Most often, the subject is not overtly realized in the syntax, in such cases, it is the SVA that signals tis number, person and nature (Bearth, 2003:122).

The NEG_2 slot is typically observed with Bantu languages that encodes double negations, both the primary and secondary negations within the same complementizer phrase. The NEG_2 slot is, therefore, the position for the secondary negation for the non main clause negation as this is observed in Bantu languages such as *Simbiti* (Nurse, 2008: 44). Such a slot is not allowed in the verbal configuration for KL.

The TA (tense/Aspect) slot stands for the encoding of tense/aspect. Nurse (2008: 34-36) states that more than an inflectional can be appended in this position. However, in most cases, when both tense and aspect appear in a verbal form, tense takes precedence in that it occurs in the TA slot, while the aspect is encoded in the FV slot. This reality on Bantu languages is not always the case with KL. In the latter, tense is appended at the FV (Final Vowel) slot. When for instance, the habitual aspect marker is overtly appended on the verb form, it occupies the FV slot and tense marker is, therefore, not overtly marked as illustrated in the following example.

(24) KL

Bob a- lamb- aka mingi

Bob-*N* SVA cook-*V* Hab. a lot-*Adv*

‘Bob cooks a lot.’

The OM (Object Marker) slot encodes the object-verb agreement within the verb configuration. It indicates the person, number, noun class and nature of the object. Bearth (2003: 123) says that the object marker is encoded in the verbal form only when “the object denotes a specific human referent” or in other cases when “the referent of the object is already established as a discourse topic”. The OM slot is not present in the verbal configuration of KL.

The slot that is always compulsory in a verbal form is that of verb root. All the other slots conglomerate around the verb root. It is the root of the verb that conveys the main meaning as encoded in the verb phrase. KL does not make any exception in this respect. Like in any Bantu language, KL also has the verb root slot. This slot is immediately followed by the extension slot which in Bantu languages is made up of rich inflectional morphemes such as the applicative, the reflexive, the causative, the reciprocal, the stative, and the passive. KL also has the extension slot. The reflexive morpheme in KL does not occur in the extension slot like in many Bantu languages. It occurs immediately before the verb root slot.

The last slot on the farther right hand side of the verb form configuration is the FV (final Vowel). The most commonly known final vowel in Bantu languages is *–a*. It encodes the indicative mood. This is the slot where tense in KL is appended. KL does not allow any Post-FV slot in its verbal configuration. The following section discusses the formation of recent and remote past tense in Lingala.

Formation of the Recent and Remote Past Tense in Lingala

The formation of the two past tenses in Lingala—recent past and remote past— is made by appending the past tense verbal suffixes -ákí or -áká to the verb stem. The suffix -ákí is used for

the recent past, while the suffix -áká is appended for the remote past in Lingala. The examples below show how the past tenses are formed in Lingala.

(25) KL

The recent past tense in Lingala

RECENT PAST			
Verbal stem	Verbal suffix	Recent Past	Example
-somb- 'Buy'	-aki 'past suffix'	-sombaki 'Bought'	a. Papa a- somb -aki mutuka lobi. Father-*N* SVA -buy-*V* S. Pst car-*N* yesterday-*Adv* The father bought the car yesterday.
-tang- 'Read'	-aki 'past suffix'	-tangaki 'Read'	b. Mokwa na Lofombo ba -tang- aki mikanda. Mokwa-*N* and-*Conj* Lofombo-*N* SVA -read-*V* S.Pst books-*N*. 'Mokwa and Lofombo read books.'
-lal- 'Sleep'	-aki 'past suffix'	-lalaki- 'slept'	c. Ye a- lal- aki libanda lobi. S/he-*Pro* SVA -sleep-*V* S. Pst outside-*Adv* yesterday-*Adv*. 'S/he slept outside yesterday.'

(26) KL

The remote past tense in Lingala

REMOTE PAST			
Verbal stem	Verbal suffix	Remote Past	Example

-somb- 'Buy'	-aka 'past suffix'	-sombaka 'Bought'	a. Papa a- somb- aka mutuka. Father-*N* SVA -buy-*V* S. Pst car-*N*. 'The father bought the car.'
-tang- 'Read'	-aka 'past suffix'	-tangaka 'Read'	b. Mokwa na Lofombo ba- tang- aka mikanda. Mokwa-*N* and-*Conj* Lofombo-*N* SVA -read-v S. Pst books-*N*. 'Mokwa and Lofombo read books.'
-lal- 'Sleep'	-aka 'past suffix'	-lalaka 'slept'	c. Ye a- lal - aka libanda. S/he-*Pro* SVA - sleep-*V* S. Pst outside-*Adv*. 'S/he slept outside.'

Use of the Recent and Remote Past Tense in Lingala

Both the recent and the remote past are used in Lingala to express a past completed event. Their use depends on the temporal setting of the event in the past. Kabasele (2014) argues that "[t]he remote past is used for an event that took place in the remote time in the past while the recent past is used to express an event which took place recently in the past" (p. 23).

(27) KL

The recent past in Lingala

Paul a- lamb -aki loso lobi.
Paul-*N* SVA -cook-*V* recent pst rice-*N* yesterday-*Adv*
'Paul cooked rice yesterday.'

(28) KL

The remote past in Lingala

Mamie a- bom -aka ngando tangu a- zal -aka mwana.
Mamie-*N* SVA -kill-*V* remote pst crocodile-*N* when-*Adv* SVA -be-*Aux* remote pst child-*N*
'Mamie killed a crocodile when she was young.'

It should, however, be specified that the appreciation of an event as being remote or recent is not always clear-cut in Lingala spoken in Kinshasa. It is observed that some people use them interchangeably. They fail to make the distinction between the two forms of the past in Lingala. A period of five years could be considered as sufficiently remote in the past.

Lingala has a further form of past tense which is called 'immediate past'. This tense is used to talk about "[…] an event which took place sometime in the past today" (Kabasele, 2014: 24). The example in (29) illustrates the use of this tense in Lingala.

(29) KL

Immediate Past in Lingala

Bea	a-	lamb-	i	tii	lelo	na	tongo.
Bea-*N*	SVA	-cook-*V*	Im.pst	tea-*N*	today-*Adv*	in-*Prep*	morning-*N*

'Bea made tea today in the morning.'

4.7 Contrast among the Simple Past (*passé simple*, recent/remote past), Present Perfect, and *Passé Composé* Tenses of the three Languages

This section contrasts the form/structure and use/function of the simple past tenses (passé simple in French, recent/remote past in Lingala), present perfect tense in English, and *passé composé* in French. All the three languages have at least one tense to express a past completed event. The simple past tense is used in English. The *passé composé* is used in French. The recent past or the remote past are used in Lingala depending on the case.

Contrasting the present perfect tense in English with the *passé composé* in French, it is observed that the present perfect tense in English is made up of the auxiliary 'have' plus the past participle. This tense is similar in form to *passé composé* in French which is also made up of

the auxiliary *avoir* (have) plus the past participle. The present perfect and the *passé composé* tenses present the same formal paradigm but differ in terms of use.

As discussed earlier in section '4.2.1' (pp. 154-159), the *passé composé* in French is used to talk about past completed events. The present perfect tense, however, is used in English to talk about a past until now event in English. This means that the present perfect tense is used to express an event that took place in the past, but that has some implication or connection in the present. Rowlett (2007) argues that changes in the spoken language in French took place in the use of the "passé composé" in which, "[t]he perfect has effectively replaced the past historic as a marker of past tense" (p.26).

This contrast of the two tenses shows that both the present perfect tense and the 'passé composé' are similar in the way they are formed, but that they differ only in terms of how they are used in the respective languages. This similarity in terms of their forms may be very misleading to learners of English who on the basis of the forms/structures of these verbs, that is, 'have/avoir + past participle' may establish a certain similarity and therefore use the present perfect tense in English to talk about a past completed event in English. This may lead to a negative transfer since it is the simple past which is normally used in such a context.

Both the recent past and the remote past present similarities in terms of forms and functions of those tenses in both Lingala and English. Both tenses are formed by appending a verbal morpheme, that is, a suffix to the verb stem. Likewise, both tenses are used to talk about past completed events in the past. These similarities are amenable to a positive transfer from Lingala into English.

Table (6) presents a synopsis of tenses in the three targeted languages.

Table (6)

Past event that was completed in the past

For an event which happened in the past and was completed in the past		
English	French	Lingala
Simple Past Tense	Passé composé	-Remote past/simple past(-áká) -Recent past (-aki)
Examples		
Abiga went to Paris last month.	-Andy est parti à Paris le mois passé. (Andy went to Paris last month)	-Andy akendaki na Paris sanza eleki. (Andy went to Paris last month) -Nathan akendaki na Paris sanza eleki. (Nathan went to Paris last month)

(Source: Kabasele, 2014: 29).

4.8 Possibilities of Transfer

The contrast in section 4.5 shows that English uses the simple past to talk about past-completed events, while French and Lingala use the 'passé composé' and remote or recent past, respectively, depending on the case. The simple past (historical past) in French is not considered as a potential factor that can trigger transfer because it has been replaced by the 'passé composé' in this context. Rowlett (2007) cited in Kabasele (2014) argues that changes in the spoken language in French have taken place in the use of the 'passé composé' in which "[t]he perfect has effectively replaced the past historic as a marker of past tense" (p.26). This indicates that the 'passé composé' is used to talk about an event that took place in the past and was as well completed in the past. Kabasele (2014) makes reference to the economy of cognitive design and linguistic architecture (Flynn et al. 2004, Rothman 2010, 2014) and to the biological theory of language acquisition (Chomsky,

2007), citing Rothman (2010) who argues that "[t]he most economical linguistic option is always favored and its selection seems to be hardwired into human cognition" (p.271). Kabasele (2014) says "[t]hat means in this research the L2-speaking French subjects would use the perfective, particularly the passé composé to talk about an event that took place and was completed in the past rather than the historical past (simple past) because the passé composé is the option that is available to them and the linguistic parser would straightforwardly prefer the option which offers easier access" (p. 7). Furthermore, the passé composé is the unmarked tense form, while the historical past (simple past) is marked in French. Therefore, participants will go for the unmarked tense form as their source of transfer.

With the similarities that French and English offer in terms of their form or structure, that is, Have/Avoir + the pst participle, it is expected and predicted that this proximity will trigger transfer from French into English when talking about a past completed event in English. Kabasele (2014) argues that "[t]his similarity is attested between the form of the 'passé compose' in French and the form of the 'present perfect tense' in English. These two tenses are structured as 'Aux (have/avoir) + past participle' in both languages" (p. 7).

However, both the 'passé composé' in French and the present perfect tense in English differ in terms of their functions. The present perfect tense is used to talk about a past until now event, while the 'passé composé' in French is used to talk about an event which took place and was completed in the past. The proximity in terms of form will trigger the transfer, but the mismatch in terms of their functions/uses will result in a negative transfer in English.

The contrast of Lingala and English in relation to the form and use of the simple past projects a strong possibility of positive transfer. This is because the simple past tense in English and the recent or remote past in Lingala are made by adding a verbal morpheme as a suffix

to the verb stem/root. Kabasele (2014) says "[…] that is, morphologically, the simple past tense in both Lingala and English uses the inflectional morphemes to morphosyntactically mark the past tense of the verbal forms" (p. 7). Furthermore, both the simple past tense in English and the recent/remote past tense in Lingala are used to talk about past completed event. This similarity leads to positive transfer from Lingala to English.

In fact, at the initial stage of the process of the acquisition of English as an L3, of course after learning some (basic) of the verbal linguistic system in English, the linguistic parser of learners of English as an L3 identifies in the L2 French linguistic system the morphosyntactic form 'auxiliary + past participle' or otherwise 'avoir /have + participe passé/past participle' as the verbal form that is used to talk about past completed event" Kabasele (2014). During this process of the acquisition of English as an L3, the linguistic parser matches the morphosyntactic verbal form of a previous language, in this case French, to the existing counterpart structure in English, which is the perfective form 'have + past participle'. These two verbal forms—Le *passé composé* in French and the present perfect tense in English—overlap in terms of their morphological structure in both languages. Evidence of such match by French speakers learning English is legion. Some of the documented cases are by Payre-Ficout and Chevrot (2004) as well as Payre-Ficout, Brissaud and Chevrot (2009).

In clear, the possibilities for French speakers learning English to use the present perfect tense in a past completed event context in English have been observed and attested in a number of studies. Therefore, the prediction that they will use the present perfect tense in past completed events is not that novel in my study. In studies such as those of Payre-Ficout and Chevrot (2004) as well as Payre-Ficout, Brissaud and Chevrot (2009) it was attested that learners were tapping into their linguistic knowledge from French, mostly from the proximity of the form

of the 'passé composé' and the present perfect tenses to talk about past completed event. This resulted in negative transfers.

For example, Payre-Ficout, Brissaud and Chevrot (2009) investigated the acquisition of the simple past/present perfect distinction in English by French speakers. Kabasele (2014) referring to this study argues that French learners fail to grasp the different morphosyntactic values of the English simple past and present perfect because they do not correspond to the values of French tenses. They note that French speakers learning English simple past/present perfect tend to look for clues that could help them to select the right tense (Payre-Ficout et al., 2009). Payre-Ficout et al. (2009) claim that French-speaking learners "[…] base their judgment on the morphological distinction between simple and compound forms which is very stable and reliable in the French verbal system. This leads them to transfer the morphological properties of French compound forms to the production of English forms" (p.12).

My prediction that participants will use the present perfect tense in the context of past completed events is based on the same aforementioned logic and findings of Payre-Ficout et al. (2009) as articulated in Kabasele (2014). I assume that the morphological properties of French compound forms of the passe compose will trigger negative transfer in English because of two main reasons. First, this passe compose compound form will be the cause of negative transfer because of its morphosyntactic similarity with the compound form of the present perfect tense in English. The second reason is because the passe compose is an unmarked verb tense in French, therefore its access and activation becomes easier and faster.

In the next chapter, I discuss the methodology that was used in this study. I describe the different forms that were used for administrative purposes and present the demographics of the participants. I finally discuss the procedure for participants' sampling in the study.

Chapter V
Methodology

5.1 Ethical Clearance Procedure

Prior to setting into my research proper, the ethic clearance was first obtained. The approval of this study was under the protocol reference number: HSS/0261/015M.

5.2 The Research Sites and Participants

Participants were recruited from two research sites, namely Canada and the USA where Congolese who live there are acquiring English, but speak Lingala as their L1 and French as their L2. These two sites have been chosen because of an easy access of the researcher (who lives in USA and Canada during the course of the PhD research) to a large number of Congolese subjects. Even though the two varieties of English are slightly different, the linguistic phenomena which are the core of this study are similar in both American and Canadian English. In particular, the study is primarily concerned with the morphosyntactic structure of verbs which appear to be mostly identical in the two varieties.

Overall, with both sites combined, there are thirty subjects who make up the control group. They all are native speakers of North American English; they speak either American and Canadian English as their L1. Ninety subjects are the total population of the experimental group of the study. They all are Congolese who speak L1 Lingala L2 French and who are learning English as an L3.

A total of hundred and twenty participants – 60 from each research site – were administered the tests. The experimental group was subdivided into thirty beginner learners, thirty intermediate learners, and thirty advanced learners. An overview of the participants in this study is provided in table (12).

Table (7)

Participants

STUDY 1 SUBJECTS					
SITE	SUBJECTS				TOTAL
	EXPERIMENTAL GROUP			CONTROL GROUP	
	Beginner	Intermediate	Advanced	Native Speaker	
USA	15	15	15	15	60
CANADA	15	15	15	15	60
TOTAL:	30	30	30	30	120

A total 60 participants were recruited from the USA: Fifteen Native speakers of American English (control group) and the 45 natives of the Democratic Republic of Congo who reside in the USA (experimental group). All USA-participants live in the state of Illinois particularly in the cities of Chicago and the twin city of Urbana-Champaign.

The fifteen participants who constitute the US-American control group grew up in Illinois and spent most of their lifetime in the USA. Their ages ranged from 23 to 40 years old, and there were eight males and seven females in this group. They are for the most part University or college students; all of them are employed. They speak American English natively and they grew up as monolinguals. Even though they took a foreign language such as Spanish, Chinese, Japanese or French at school, none of them speaks a second language fluently.

The forty-five participants forming the USA contingent of the experimental group are Congolese citizens who lived in Kinshasa prior to immigrating to the USA. Their ages varied from 20 to 45 years old. There were twenty-four male participants, and twenty-one female

participants. They are in the USA on a green card. They live and work either in Chicago or in Urbana-Champaign. They speak Lingala as L1 and French as L2. They are exposed to American English, which they have been acquiring as an L3.

A second set of 60 participants were recruited in the English speaking regions of Canada; i.e. Alberta and British Columbia. The 15 participants who constitute the Canadian control group had to be Native speakers of Canadian English and had to have some college or university level of education. Their ages varied from 25 to 40 years old. There were eight males and seven female participants in the group. Most of them are from Calgary and they attend the University of Calgary as either undergraduate or graduate students while a few stem from Vancouver, Edmonton, and Red Deer. All Canadian members of the control group are white Caucasians who were born and raised in either Alberta or British Columbia. They speak Canadian English natively and they grew up as monolinguals. They all work besides their studies and English is the language of academic instruction for all of them.

The experimental group from the Canadian research site is made up of 45 Congolese citizens who live in Canada. Their ages ranged from 20 to 55 years old. There were twenty-four male participants and twenty-one female participants in the group. They live and work in Calgary, Edmonton, or Red Deer. They all lived in Kinshasa before they moved to Canada and speak Lingala as L1 and French as L2. They are exposed to Canadian variety of English which they have been acquiring as an L3.

The participants were categorized into three different proficiency levels using the cloze test. Both the French and English cloze tests were used, but only the results of the English cloze test were considered to determine the overall proficiency levels of the participants in the study. Participants were therefore categorized as belonging to beginner, intermediate, and

advanced proficiency groups. The French version of the cloze test was used to determine the proficiency level of the participants in French for the sake of the interpretation of the results.

Four main studies were conducted using different types of research instruments. The interview, the Written Elicitation Task (WET), and the Acceptability Judgment Task (AJT) were respectively used in this research. Data were elicited in the production as well as comprehension mode. The interview under the language production study aimed to collect data in the implicit mode. The implicit mode is motivated by the time pressure that participants underwent during the interview. Both the Written Elicitation Task (WET), and the Acceptability Judgment Task (AJT) were used to collect data in the explicit mode since more time was allowed during the administration of these tasks. The WET an AJT were used in both the language production and comprehension studies.

5.3 Participant Sampling

I used stratified sampling in this study. Stratified sampling is defined by Kathari (2004) in this way "Under stratified sampling the population is divided into several sub-populations that are individually more homogeneous than the total population (the different sub-populations are called 'strata') and then we select items from each stratum to constitute a sample. Since each stratum is more homogeneous than the total population, we are able to get more precise estimates for each stratum and by estimating more accurately each of the component parts, we get a better estimate of the whole" (p. 62). I had to meet three main conditions in order to use the stratified sampling:

(1) partition the population into groups (strata)

(2) obtain a simple random sample from each group (stratum)

(3) collect data on each sampling unit that was randomly sampled from each group (stratum).

5.3.1 Partition of the Population into Groups (Strata)

The whole population was made up of Congolese who live in North America, in both the USA and Canada. I partitioned my whole population into two main groups: the USA and Canada. In the USA, I considered Congolese who live in the state of Illinois. I partitioned them into three strata: Chicago, Urbana, and Champaign. On the other hand, in Canada, the Anglophone province of Alberta was considered. I partitioned this province into three strata: Calgary, Edmonton, and Red Deer.

5.3.2 Simple Random Sample from each Group (stratum)

The second stage consisted in obtaining a simple random sample from each stratum. I obtained a list and contact details (an email list or phone numbers) of Congolese living in Chicago, Urbana, and Champaign for the Illinois site (The USA) and a list and contact details (an email list or phone numbers) of Congolese living in Alberta: Calgary, Edmonton, and Red Deer. The respective email lists were provided to me by the representative of each Congolese community association in those different sites.

In each specific site, an individual on the list was assigned a number which was written on a folded piece of paper. All the folded pieces of paper were put in a basin, then I had to randomly pick one, write the number, and then put the piece of paper back into the basin. Therefore, for Chicago, Urbana, and Champaign for instance, I picked fifteen subjects for each site which resulted in forty-five Congolese subjects from Illinois, the USA. The same procedures were used to pick Congolese subjects from the Canadian site.

The control group were randomly selected on their respective campus, depending on their availability. The control group participants were selected from the University of Illinois at Urbana Champaign in which eight subjects were picked and Parkland College in Illinois were

seven subjects were picked. In Canada, five subjects were selected from the University of Calgary, five from the University of Alberta at Edmonton, and five from SAIT College in Calgary.

5.3.3 Collection of Data on each Sampling Unit that was Randomly Sampled from each Stratum

Finally, the data were collected from the selected individual from each site. It was easier to collect data using the Written Elicitation Task (WET) and the Acceptability Judgment Task (AJT) than using the Interview. There were cases when the WET and the AJT, which were written task, could be dropped at the subject's home when s/he was not there or it could be emailed to him/her. With the interview, however, the presence of the subjects was very important. There were times when the interviews were conducted over the phone or on skype. This difficulty to reach my subjects affected the total number of the interviewees since some of them could not make it for one or another reason.

The following table (8) presents information on the stratification of the sample.

Table (8)

The stratified table

Population	North America					
	The USA			Canada		
	Illinois			Alberta		
Strata	Chicago	Urbana	Champaign	Calgary	Edmonton	Red Deer
Obtain a simple random sample	15 people from each of the sites					
Sample	15 x 6 = 90 participants for the experimental group					

5.4 Consent Form Administration

Prior to administering any task to the participants of the study, they were asked to grant their consent by signing a consent form. The form was either emailed, mailed, or provided in hand depending on the case. Participants were informed that they could revoke their consent at any time and that there was no payment for participating in the study. A sample of the consent form is attached in appendix (1).

Chapter VI
The Cloze Tests and Linguistic Background

6.1. Motivation

Two cloze tests were administered to the participants of this study in order to determine their proficiency level in both French and English (see chapter V) for a detailed description of the participants in this study). The aim was to categorize subjects in three different proficiency groups. The three groups are beginner, intermediate, and advanced.

The participants of the study were categorized in order to better test the impact of language proficiency in the acquisition process of English as an L3. The categorization of the population of this study will further help to analyse their performance using inferential statistics (ANOVA or t-test, depending on the case) for the interpretation of the results of the study.

Two versions of cloze tests are used to determine subjects' level of proficiency in both English and French, respectively.

The English version of the cloze test was previously used by Ionin and Montrul (2010) to determine the proficiency level of their subjects. This version of the cloze test is an actual adaptation from American Kernel Lessons, which was drawn from the Advanced Students' Book by O'Neil and Washburn (1981). The French version of the cloze test can be found at 'www.ortholud.com/lecture/phrases_a_trous/'. Both tests have effectively served the cause of this study in categorizing the subjects in the three proficiency groups that are mentioned throughout this work.

6.2 English Cloze Test

6.2.1 Background and Structure of the English Cloze Test

The cloze test is made up of text with forty blanks. For each blank the subject is provided with three options. Options refer to the set of three words that were suggested for every blank in the

text for the participant to choose the correct answer from. For each blank subjects have to choose one correct answer and then circle the word that they identify as the appropriate filler for any given blank. Overall, 120 options were available for the whole text, of which 40 correct fillers had to be selected. Example (29) below illustrates a sample from the English cloze test. The entire English cloze test is included in appendix (2).

(29): English Cloze Test

CL T

Number: _____

For each blank in the following passage, please circle one of three options given. Please choose the option appropriate for the context. Please choose one option only for each blank.

Joe came home from work on Friday. It was payday, but he wasn't ____ **(1) even/more/ever__** excited about it. He knew that __ **(2) then/when/while** ___ he sat down and paid his____ **(3) checks/bills/salary** ____ and set aside money for groceries, ____ **(4) driving/pay/gas** ____ for the car and a small ____ **(5) deposit/withdrawal/money** ____ in his savings account, there wouldn't be ____ **(6) quite/not/too** ____ much left over for a good ____ **(7) pleasure/leisure/life____.**

For instance, for blank (1), **even/more/ever** are the three options out of which participants have to choose the correct answer and **even** is the correct answer.

The available 120 options contained all word classes (adverbs, nouns, verbs, prepositions, pronouns, adjectives, determiners, and conjunctions). There were time adverbs, place adverbs, condition adverbs, degree adverbs, and frequency adverbs as well as countable and uncountable nouns and lexical verbs plus auxiliary verbs. Among the auxiliary verbs, there were modal and perfective auxiliaries. Three types of prepositions were provided: time, place, and direction prepositions alongside two types of pronouns: personal and relative pronouns. Finally,

the test included three types of adjectives (descriptive, comparative, and possessive) as well as two types of determiners (one article and two quantifiers) and conjunctions, respectively.

6.2.2. The Results of the English Cloze Test

One hundred and twenty participants (see chapter V) were administered the English cloze test. That is, both the control group and the experimental groups took the test. Out of the ninety subjects of the experimental group, three main proficiency categories were determined.

The Results of the English Cloze Test for the Beginner Proficiency Group

Thirty participants were categorized as members of the beginner group. Their scores in the English cloze test varied from eight (8) correct answers as the minimum score to 21 correct answers out of a possible 40 correct answers as the highest score in this group (see table (9) below).

Table (9)

Summary for the beginner proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
8.00	12.25	15.00	14.67	16.75	21.00

The median score for the beginner group is 15, while the mean in this group is 14.67. The first and third quartiles are 12.25 and 16.75, respectively.[3] The categorization was idiosyncratic; that is, It was motivated by the distributions of points that participants scored in the English cloze test.

The Results of the English Cloze Test for the Intermediate Proficiency Group

The intermediate proficiency group comprises of 30 subjects whose score range varies between 23 and 29. The median score of this proficiency group is 26, while the mean is 25.87. The first quartile

[3] Individual scores for the beginner proficiency group are depicted in appendix 3.

is 25 and the third quartile is 27.The summary for the intermediate proficiency group is presented in table (10).[4]

Table (10)

Summary for the intermediate proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
23.00	25.00	26.00	25.87	27.00	29.00

The Results of the English Cloze Test for the Advanced Proficiency Group

Thirty subjects belong to the advanced proficiency group as a result of their score in the English cloze test. Their scores to the English cloze test varied from 30-39. The median score in the advanced group is 35, whereas the mean in this proficiency group is 34.77. The first and third quartiles are 33.25 and 36, respectively. The summary table for the advanced proficiency group is presented in table (11).[5]

Table (11)

Summary for the advanced proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
30.00	33.25	35.00	34.77	36.00	39.00

The Results of the English Cloze Test for the Control Group

The control group was made up of 30 participants of which 15 were recruited in the Urbana-Champaign, Illinois, the USA and the other 15 subjects were recruited in Calgary, Alberta, Canada.

[4] Individual scores for the intermediate proficiency group are depicted in appendix 4.

[5] Individual scores for the advanced proficiency group are depicted in appendix 5.

All their scores to the English cloze test were perfect; they got all the answers correct. Therefore, both their minimum score as well as the maximum score is 40. The same applies to the median score, the mean and the first and third quartiles, which were also 40. The summary table for the control group is presented in table (12).[6]

Table (12)

Summary for the control group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
40	40	40	40	40	40

The Results of the Statistical Analysis of the English Cloze Test

The ANOVA was conducted to determine whether the three proficiency subsets (beginner proficiency group, intermediate proficiency group, and advanced proficiency group) of the experimental group were significantly different from the control group. The test was also conducted to determine whether those three proficiency subsets were significantly different from one another.

The Paired t-test was run to compare the scores of the beginner proficiency group with those of the intermediate group. I posit as the null hypothesis that the scores of the beginner proficiency group are the same as those of the intermediate proficiency group. The alternative hypothesis predicts that the scores of the beginner proficiency group are different from those of the intermediate proficiency group.

Since the p-value ($p = 2.2e-16$) is smaller than alpha (.05), I reject the null hypothesis, which predicts that the performance of the beginner proficiency group will be the same

[6] Individual scores for the control group are depicted in appendix 6.

as that of the intermediate proficiency group. Therefore, the results of the paired t-test [t (29) = -17.538, p < 2.2e-16] that aimed to determine whether there are any significant differences between the beginner and intermediate proficiency groups' performance in the English cloze test show that there are significant differences between the beginner and intermediate proficiency groups' performance. Hence the alternative hypothesis is confirmed.[7]

The intermediate group was compared with the advanced proficiency group. The null hypothesis predicts no differences between the intermediate and the advanced group, while the alternative hypothesis assumes differences between the two groups. The hypotheses are presented as follows:

The results [t (29) = -18.53, p < 2.2e-16] confirm the alternative hypothesis showing that the scores of the intermediate proficiency group is significantly different from those of the advanced proficiency group.

Furthermore, the scores of each proficiency group of the experimental group (EG) were compared with those of the control group (CG). Starting with the comparison of the beginner proficiency group to the control group, the null hypothesis predicts no differences between the two groups. Whereas, the alternative hypothesis predicts differences between the beginner proficiency group with the control group.

Since the p-value (p < 2.2e-16) is smaller than alpha (.05), I reject the null hypothesis, which predicts that the scores of the beginner proficiency group are the same as those of the control group. On the basis of these results [t (29) = -47.77, p < 2.2e -16], I confirm the

[7] The beginner proficiency group was also compared with the advanced proficiency group, as expected the Paired t-test indicated that the scores of the beginner proficiency group are significantly different from the advanced proficiency group.

alternative hypothesis which predicts significant differences between the beginner proficiency group and the control group.

The intermediate group was compared with the control group as well. The null hypothesis predicts no differences between the intermediate and the control groups. Whereas, the alternative hypothesis predicts differences between the intermediate proficiency group with the control group.

The results [$t(29) = -47.364$, $p < 2.2e-16$] confirm the alternative hypothesis which predicts significant differences between the intermediate proficiency group and the control group.

Finally, the advanced proficiency group was compared with the control group. The null hypothesis predicts no differences between the advanced proficiency group and the control group. The alternative hypothesis, however, predicts differences between the advanced proficiency group and the control group. The hypotheses are presented as follows:

H_o: advanced proficiency group = control group

H_1: advanced proficiency group ≠ control group

The alternative hypothesis, which predicts significant differences between the advanced proficiency group and the control group, is confirmed through this result [$t(29) = -12.803$, $p < 1.849e-13$].

6.2.3 Discussion

The results for the English cloze test yield three distinct proficiency groups within the experimental group. These are the groups which will be considered in any further analyses. The groups are evenly distributed with thirty subjects in each group. The sum of the points scored by the subjects in each group help to represent them in a categorical way in table (13) and the histogram.

Table (13)

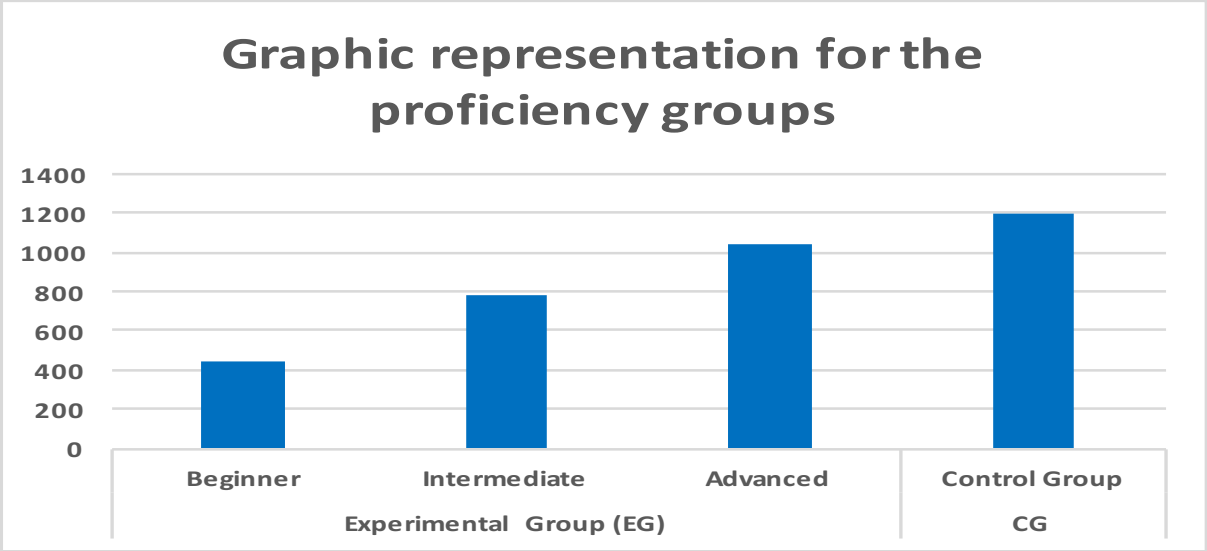
The proficiency category groups emerging from the English cloze test

Experimental Group (EG)						CG	
Beginner		Intermediate		Advanced		Control Group	
Score	Percent	Score	Percent	Score	Percent	Score	Percent
440	36.6 %	776	64.6 %	1043	86.9 %	1200	100 %

Figure (7) presents these proficiency groups graphically.

Figure (7)

Graphic representation for the proficiency groups



6.3 The French Cloze Test

6.3.1 Background and Structure of the French Cloze Test

The French version of the cloze test is drawn from https://www.ortholud.org. The test requires the reading and comprehension of a text passage about the popular cartoon character, Tin Tin (Georges Remi, known by the pen name Hergé; Tin Tin was published from 1929 until 1976).

The choice of this passage is motivated by the familiarity which Congolese in general and Kinois (Kinshasa inhabitants) in particular have with this character.

The French version of the cloze test is marked out of 20. The participants' results helped to categorize them into proficiency groups. The French cloze test has ten blank spaces to fill in. The words to choose out of the list are presented on top of the text. Ten options were presented to be selected to fill in the blanks. Out of the ten options which were presented, there was one verb, one adjective, one coordinating conjunction, one adverb of time, and six nouns. The text of the cloze test is made up of 123 words. The sample of the French cloze test is presented in appendix (7).

6.3.2 The Results of the French Cloze Test

The lowest score for the whole population of the study is 16, while the highest is 20. The first quartile is 18, and the third quartile is 19.7. The median score is 19, while the mean is 18.5. The summary for the whole population of the study which is categorized as an advanced proficiency group is presented in table (14).[8]

Table (14)

Summary for the French cloze test

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
16.00	18.00	19.00	18.5	19.7	20.00

6.3.3 Discussion

The results of the French cloze test show that there are no significant differences among the subjects of the experimental group in terms of their proficiency on French. The range of their

[8] Individual scores for the French proficiency test (cloze test) are depicted in appendix 8.

scores indicate that all subjects may be categorized as belonging to an advanced proficiency group. Therefore, no further categorization is provided except their advanced proficiency category.

These results may be justified by the fact that all the subjects received their education in French, which had been used as the language of instruction since elementary school. All the subjects have at least a high school diploma and at most a university degree. Also, since most of them lived in a country where French is spoken as an official language and some have been using it at home, the French cloze test reflects their true proficiency level in the language. It should however be noted that the participants cannot be considered as native speakers of French because the amount of input and the duration of their exposure to French are not enough for one to consider them native speakers of French – in particular input and exposure where not sufficient during the critical period (1-6 years of age) of first language acquisition. The "advanced proficiency" label describes their French proficiency better than any other label.

Throughout this study the results of the English cloze test are used to group subjects into the three proficiency categories because English is the target language that the subjects are trying to acquire.[9]

6.3.4 The Linguistic Background and Language History

Beside the cloze tests, subjects were required to fill in a questionnaire, which addressed their language learning background (see appendix 9 for a full version of the questionnaire in both French and Lingala). The questionnaire was divided into three main sections of which the linguistic background constituted seventy-five percent of the questions. The first two sections were on the personal data and the subject's family history. The questions were specific and they sought to

[9] Obviously, the subjects in the control group were not administered the French cloze test. Firstly, there was no need to have a French speaking control group and secondly none of the subjects in the English speaking control group speaks French.

identify both the country of origin and country of residency; to elicit information related to the subject's level of education, length of stay either in the USA or in the Anglophone provinces of Canada; the language(s) the subject grew up with; the language(s) the subject speaks at home, with friends, and at school, and the language s/he speaks the most and or the least on a daily basis.

The results have shown that all participants have at least a high school degree and at most a bachelor degree. Sixty-three participants, that is, seventy percent (70%) have high school degrees (D6), seventeen participants, that is, eighteen point eight percent (18.8%) have associate degrees, and ten participants, that is, eleven point one percent (11.1 %) have bachelor degrees.

All participants have at least lived in North America (NA), that is, the USA and Canada, for seven months and at most eight years. Thirteen participants, that is, 14.5 % have lived in North America for less than a year. Nineteen participants, that is, 21.1% have lived in NA for just a year. Twenty-one participants, that is, 23.3 % have lived in NA for two years. Seventeen participants, that is, 18.8 % have lived in NA for three years. Finally, twenty participants, that is, 22.2 % have lived in NA for more than 5 years, that is, between five to eight years. The average length of stay in NA is of four months and five weeks. The following table (15) presents the demographic features of my participants.

Table (15)

The demographic features of the participants

NORTH AMERICA							
	ILLINOIS			ALBERTA			
	Chicago	Urbana	Champaign	Calgary	Edmonton	Red Deer	Total

Participants number	15	15	15	15	15	15	90
Degree	Level of education						
High school	12	5	12	13	9	12	63
Associate	2	6	2	1	4	2	17
Bachelor	1	4	1	1	2	1	10
	Total						90
Length	Length of stay in North America						
Less than a year	1	4	3	4	1	-	13
1 year	7	3	2	-	5	2	19
2 years	4	2	2	-	4	9	21
3 years	1	2	4	6	2	2	17
5 to 8 years	2	4	4	5	3	2	20
	Total						90

All the participants speak at least three languages: Lingala, French, and an ethnical language. They are acquiring English either in the USA or in Canada where they live. They tend to speak Lingala when they are at home and when they meet their Congolese friends, but speak English at the work place. Some speak French with friends and even when they are at home. English is mostly used at the work place when interacting with a supervisor or any co-worker who

does not speak Lingala or French. English is also used as a language for shopping. They also use it when they go to see a doctor or when they attend the teacher-parent conference at their children's school.

6.3.5 Self-rating Forms

Participants were administered the same proficiency test (see chapter VI), a subject language learning history form (see chapter VI) and a self-rating form in order to elicit their background information (see chapter VI and appendix (10)). The information from the self-rating forms has shown that most participants have underestimated their proficiency level. That is, compared to the results of the cloze test, most participants who are, for instance, of intermediate level rated themselves as beginners. Their language learning history has shown that most participants, that is, 72 people have basically learned English in high school. 43 participants have mentioned that beside high school, they also attended some English language school in Kinshasa. 18 participants said they attended formal English language program either in the USA or in Canada.

Chapter VII

Investigation of Morphosyntactic Transfer in Language Production

7.1 Introduction

This chapter presents the experimental investigation of morphosyntactic transfer in language production. It discusses both study 1, "Past completed event" and 2, "Past until now event" and presents the results and findings of each study separately.

Study 1, which is related to the past completed event looks at possible transfer from the subjects' L1 (Lingala) or from the subjects' L2 (French) in the subjects' construction and use of the simple past tense in English. Study 2 is related to past until now event and examines possible transfer from the subjects' L1 (Lingala) or from the subjects' L2 (French) in in the subjects' construction and use of the present perfect tense in English. Both studies test the claims of the Cumulative Enhancement Model (Flynn, Foley, and Vinnitskaya, 2004), the 'L2 Status Factor' Model (Bardel and Falk 2007), and the Typological Primacy Model (Rothman 2010, 2011).

In the following sections, I present the results and discuss the findings of studies 1 and 2. In both studies, I use the same research questions, summarize my predictions, and provide necessary information on the task of the study. The data analyses and the results are presented below.

7.2 Study 1: Past Completed Event

The first part of the study examines how L1 Lingala L2 French speakers express an event that took place and was completed in the past in English as such it tests the claims of the Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004), the 'L2 Status Factor' Model by Bardel and Falk (2007), and the Typological Primacy Model (TPM) by Rothman (2010, 2011) as outlines in chapter II, pages 69-87.

7.2.1 Task 1: The Interview

7.2.1.1 Rationale

The interview questions aim to elicit sentences that are related to both events, which took place and were completed in the past and events that started in the past but that have some implication in the present. Since study 1 is restricted to past-completed event, only questions, which aimed to elicit answers on the past-completed events, are tackled in this study. All the questions that are related to 'past until now events' are discussed in study 2 while questions that are related to 'future events' are treated as the distractors in the experiment.

The interview seeks to elicit data in oral mode. It provides data for the production part of this research. As mentioned earlier, five questions constitute the body of the interview. These questions are:

Question 1: Tell me about something that you remember when you were in high school?

Question 2: Tell me about your two big accomplishments in the last six months?

Question3: Tell me about something that you would like to do in six months?

Question 4: Tell me about your first week experience at college/University/work?

Question 5: Tell me about something you remember from your childhood?

Questions 1, 4, and 5 aim to elicit the use of the simple past tense in the context of past-completed event in English. Answers to these questions will help to test the claims and predictions of the three aforementioned models of L3-acquisition.

7.2.1.2 Research Questions

With reference to language production, the research questions (repeated here from chapter I, p. 9) are:

(1) Which previously acquired language(s) dominate in L3 transfer?
   - Is either the L1 or the L2 more dominant?
   - Or are both the L1 and the L2 equally dominant?

(2) Is the L2 the privileged source of transfer even when the L1 offers local similarities with the L3?

The first question aims to determine the language that serves as source of transfer. It straightforwardly tests the claims and predictions of the three aforementioned L3 syntactic models. The second question, however, tries to determine the power of influence between the potentially highly influential status of the L2 (L2 status) and the typological proximity between the languages under consideration and wants to determine whether the L2 status or the typological similarity takes precedence when both factors are in competition during the acquisition of an L3 such as in the case of the current study.

7.2.1.3 Predictions

Morphological tense is predicted as an area of morphosyntactic transfer. The work looks at the similarities of the morphosyntactic realization of the functional 'tense' feature in the three languages and tests the following predictions which follow from the three competing models of morphosyntactic transfer.

Prediction one: Based on the Typological Primacy Model (TPM) by Rothman (2010, 2011), it follows that if subjects tap into their linguistic knowledge from the L1 to talk about past-completed event in English, they will use the simple past tense.

Prediction two: The prediction of the 'L2 Status Factor' Model by Bardel and Falk (2007) is that the subjects should tap into their linguistic knowledge from the L2 to talk about past-completed events in English; hence they should use the present perfect tense.

Prediction three: The Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004) predicts that if subjects tap into their linguistic knowledge from both L1 and L2 to talk about past-completed event in English, they will use the simple past tense.

Prediction one and prediction three cannot be teased apart in the current study 1 since both models predict the use of the simple past tense in this context. The prediction for the use of the simple past tense by the Typological Primacy Model (TPM) (Rothman, 2010, 2011), is based on the assumed effects of linguistic proximity between the L1 and the TL, while the Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004) predicts the use of the simple past tense due to the effects of cumulated knowledge from both the L1 and the L2.

Referring to the concern of determining whether subjects are more accurate when in using implicit rather than explicit knowledge, the study posits that the subjects will make fewer errors in the interview than in the written elicitation task. However, if subjects are more accurate when they employ explicit knowledge rather than implicit knowledge, they will make fewer errors in the written elicitation task than in the interview.

Participants' errors will be quantified in both the interview (implicit knowledge) and the Written Elicitation Task (WET)/the Acceptability Judgment Task (AJT) (explicit knowledge). Then, these errors are compared to determine in which task and mode of knowledge the participants make more errors. I will finally run the inferential statistics to determine whether there are any significant differences between the proficiency groups.

7.2.1.4 Procedure

Subjects are interviewed individually for a maximum of five minutes. The added time pressure of the oral interview situation allows to access a learner's implicit knowledge (Dekeyser, 2001). The interviewer uses linguistic devices as fillers in order to keep the interviewee speaking and to give him/her less time to readjust their message or plan what they want to express. Every subject was interviewed individually. The interview was either audio recorded or video recorded.

7.2.1.5 Data Coding and Analysis

I used three independent coders to identify the obligatory contexts for the use of the simple past tense in the interview transcripts of every individual participant. Two coders were native speakers of English—an American and a Canadian— of which one is a teacher of English as a second language, one is a linguist. I was the third coder. I used the same coders to identify the mistakes which were observed in the implicit knowledge condition as opposed to the explicit knowledge condition in the data. Coding was done independently; all the coders sat together at a certain point to harmonize the minor coding differences in order to find a consensus.

A point was assigned for every single correct answer that was provided by the participant in the obligatory context of past completed event in which the use of the simple past tense was required. The number of the obligatory contexts varied depending on one participant to another. For instance, a participant who used the present perfect tense in the context of past completed event was assigned zero point for that particular obligatory context. Likewise, a participant who used the simple present in the context of PCE was granted zero point as that is illustrated in the illustration below.

Participant 9, F6

I: tell me about something you remember when you were in high school?
P: ah, [laughs] like what? Hum, anything I remember a lot of things. I remember my first time when I started because I started my high school when I was in Kinshasa. But we have to move to Lubumbashi. And then when we were there, all of, all of them they were thinking that I am the stupid, I am the stupid eleve as I was coming from Kinshasa.

The erroneous verb tense is double underscored. This participant used the form 'have to' rather than 'had to' to talk about a PCE. Also, he used the simple present tense 'am' rather than 'was' in two different instances above. All these contexts are related to PCE and the correct tense would be the simple past tense. Such mistakes were granted zero point for each context.

When a correct verb tense was used, that is, the simple past tense in the context of past completed event, a point was assigned.

Since the transcripts of the interviews were based on oral production, pronunciation mistakes due to the quality of the vowel such as in 'bought' were not penalized. That is, the simple past tense of the verb 'to buy' could be pronounced with either an open or a close [o] as in [bot] or [bɔt]; these were considered as correct answers and a point was granted. Likewise, mistakes due to the pronunciation of the –ed ending did not count either. For instance, rather than producing the verb 'asked' as [æskt], a participant would produce it as [æskid]. Such a case of mistake was not penalized; therefore, a point was granted to the participant.

7.2.1.6 The Results and Statistical Analysis

Hypothesis

I ran ANOVA to examine the relationship between the four proficiency groups and their use of the simple past tense which is my response variable in the context of past completed events in English. This relationship is mathematically represented as:

Y~Z

The aim in running ANOVA is to compare the means of the use of the simple past tense in obligatory contexts in the case of past completed events in English. The null hypothesis predicts that there are no significant differences among the means for all four proficiency groups. This entails that there is no relationship between the proficiency groups and the use of the simple past tense in obligatory contexts in the case of past completed events in English. The null hypothesis is written as:

H_0: Beginner proficiency group = Intermediate proficiency group = Advanced proficiency group = Control Group

The alternative hypothesis, however, predicts that there are significant differences among the four proficiency groups. This means that not all the four proficiency groups are equal. This entails that there is a relationship between the proficiency level and the use of the simple past tense in obligatory context in the case of past completed events in English. The alternative hypothesis is written as:

H_1: Beginner proficiency group ≠ Intermediate proficiency group ≠ Advanced proficiency group ≠ Control Group

The Results of ANOVA

[$F(3,428) = 13.02$, $p < .05$]

Since the results of ANOVA has shown that p-value is smaller than alpha (.05), I conclude that for my confidence interval, I accept the alternative hypothesis (H_1) which predicts significant differences between the four proficiency groups. That is, there is a significant relationship between the proficiency level and the use of the simple past tense in obligatory context in the case of past completed events in English.

At this stage, ANOVA tells us that not all the means are equal. Yet my categorical variable 'proficiency groups' has four categories. A Post Hoc Test needs to be conducted to determine the proficiency groups that are different from one another. Therefore, the Tukey HSD post hoc test was used. The results of the Tukey multiple comparisons of means, at 95% family-wise confidence level, are reported in table (16).

Table (16)

The results of Tukey HSD post hoc test

$ Group	diff	lwr	upr	p adj
Beg-advanced	-0.118330526	-0.23026413	-0.006346383	0.0336923
CG-advanced	0.11340206	0.01873525	0.208068875	0.0114313
Interm-advanced	-0.02409794	-0.13681264	0.088616763	0.9461409
CG-beginner	0.23170732	0.13164630	0.331768332	0.0000000
Interm-beginner	0.09420732	-0.02307442	0.211489052	0.1640672
Interm-CG	-0.13750000	-0.23840600	-0.036593996	0.0027362

From the results as presented in table (16), it is concluded that:

- There is no significant difference in the use of the simple past tense in obligatory context in the case of past completed events between:
  - The intermediate proficiency group and the advanced proficiency group ($p = 0.94 > .05$)
  - The intermediate proficiency group and the beginner proficiency group ($p = 0.16 > .05$)
- There is a significant difference in the use of the simple past tense in obligatory context in the case of past completed events between:

- The beginner proficiency group and the advanced proficiency group (p = 0.03)
- The control group and the advanced proficiency group (p = 0.01)
- The control group and the beginner proficiency group (p = 0.00)
- The intermediate proficiency group and the control group (p = 0.00)

The t-test was further used to compare the means scores of the use of the simple past tense (correct answers) and the use of the present perfect tense (wrong answers) in the obligatory context of a past completed event in English. The aim was to determine whether there were any significant differences in terms of the use of these two tenses in the context of past completed event in English.

I therefore compared the use of the simple past tense and the present perfect tense by beginner proficiency group, the use of the simple past tense and the present perfect tense by intermediate proficiency group, and the use of the simple past tense and the present perfect tense by advanced proficiency group. The null hypothesis predicted no significant differences between the use of the simple past tense and the use of the present perfect tense by beginners. The alternative hypothesis predicted a significant difference between the use of the simple past tense and the use of the present perfect tense by beginners.

In addition, for the intermediate proficiency group, the null hypothesis predicted no significant differences between the use of the simple past tense and the use of the present perfect tense by the intermediate proficiency group. The alternative hypothesis predicted a significant difference between the use of the simple past tense and the use of the present perfect tense by the intermediate proficiency group. Finally, for the advanced proficiency group the null hypothesis predicted no significant differences between the use of the simple past tense and the use of the

present perfect tense by the advanced proficiency group. The alternative hypothesis predicted a significant difference between the use of the simple past tense and the use of the present perfect tense by the advanced proficiency group.

The results of the Welch Two Sample t-test indicate that there is a significant difference in the use of the simple past tense and the present perfect tense by the beginner proficiency group ($t = 7.12$, $df = 161.96$, p-value = 3.213e-11), by the intermediate proficiency group ($t = 13.231$, $df = 158$, p-value < 2.2e-16), and by the advanced proficiency group ($t = 16.894$, $df = 192$, p-value = 2.2e-16) in the context of past completed events in English.

7.2.1.7 Discussion

The findings of this study have revealed that participants in this current study prevalently used the simple past tense to talk about past completed events in English. The use of the simple past tense in the context of past completed events is attributed to positive transfer since the results of statistical analysis have shown significant differences between the Experimental Group (EG) and the Control Group (CG). This entails that participants have tapped into their previous linguistic knowledge from the L1 Lingala in the context of past completed events. Proficiency has also played a certain role in the transfer process of the acquisition of an L3.

The statistical differences in the use of the simple past tense and the use of the present perfect tense in the context of past completed event shows that participants have transferred their linguistic knowledge from the L1 Lingala in the context of past completed events in English. This positive transfer is in alignment with the predictions of the TPM by Rothman (2010, 2011) who argues that transfer comes from the language that offers some morphosyntactic proximity with the TL.

7.2.2 Task 2: The Written Elicitation Task

The Written Elicitation Task (WET) elicited the production data of the study through a written mode. This task collected the data through the explicit mode of accessing the linguistic knowledge. That is, participants did not undergo any time pressure while providing answers to the questions of the task.

7.2.2.1 Rationale

Unlike the interview, the written elicitation task is administered in order to collect data while the subjects are in an explicit mode. The written elicitation task is used to promote reliance on explicit knowledge because subjects are allowed ample time to answer the questions. The goal of the written elicitation task is to determine the mode – implicit versus explicit – in which learners are more accurate.

7.2.2.2 Procedure

The written elicitation task (see appendix (11) for the template) is administered in both studies 1 and 2. No restriction in terms of time is imposed on the written elicitation task. Subjects use the verbs suggested to them in parentheses to fill in the blanks left for them in a text and they then add the appropriate tense morphology to the verb that is suggested by the time adverbial clue in the sentence. The task has 24 questions, which are organized into a category of six items.

Here are some sample questions of the written elicitation task that are arranged into three categories, past completed events, filler events and past until now events:

Table (17)
Sample questions for the written elicitation task

Category	Fill in the blanks with the verb provided in the parentheses; use the correct form of the verb.
Past completed event	1. Joe……a car 10 years ago (buy).
	2. Allegress.....in Champaign in 2012 (arrive).
Filler	1. Passy……..food now (cook).
	2. Betty……home next week (go).
Past until now event	1. Nathan……..in Alberta since 2011 (live).
	2. Betty……piano for six years (play).

The targeted categories are the simple past tense and the present perfect tense. The future, the simple present and the present progressive are distractors. In the first part of this study, the category of items that are related to the use of the simple past tense will be reported in study 1 and data related to the use of the present perfect tense will be reported in study 2.

7.2.2.3 Predictions

This section discusses the categories and conditions which are presented in the prediction table (table 18) and it also articulates the predictions for this task. The answers in table (18) help to discuss the possibilities of the linguistic transfer that are likely to be observed in this experiment. The answers are related to three possibilities to determine whether transfer is coming from the L1, the L2, or from both the L1 and the L2.

Table (18)

Categories and Conditions of the Tokens

Fill in the blanks with the appropriate verb tense as suggested by the context	Answers	Only transfer from L1 to L3	Only transfer from L2 to L3	Cumulative transfer from L1 & L2	English
1.Bob.....in Paris in 2003 (to live).	Bob **lived** in Paris in 2003	✓	X	✓	Grammatical
2.Joe …..Paris in 2005 (to visit).	Joe **has visited** Paris in 2005	X	✓	?	Ungrammatical
3.Bob…..in Paris from 2000 to 2004 (to study).	Bob **studied** in Paris from 2000 to 2004	✓	X	✓	Grammatical
4.Clara…..in Marseille in 2005 (to work).	Clara **has worked** in Marseille in 2005	X	✓	?	Ungrammatical
5.Bob…..in Paris 3 years ago (to live).	Bob **lived** in Paris 3 years ago	✓	X	✓	Grammatical

The example (1), (3), and (5) in table (18) show cases of positive transfer that is coming from the L1 which is Lingala because the L1 offers some structural proximity with the TL English. The morphosyntactic proximity between Lingala and English is observed at the level of the simple past suffix inflection in both languages and at the level of the VP structure. In both Lingala and English, the simple past tense is formed by appending a suffix to the verb stem. Lingala uses the suffix –aki, while English uses –ed. French, on the other hand, uses the auxiliary AVOIR (the auxiliary 'have') plus the past participle of the main verb, which is similar to present perfect tense in English.

The proximity between Lingala and English in terms of a past completed event may trigger positive transfer in the TL. The examples in (1), (3), and (5) support the claims of both the

TPM and the CEM. However, there is a need to unpack the cumulative knowledge in this case and show the linguistic system which has contributed in providing the correct and grammatical sentence in this case. I argue that in (1) = positive transfer, (3) = positive transfer, (5) = positive transfer, the transfer is coming from the L1 since only Lingala predicts the use of the simple past tense as a result of transfer in these cases. This hypothesis supports the Typological Primacy Model (TPM) because the Cumulative Enhancement Model (CEM) does not support the idea of negative transfer during the acquisition process of an additional language and the L2 may be discarded as having contributed knowledge because, according to the predictions, French would have contributed 'passé compose knowledge' which in turn would have resulted in the use of the present perfect tense in English.

Examples (2) and (4) in table (18) show cases of negative transfer from a previously acquired language. The distance in terms of the structure of the verbs between the L2 French and the TL English has triggered negative transfer from the L2. In fact, to talk about a past completed event in French, the 'passé compose' is used; that is, the structure 'AVOIR + PARTICIPE PASSE", which is the equivalent of the English 'HAVE + PAST PARTICIPLE'. However, the use of the present perfect tense in the context of past completed event would be erroneous and ungrammatical in English.

In sum, the most relevant and plausible predictions concerning the source of transfer in relation to the three tested models which synoptically capture the realities depicted in table (18) are summarized below.

The predictions related to past completed events are presented in table (19).

Table (19)

Predictions Related to Past Completed Events

Model	Prediction
TPM	The Typological Primacy Model (TPM) claims that only the language with syntactic proximity with the TL serves as the source of transfer; hence the TPM predicts that if subjects are tapping into their linguistic knowledge from the L1 to talk about a past completed action in English, they will use the simple past tense verb in their sentences in a context in which the simple past tense is required.
The 'L2 Status Factor' Model	The 'L2 Status Factor' Model claims that the L2 is the strongest source of transfer in L3 acquisition and that the L2 blocks any morphosyntactic transfer from the L1 syntactic system; hence the model posits that if subjects are tapping their linguistic knowledge from their L2 (French) to talk about a past completed event in their L3 (English), they will use the present perfect tense verb in sentences which require the simple past tense.
CEM	The Cumulative Enhancement Model CEM claims that learners rely on their cumulated linguistic knowledge from both L1 and L2 as source of transfer and that transfer is only positive or null; hence this model posits that if subjects are tapping into their linguistic knowledge from both L1 and L2 to talk about past completed

	event in English they will use the simple past tense in their sentences.

7.2.2.4 Research Questions

Two main questions have guided the procedures and analysis of this experiment; those questions are repeated here from chapter I, p. 8. they are:

(1) Which previously acquired language(s) dominate in L3 transfer?

- Is either the L1 or the L2 more dominant?
- Or are both the L1 and the L2 equally dominant?

(2) Is the L2 the privileged source of transfer even when the L1 offers local similarities with the L3?

(3) Does gender pay any role with regards to linguistic transfer?

The questions aim to shed light on the predictions of the three models that are being tested in this study.

7.2.2.5 Data Coding and Analysis

Six questions in the Written Elicitation Task (WET) aimed to test subjects' knowledge of how to correctly verbalize a past completed event in English; i.e. questions (1), (7), (11), (15), (19), and (24) which offered the possibility of using the simple past tense in English since in all those contexts the event took place and was completed in the past. For every single correct answer one point was assigned for the use of the correct verb form, i.e. the simple past tense, in those questions; this amounts to a total of six as the maximal score.

If the provided space was left empty, no point could be allocated. Likewise, in the case of spelling mistakes no points were granted. These criteria were discussed among all the raters

and we finally agreed upon such cases as those which are described below. It should be noted that all the three coders explicitly agreed upon adopting a strictly pedagogical approach on the form of the verb. Any spelling mistake related to the inflection of the verb tense was considered erroneous. For example, if a subject used the verbal form such as 'buyed' rather than writing 'bought', no point was awarded. In some cases, subjects used the simple past form of the verb 'to bring' which is 'brought' rather than using the simple past tense of the verb 'to buy', in which case the answer was considered incorrect and no point was granted.

The correct use of the simple past tense in this set of test sentences may be attributed to the effects of positive transfer from the L1 Lingala which offers verbal morphosyntactic proximity with English. The use of the present perfect tense in the context of past completed event was attributed to negative transfer from the L2 French which uses 'le passé composé' to talk about a past completed event; since 'le passé composé' is similar to the present perfect tense in terms of form, I assume that the use of the present perfect tense in this context is triggered by negative transfer from French.

7.2.2.6 The Results and Statistical Analysis

This section discusses both the results of descriptive statistics and those of inferential statistics. The t-test was computed for the inferential statistics in which variables were considered in pairs. The following subsection is on the descriptive statistics.

7.2.2.6.1 The Results of Descriptive Statistics

The scores that result from the summing up of the points individual participants scored in the WET show an ascending tendency; i.e. scores are increasing as a result of the proficiency level (in Appendix 12). Beginners scored fewer points than the intermediate and advanced groups. The

control group which was composed of native speakers of English outperformed all the three experimental groups. The following table (20) presents the results according to proficiency level.

Table (20)

The WET results per proficiency level

Level/Category	Score	Percent
Beginner	140	77.7 %
Intermediate	148	82.2 %
Advanced	169	93.8 %
Control Group	180	100 %

Table (21) presents the results of the WET in terms of proficiency level. I try to control proficiency in order to determine the group which will have outperformed in different tasks, and the one which will make more transfers.

Table (21)

The results of the WET in terms of both gender and proficiency level

Level/Category	Gender	Score	Percent	Total score	Percent
Beginner	Male	77	42.7 %	140	77.7 %
	Female	63	35 %		
Intermediate	Male	73	40.5 %	148	82.2 %
	Female	75	41.6 %		
Advanced	Male	87	48.3 %	169	93.8 %
	Female	82	45.5 %		
Control Group	Male	90	50 %	180	100 %
	Female	90	50 %		

The following diagrams represent the results of the WET. They depict the total points per proficiency level; specify, they present the category or proficiency level in French, and determine the gender of the subjects.

Figure (8)

The results of the WET

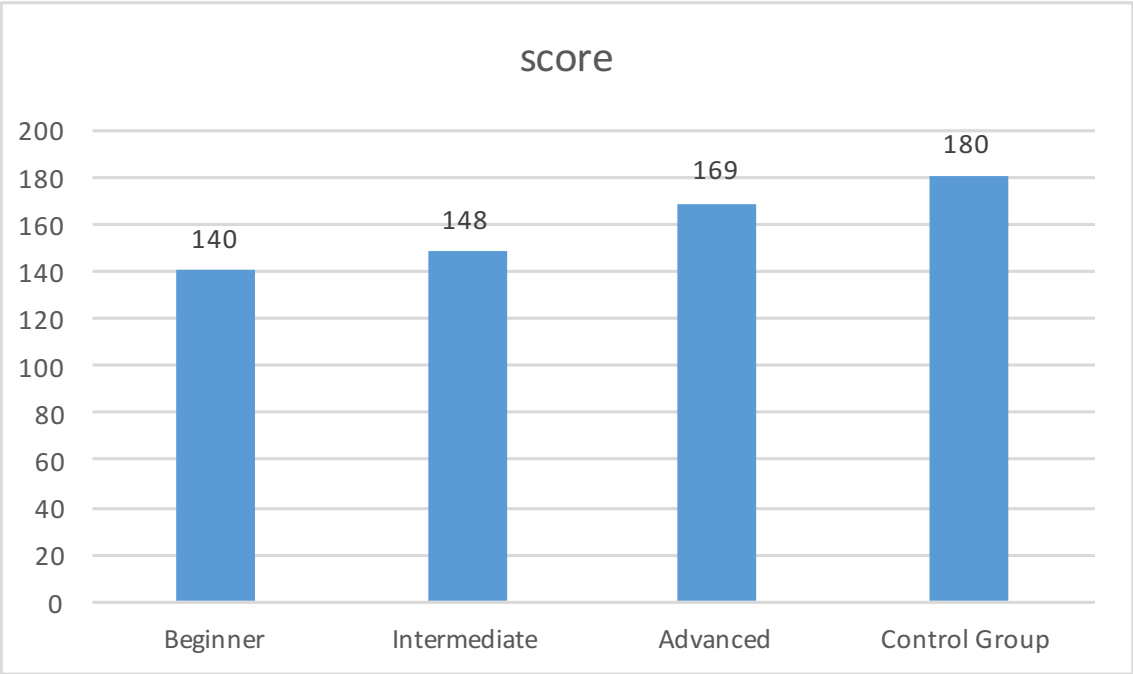
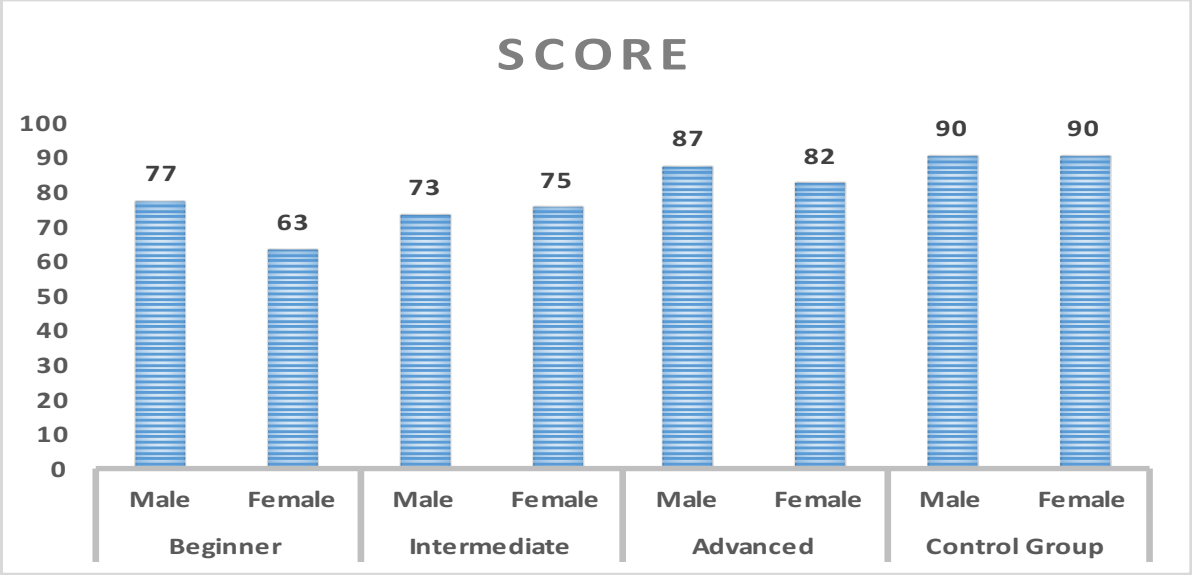


Figure (9) presents the results of the WET, in histogram, in terms of gender for each proficiency group.

Figure (9)

The WET results in terms of gender



The diagram in figure (9) shows that overall the male subjects outperformed the female subjects in the WET. The male performance in the beginner category was even better than both male and female groups in the intermediate category. It is only in the intermediate category that the female subjects outperformed the male subjects.

7.2.2.6.2 The Results of the t-test

The results of the three experimental groups (EG) were compared with those of the control group (CG) using the t-test. I use the statistical software 'R'[10] to compute the t-test in order to determine whether the experimental performance of the three experimental groups in the WET was the same or significantly different from the control group. Furthermore, subjects' performance on the WET was compared across proficiency levels. That is, the results of the beginner proficiency group were compared to those of the intermediate proficiency and advanced proficiency groups. Finally, the

R version 3.2.0 (2015-04-16) "Full of Ingredients "Copyright (C) 2015 The R Foundation for Statistical Computing Platform: x86_64-apple-darwin13.4.0 (64-bit).

results of the intermediate proficiency group were compared to those of the advanced proficiency group.

I predict as the null hypothesis that the beginner proficiency group's performance will be the same as that of the intermediate proficiency group. This prediction is based on the effects of linguistic proximity between the L1 Lingala and the TL English, which may facilitate the acquisition process of the simple past tense in English to the subjects of all proficiency levels. The alternative hypothesis predicts that the beginner proficiency and intermediate proficiency groups' performance will be different. This prediction is based on the effects of the proficiency differences between the two groups of participants.

H_o: beginner proficiency group = intermediate proficiency group

H_1: beginner proficiency group ≠ intermediate proficiency group

Since the p-value ($p = 0.39$) is greater than alpha (.05), I accept the null hypothesis, which predicts that beginner proficiency group's performance is the same as the performance of the intermediate proficiency group. The results of the paired t-test [$t(29) = -0.86931$, $p = 0.39$] that aimed to determine whether there are any significant differences between the beginner and intermediate groups' performance in the WET shows that there are no significant differences between the beginner proficiency and intermediate proficiency groups' performances.

Comparing the performance of the beginner proficiency group with those of the advanced proficiency group in the WET in terms of past complete events in English, the null hypothesis predicts that the beginner group's performance will be the same as that of the advanced group. This prediction is based on the effects of linguistic proximity between the L1 Lingala and the TL English, which may facilitate the acquisition process of the simple past tense in English for subjects of all proficiency levels. The alternative hypothesis predicts that the beginner proficiency

and advanced proficiency groups' performance will be different. This prediction is based on the effects of the proficiency differences between the two groups of participants.

H_o: beginner proficiency group = advanced proficiency group

H_1: beginner proficiency group ≠ advanced proficiency group

Since the p-value (p = 4.162e-05) is smaller than alpha (.05), I reject the null hypothesis which predicts that the performance of the beginner proficiency group will be the same as that of the advanced proficiency group. The results of the paired t-test [t (29) = -4.8218, p = 4.162e-05] that aimed to determine whether there are any significant differences between the beginner proficiency and advanced proficiency groups' performance in the WET shows that there are significant differences between the beginner proficiency and advanced proficiency groups' performance. Therefore, the alternative hypothesis is confirmed.

Furthermore, the performance of the intermediate proficiency group was compared with that of the advanced proficiency group in the WET in terms of past complete events in English. The null hypothesis predicts that the intermediate proficiency group's performance will be the same as that of the advanced proficiency group. This prediction is based on the effects of linguistic proximity between the L1 Lingala and the TL English, which may facilitate the acquisition process of the simple past tense in English for the subjects of all proficiency levels. The alternative hypothesis predicts that the intermediate proficiency and advanced proficiency groups' performance will be different. This prediction is based on the effects of the proficiency differences between the two groups of participants.

H_o: intermediate proficiency group = advanced proficiency group

H_1: intermediate proficiency group ≠ advanced proficiency group

Since the p-value ($p = 0.0029$) is smaller than alpha (.05), I reject the null hypothesis which predicted that the performance of the intermediate group will be the same as that of the advanced group. That is, the results of the paired t-test [$t(29) = -3.2524$, $p = 0.0029$] that aimed to determine whether there are any significant differences between the intermediate and advanced groups' performance in the WET indicates that there are significant differences between the beginner proficiency group's and advanced proficiency group's performances. Therefore, the alternative hypothesis is confirmed.

Furthermore, all three proficiency categories of the experimental groups (EG) were compared with the control group (CG). This comparison aimed to determine the impact of proficiency, beside that of the linguistic similarity between two linguistic systems. I computed to determine the degree of differences between each group compared to the control group to see whether the differences were significance.

Starting with the comparison between the beginner proficiency group and the control group, I posit as null hypothesis that the performance of the beginner group will be the same as that of the control group. The alternative hypothesis assumes that the performance of the two groups will be different.

Since the p-value ($p = 6.564e\text{-}07$) is smaller than alpha (.05), I reject the null hypothesis which predicted that the beginner proficiency group's performance will be the same as that of the control group. Therefore, I confirm the alternative hypothesis which assumes the differences between the two groups; indeed, the results [$t(29) = -6.3246$, $p = 6.564e\text{-}07$] show that there are significant differences between the beginner proficiency group and the control group.

As of the contrast between the intermediate proficiency group and the control group, I predict as the null hypothesis that the intermediate proficiency group's performance will

be the same as that of the control group. The alternative hypothesis predicts that the performance of the two groups will be different.

The p-value (p = 4.798e-07) that was found from the computing of the Paired t-test is smaller than alpha (.05), therefore the null hypothesis which predicts performance similarity between the intermediate proficiency group and the control group is rejected. I thus confirm the alternative hypothesis which assumed differences in terms of the performance of the two groups. The results [t (29) = -6.4401, p = 4.798e-07] clearly show that there are significant differences between the intermediate proficiency group and the control group.

Concerning the comparison between the advanced proficiency group and the control group in terms of their performance to the WET with reference to the past completed events, I predict as null hypothesis that the advanced proficiency group's performance will be the same as that of the control group. Whereas, the alternative hypothesis predicts that the performance of the advanced proficiency group will be different from that of the control group.

Since the p-value (p = 0.002) is smaller than alpha (.05), I reject the null hypothesis that assumes that the advanced group performance will be the same as the control group performance. I, therefore, confirm the alternative hypothesis on the basis of these results [t (29) = -3.2658, p = 0.002]; i.e. that the advanced proficiency group's performance is different from the control group's performance.

7.2.2.7 Discussion

The results of this experiment confirm the predictions of the Typological Primacy Model (TPM) by Rothman (2010, 2011) which assumes that structural similarity plays the preponderant role in the acquisition process of the morphosyntactic structure of an additional linguistic system beyond the L2. All the three proficiency categories of the experimental group performed far beyond the

average. This entails the facilitative effects of the morphosyntactic proximity between the L1 and the TL which positively impact all the three groups in different ways. Proficiency also played a deterministic role in the process as is highlighted in the discussion below.

The performance of both beginner and intermediate groups in the Written Elicitation Task (WET) was positively impacted by the linguistic proximity between Lingala and English. These results on the differences between the beginner proficiency and intermediate proficiency groups indicate that the morphosyntactic proximity between Lingala and English determined the linguistic performance of both groups in the WET and played a facilitative role in the acquisition process of the simple past tense. The fact that the beginner proficiency group performance is similar to that of the intermediate proficiency group implies that proficiency did not play a major role at this level. If proficiency had any positive impact at this initial stage, the two group would have performed differently with the intermediate proficiency group outperforming the beginner group.

The differences in performance between the beginner proficiency and the advanced proficiency groups, and the intermediate proficiency and the advanced proficiency groups confirm what I stated above. While the morphosyntactic proximity between Lingala and English seems to play a deterministic role for the beginner proficiency and intermediate proficiency groups' performances, I suspect that proficiency also played a deterministic role besides the morphosyntactic proximity. This viewpoint is supported by the differences in performance that are observed between the beginner proficiency group and the advanced proficiency group and between the intermediate proficiency group and the advanced proficiency group. I posit that the differences between the beginner proficiency and the advanced proficiency group are dictated by both the

linguistic similarity and by the advanced proficiency level of the advanced proficiency group in combination, as the advanced proficiency group outperformed the other two groups by a margin.

If the positive influence was only coming from the morphosyntactic proximity between the L1 Lingala and the TL English, we would not have observed any differences between the beginner proficiency group and the intermediate proficiency group on the one hand and the advanced proficiency group on the other hand. The linguistic proximity between the two targeted linguistic systems would have allowed subjects at different proficiency levels to perform without any significant differences. However, the differences between the beginner proficiency group and the advanced proficiency group support my hypothesis.

Moreover, the significant differences between the intermediate proficiency group and the advanced proficiency group indicate the level at which the impact of proficiency plays a role in the process of acquisition and becomes effective in having an impact. If the linguistic proximity was acting as the sole variable that positively influences the acquisition process of the simple past tense in this context, there would not be any significant differences between the intermediate proficiency and the advanced proficiency groups. Also, if any level or degree of proficiency was enough to impact the acquisition process of the simple past tense, there would neither be any significant differences between the two groups either. The differences between these two groups suggest that low and intermediate proficiency are not strong enough to impact the acquisition process of a linguistic feature such as the acquisition of the simple past tense to the point to equalize the performance of the three targeted proficiency level categories. I therefore posit that only the advanced proficiency level plays a deterministic role in demarcating the performance level of the different proficiency groups.

The comparisons of all the three proficiency categories of the experimental groups (EG) with the control group (CG) show significant differences for each pair of the compared groups. This once more demonstrates the positive impact of proficiency in the learning process. From the sum of what is discussed above, it could be implied that morphosyntactic proximity may play a capital and thus facilitative role in the acquisition process of syntactic features of a language. However, morphosyntactic proximity coupled with an advanced linguistic proficiency boost the facility of the acquisition process.

Overall, transfer in this experiment seems to have come from the L1, Lingala, which offers morphosyntactic similarities with the TL English. The predictions of the 'L2 Status Factor' Model (Bardel and Falk 2007) were discarded as they do not seem to have an impact on the acquisition process of the simple past tense because transfer in this case could not be attested as coming from the L2 French.

It should be noted, though, that some subjects, mostly in the beginner proficiency group may have transferred their linguistic knowledge from the L2. They seem to have used the present perfect tense to talk about events which started and were completed in the past. This instance of the negative transfer from the L2 was observed at a relatively low rate (17%).

These results entail that the L2 linguistic system did not play a major role in the acquisition process of English as an L3. Rather, the L1 linguistic influence seems to have overridden the influence of the L2. This aspect of the findings of this study challenges the claims of the 'L2 Status Factor' Model (Bardel and Falk; 2007) which claims that the L2 linguistic system blocks access to the linguistic system of the L1.

It should be noted, that when the L1 offers morphosyntactic similarities with the TL and competes with the L2-Status, linguistic proximity overrides the effects of the L2 as this is

shown for the particular combinations of languages in this study. If this was not the case, I would expect the majority of the participants to use the present perfect tense in the context of past-completed event. The use of the present perfect tense in this context would have confirmed the predictions on the probable transfer from the L2.

The predictions of the Cumulative Enhancement Model (CEM) by Flynn, Foley and Vinnitskaya (2004) are debatable. We cannot assume that the attested positive transfer in this experiment is the result of the cumulated knowledge from both the L1 and the L2 because the contribution of the L2 would result in the use of the present perfect tense in the context of past completed events in English; i.e. it would be a case of negative transfer. Yet the CEM does not predict any negative transfer. It states that transfer must either be positive or neutral. In the current context, the only linguistic system that was attested to contribute positive transfer is the L1, i.e. Lingala. Hence we need to acknowledge the effects of morphosyntactic proximity and therefore give credits to the Typological Primacy Model (TPM) by Rothman (2010) whose predictions seem to be reflected in the findings of this experiment.

7.3. Study 2: Past until Now Event

The study, in the context of past until now events, circumscribed the activities that started in the past, but that have some implication in the present time. The data in this context were elicited both through the interview and the Written Elicitation Task. The following section discusses the elicitation of the data through the interview.

7.3.1 Task 1: The Interview

7.3.1.1 Rationale

Study two (2) examines how L1 Lingala L2 French speakers learning English express an event that started in the past and has some connection or implications in the present time in English. It

tests the claims of the Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004), the 'L2 Status Factor' Model by Bardel and Falk (2007), and the Typological Primacy Model (TPM) by Rothman (2010, 2011) as outlined in chapter II, pages 69-87. Furthermore, it also tests some of my new predictions which are formulated in case of the absence of morphosyntactic similarities between the pairs of languages that are involved in the acquisition process of an additional language beyond the L2.

7.3.1.2 Predictions

The predictions of past until now events which are stated in chapter I, are repeated here for clarity. These are my new predictions that I formulate in the context of past until now event, in relation to factors such as the absence of any morphosyntactic similarity between a previously acquired linguistic system and the target language. Therefore, the absence of morphosyntactic proximity is treated as a variable that can be tested. I predict that in the case of absence of morphosyntactic proximity with the target language, both previously acquired linguistic system will equally compete. This means that both previously acquired linguistic systems may be accessed.

However, there might be other factors which may determine the source of linguistic transfer. For example, it may be the language which offers the less linguistic 'insecurity' which may serve as the source of transfer in the L3 acquisition process (Bucci and Baxter,1984, Eckman et al. 2013, Daftari 2016). Linguistic insecurity is discussed by Baldaqui (n.d.: 1) who paraphrases Labov (1966, 2006) in this words "LI [linguistic insecurity] is a measurement of the speaker's perception of the prestige of certain linguistic forms, compared to the ones the speaker remembers her or she normally uses" (p. 1).

The predictions that are related to study (2) which examines the verbalization of past until now events in the TL are as follows:

In the absence of any morphosyntactic proximity between both the L1 and the L2 with the target language (L3), both previously acquired linguistic systems will compete, therefore will be accessed; it may be the language which offers similarity in terms of the function/use of the tense, or in which learners have high proficiency, and/or the language which offers less linguistic 'insecurity' which may take precedence and thus serve as source of transfer in the L3. The study posits that if subjects are tapping into their linguistic knowledge from the L1 to express in English a past until now event, they will produce sentences with the simple past tense.

With reference to the same aforementioned new predictions, the study posits that if subjects are tapping into their linguistic knowledge from the L2 to express a past until now event in English, they will produce sentences with the simple present tense. This tense is predicted due to some of its function similarities with the context of use in PUNE in the target language.

Finally, the study posits that if subjects are tapping into their linguistic knowledge from both the L1 and L2 to express a past until now event in English, they will produce sentences with either the simple past or the simple present tense in a context where both the L1 and the L2 offer some morphosyntactic differences from the target language.

7.3.1.3 Data Coding and Analysis

Three coders determined the obligatory contexts for the use of the present perfect tense in the context of past until now events. The use of the present perfect tense in this context was considered as correct. However, it is important to note that in both the USA and Canada the simple past tense is also used in the context of past until now events. Since my participants live in either the USA or Canada, the use of the simple past tense in this context was not considered as incorrect. Besides, since the participants have previously been exposed to the variety of British English for their whole high school prior to travelling either to the USA or to Canada, the use of the simple past tense is

considered as due to the influence of the variety they are exposed now in North America. The frequency of answers was divided into three columns: the simple past tense, the present perfect tense, and the simple present tense. Only the use of the simple present tense in the context of past until now event was considered incorrect in this context.

7.3.1.4 The Results and Statistical Analysis

7.3.1.4.1 Hypothesis

I ran ANOVA to examine the relationship between the four proficiency groups and their responses in the context of past until now events in English. This relationship is mathematically represented as:

$$Y \sim Z$$

The aim in running ANOVA is to compare the means of the use of the simple past tense (answers provided by the large majority of participants) in obligatory contexts in the case of past until now events in English. The null hypothesis predicts that there are no significant differences among all the four proficiency groups means. This entails that there is no relationship between the proficiency groups and the use of the simple past tense in obligatory contexts in the case of past until now events in English. The null hypothesis is written as:

H_0: Beginner proficiency group = Intermediate proficiency group = Advanced proficiency group = Control Group.

The alternative hypothesis, however, predicts that there are significant differences among the four proficiency groups. This means that not all the four proficiency groups are equal. This entails that there is a relationship between the proficiency level and the use of the simple past tense in obligatory context in the case of past until now events in English. The alternative hypothesis is written as:

H_1: Beginner proficiency group ≠ Intermediate proficiency group ≠ Advanced proficiency group ≠ Control Group.

7.3.1.4.2 The Results of ANOVA

[F (3,394) = 14.08, p < 9.75e-09]

Since the results of ANOVA has shown that p-value is smaller than alpha (.05), I conclude that for my confidence interval, I accept the alternative hypothesis (H_1) which predicts significant differences between the four proficiency groups. That is, there is a significant relationship between the proficiency level and the use of the tense in obligatory context in the case of past until now events in English.

At this stage, ANOVA tells us that not all the means are equal. Yet my categorical variable 'proficiency groups' has four categories. A Post Hoc Test needs to be conducted to determine the proficiency groups that are different from one another. Therefore, the Tukey HSD post hoc test was used. The results of the Tukey multiple comparisons of means, at 95% family-wise confidence level, are reported in table (22).

Table (22)

The results of Tukey HSD post hoc test

$ Group	diff	lwr	upr	p adj
beginner-advanced	-0.10777882	-0.23810389	0.02254625	0.1442739
Control group-advanced	0.15865915	0.05343206	0.26388623	0.0006773
intermediate-advanced	-0.03241997	-0.15753871	0.09269878	0.9089037
control group-beginner	0.26643796	0.14684305	0.38603288	0.0000001
intermediate-beginner	0.07535885	-0.06206351	0.21278121	0.4907987
intermediate-control group	-0.19107911	-0.30497828	-0.0771799	0.0001120

From the results as presented in table 22, it is concluded that:

- There is no significant difference in the use of the simple past tense in obligatory context in the case of past until now events between:
  - The beginner proficiency group and the advanced proficiency group ($p = 0.14 > .05$)
  - The intermediate proficiency group and the advanced proficiency group ($p = 0.90 > .05$)
  - The intermediate proficiency group and the beginner proficiency group ($p = 0.49 > .05$)
- There is a significant difference in the use of the simple past tense in obligatory context in the case of past completed events between:
  - The control group and the advanced proficiency group ($p = 0.00$)
  - The control group and the beginner proficiency group ($p = 0.00$)
  - The intermediate proficiency group and the control group ($p = 0.00$)

The t-test was further used to compare the means scores of the use of the simple past tense (the most provided answers) and the use of the simple present tense (the second most provided answers) in the obligatory context of a past until now event in English. The aim was to determine whether there were any significant differences in terms of the use of these two tenses in the context of past until now events in English.

I therefore compared the use of the simple past tense and the simple present tense by beginner proficiency group, the use of the simple past tense and the simple present tense by intermediate proficiency group, and the use of the simple past tense and the simple present tense by advanced proficiency group. The null hypothesis predicted no significant differences between

the use of the simple past tense and the use of the simple present tense by beginners. The alternative hypothesis predicted a significant difference between the use of the simple past tense and the use of the simple present tense by beginners.

In addition, for the intermediate proficiency group, the null hypothesis predicted no significant differences between the use of the simple past tense and the use of the simple present tense by the intermediate proficiency group. The alternative hypothesis predicted a significant difference between the use of the simple past tense and the use of the simple present tense by the intermediate proficiency group. Finally, for the advanced proficiency group the null hypothesis predicted no significant differences between the use of the simple past tense and the use of the simple present tense by the advanced proficiency group. The alternative hypothesis predicted a significant difference between the use of the simple past tense and the use of the simple present tense by the advanced proficiency group.

The results of the Welch Two Sample t-test have shown that there is a significant difference in the use of the simple past tense and the simple present tense by the beginner proficiency group ($t = 6.59$, $df = 129.52$, p-value = 9.977e-10), by the intermediate proficiency group ($t = 9.31$, $df = 150$, p-value < 2.2e-16), and by the advanced proficiency group ($t = 22.04$, $df = 96$, p-value = 2.2e-16) in the context of past until now events in English.

7.3.1.5 Discussion

The participants of this study used the simple past tense rather than the present perfect tense in the context of past until now events in English. The choice of the simple past tense rather than the present perfect tense in the context of past until now events is not that surprising since in North America, that is in the USA and Canada the simple past tense is often used in the context of past until now events in English. I may attribute this use of the simple past tense in the context of past

until now events to the effects of transfer which comes from a variety of the target language (TL), that is, from the USA and Canada to the variety that my participants were previously exposed to, bookish English (British English) which requires the use of the present perfect tense in the context of past until now events.

In fact, for my participants, who now live in both the USA and Canada, both the present perfect tense and the simple past tense could fairly be expected in the context of PUNE. The present perfect tense could be expected because in this context because my participants were explicitly taught at school to use the present perfect tense in the context of PUNE. However, they have also learned through their exposure to the variety of English that is spoken in both the USA and Canada that the simple past tense is also used in the context of PUNE. As a result, the use of the simple past tense in the context of PUNE was dominant in the study.

This transfer, which I dub 'oblique', is the result of linguistic insecurity. The latter term should here be understood as the comparison of a linguistic form to the one the speaker uses and which results in discarding his/her linguistic form, but considering the other one as 'correct' or as 'prestigious' (Labov, 1996, 2006; Daftari, 2016). Since the American and Canadian speakers of English use the simple past tense in the context of past until now events, participants have discarded the use of the present perfect tense in this context to adopt the use of the simple past tense as the correct form.

Beside, the use of the simple past tense in the context of past until now event could also be attributed to the influence from the L1 Lingala since in such a context Lingala speakers use the simple past tense. Such an influence from the L1 would still be deemed positive because in the geographical context in which my participants live the use of the simple past tense in the context of PUNE is correct.

7.3.2 Task 2: The Written Elicitation Task (WET)

Task 2 elicited the data in the explicit mode of accessing the linguistic knowledge. The written elicitation task was therefore used to collect the data. Participants were given ample time to work on the task.

7.3.2.1 Rationale

This experiment aims to determine the source of linguistic transfer in the case of past until now events in English. The experiment tests the predictions of the three models plus a new prediction that I have formulated. This new prediction caters for the case in which neither of the previously acquired language offers any morphosyntactic proximity with the TL. The predictions in the case of past until now events are presented in section 3 of this current chapter. The predictions in this experiment involve some semantic aspects which interact with syntax.

7.3.2.2 Research Questions

Research question (1) refers to all four (4) experiments. However, research question two (2) is specific to this experiment. The research questions of this experiment are formulated as follow:

1. Which previously acquired language(s) dominate in L3 transfer? Is either the L1 or the L2 more dominant? Or are both the L1 and the L2 equally dominant? (Q1 refers to all the four studies)
2. Which prior language serves as the source of transfer when both the L1 and the L2 do not offer any local morphosyntactic proximity with the target language (TL)?

7.3.2.3 Predictions

The predictions of the past until now events, which have been discussed in chapter VII, section 7.4.2, point 2 are repeated here for the reasons of clarity. The said predictions, that are related to study (2) which examines the verbalization of past until now events in the TL, are as follows:

- In the absence of any morphosyntactic proximity between both the L1 and the L2 with the target language (L3), both previously acquired linguistic systems will compete, therefore will be accessed; it may be the language which offers similarity in terms of the function/use of the tense, or in which learners have high proficiency, and/or the language which offers less linguistic 'insecurity' which may take precedence and thus serve as source of transfer in the L3. The study posits that if subjects are tapping into their linguistic knowledge from the L1 to express in English a past until now event, they will produce sentences with the simple past tense.
- With reference to the same aforementioned new predictions, the study posits that if subjects are tapping into their linguistic knowledge from the L2 to express a past until now event in English, they will produce sentences with the simple present tense.
- Finally, the study posits that if subjects are tapping into their linguistic knowledge from both the L1 and L2 to express a past until now event in English, they will produce sentences with either the simple past or the simple present tense in a context where both the L1 and the L2 offer some morphosyntactic differences from the target language.

The materials in this study are made up of 36 tokens of which 12 are filers. The ratio of the combination of the targeted tokens and the fillers is of 1 filler for every 3 tokens. It is the predictions of the study which resulted in creating these tokens. The tokens reflect the realities of transfer as they are formulated and claimed in the selected models of third language acquisition in relation to morphosyntactic transfer.

7.3.2.4 Data Analysis and Coding

The same coding that was used in the interview is used here with the exception that in the interview the coders had to identify the obligatory context for the use of the simple past tense while in the WET the obligatory context was predetermined in the task. The coding that is discussed in chapter VII, section 7.2.1, point 5 is repeated here.

I used three coders to assess the use of the simple past tense in the context of past completed events in English. Two coders were native speakers of English—an American and a Canadian—of which one is a teacher of English as a second language, one is a linguist. I was the third coder. I used the same coders to identify the mistakes that were observed in implicit as opposed to explicit knowledge in the data. A point was assigned for every single correct answer that was provided by the participant in the obligatory context of past completed event in which the use of the simple past tense was required.

7.3.2.5 The Results and Statistical Analysis

This subsection provides the results of both the descriptive statistics and those of inferential statistics. The results of the descriptive statistics are presented in relation to different proficiency level groups. They provide the summary for each proficiency group, which includes information such as the minimum, the first quartile, the median, the mean, the third quartile, and the maximum

for each group. Then, the results of the inferential statistics is presented. The results of the t-test are presented and interpreted thereof.

7.3.2.5.1 The Results of Descriptive Statistics

This results of descriptive statistics of individual participants on the Written Elicitation Task (WET) in relation to the past until now events are presented in this section. Different tables depict those results in relation to proficiency level groups in the appendixes. The frequency of answers, the total of answers per participant, the information about the gender and the proficiency level of the participants are presented in those tables.

7.3.2.5.1.1 The Results of Descriptive Statistics for the Beginner Proficiency Group

The results for the beginner proficiency scores on the WET in the context of past until now event varied from zero (0.00) as the minimum score to six (6.00) as the maximum score. The first and third quartiles are zero (0.00) and three (3.00) respectively. The median score of this proficiency group is zero (0.00) as well, while the mean of this proficiency group is one point five (1.5). The total score is out of six (6.00). The summary table for the beginner proficiency group is presented in table (23).[11]

Table (23)

Summary for the beginner proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
0.00	**0.00**	**0.00**	**1.5**	**3.00**	**6.00**

[11] Detailed results of descriptive statistics for the beginner proficiency group are presented in the appendix (13).

7.3.2.5.1.2 The Results of Descriptive Statistics for the Intermediate Proficiency Group

The minimum point that was scored by the participants in this group is zero (0.00). The score for the first quartile is one (1.00), while for the third quartile is four (4.00). The median in this proficiency group is one (1.00), whereas, the mean is two point five (2.5). The maximum score is six (6.00).The summary table for the intermediate proficiency group is presented in table (24).[12]

Table (24)

Summary for the intermediate proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
0.00	**1.00**	**1.00**	**2.5**	**4.00**	**6.00**

7.3.2.5.1.3 The Results of Descriptive Statistics for the Advanced Proficiency Group

The advanced proficiency group participants scored one (1.00) as their minimum score and six (6.00) as their maximum score. The first quartile is one point five (1.5) and the third quartile is six (6.00). Their median is four (4.00), while their mean score is three point nine (3.9). The maximum score is six (6.00). The summary table for the advanced proficiency group is presented in table (25).[13]

Table (25)

Summary for the advanced proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
1.00	**1.5**	**4.00**	**3.9**	**6.00**	**6.00**

7.3.2.5.1.4 The Results of Descriptive Statistics for the Control Group

[12] Detailed results of descriptive statistics for the intermediate proficiency group are presented in the appendix (14).

[13] Detailed results of descriptive statistics for the advanced proficiency group are presented in the appendix (15).

The control group was the only group whose performance was perfect. Their scores were six (6.00) as the minimum and maximum, six (6.00) as median, mean, first quartile and third quartile. Their scores reflect their levels as native speakers of the language. The summary table for the control group is presented in table (26).[14]

Table (26)

Summary for the control group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
6.00	**6.00**	**6.00**	**6.00**	**6.00**	**6.00**

7.3.2.5.1.5 The Results of Descriptive Statistics for the Whole Population of the Study

The performance of the whole population of the study is presented here. The minimum score was zero (0.00), and the maximum score was six (6.00). The first quartile was one (1.00), and the third quartile was six (6.00). The mean score of the group was three point five (3.5), while the median was four (4.00). The summary table for the whole population of the study is presented in table (27).[15]

Table (27)

Summary for the whole population of the study

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
0.00	**1.00**	**4.00**	**3.5**	**6.00**	**6.00**

[14] Detailed results of descriptive statistics for the control group are presented in the appendix (16).

[15] Detailed results of descriptive statistics for the whole population of the study are presented in the appendix (17).

In the following table, I present the sum of the points each proficiency group scored in the Written Elicitation Task (WET) for the past until now events. This table shows the tendencies in the whole study and it helps to establish comparisons between the three proficiency groups of the experimental group (EG) with the control group (CG). Both the sums of scores and the percentages are presented in table (28).

Table (28)

The WET results per proficiency level for the past until now events

Level/Category	Score	Percent
Beginner	47	26.1 %
Intermediate	85	47.2 %
Advanced	118	65.5 %
Control Group	180	100 %

Finally, table (29) presents the results of the WET in terms of both gender and proficiency level. As mentioned earlier, I try to control proficiency in order to determine the group which makes more transfer.

Table (29)

The results of the WET in terms of proficiency level

Level/Category	Gender	Score	Percent	Total score	Percent
Beginner	Male	31	65.9 %	47	26.1 %
	Female	16	34 %		
Intermediate	Male	38	44.7 %	85	47.2 %
	Female	47	55.2 %		

Advanced	Male	57	48.3 %	118	65.5 %
	Female	61	51.6 %		
Control Group	Male	90	50 %	180	100 %
	Female	90	50 %		

The following diagrams represent the results of the WET in relation to past until now event in English. They depict the percentage per proficiency level and they present the categories or proficiency levels, and reflect the gender of the subjects.

Figure (10)

The results of the WET

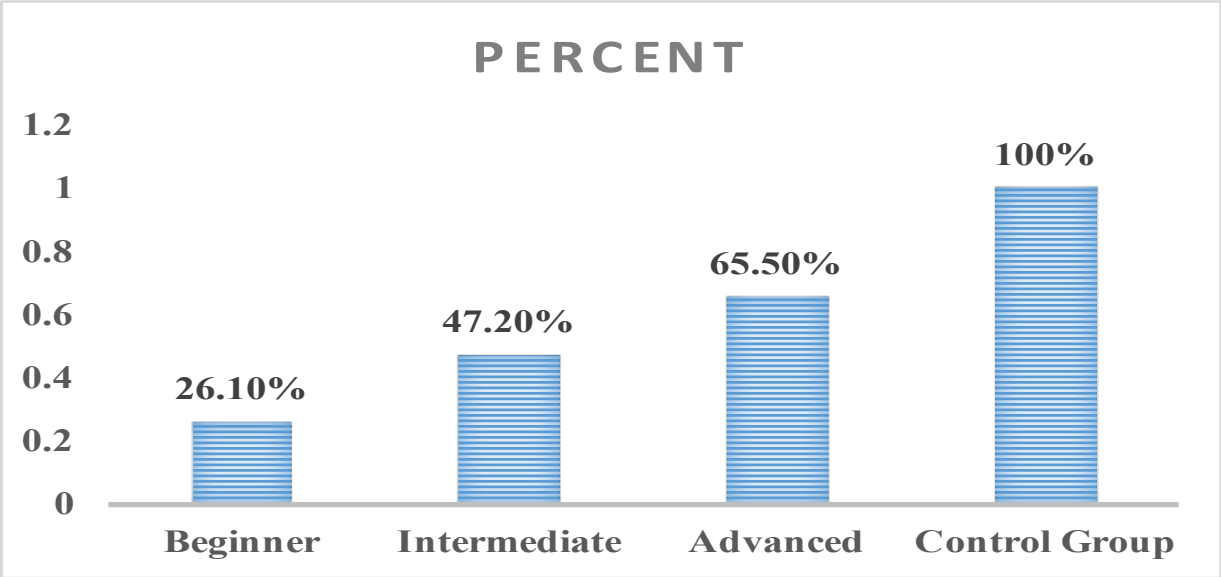
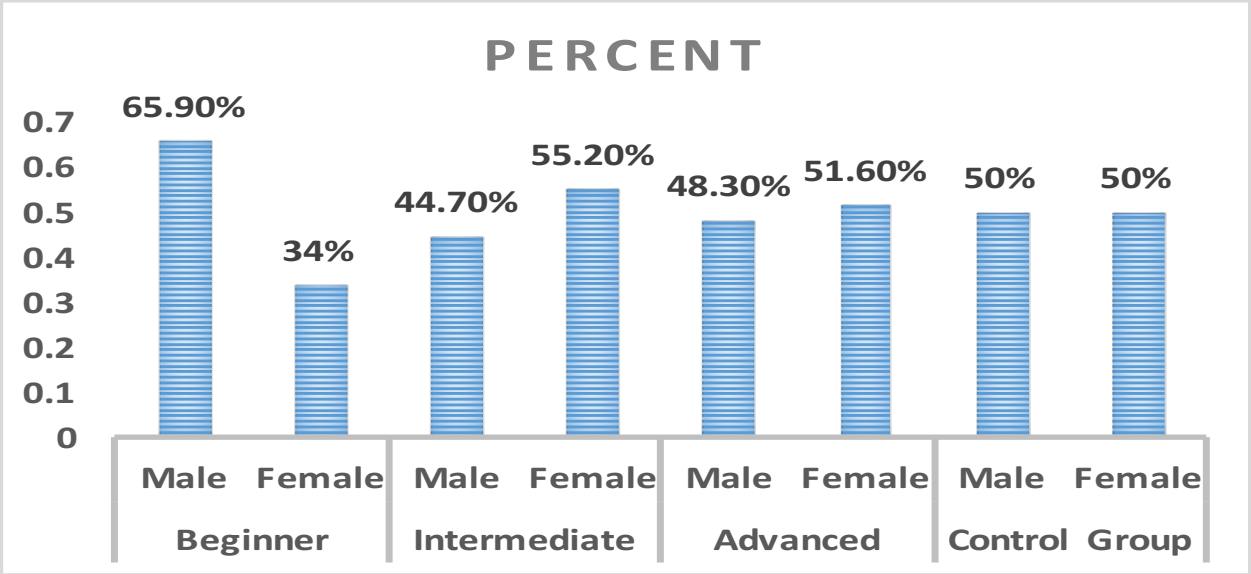


Figure (11) presents the results of the WET, in histogram, in terms of gender for each proficiency group.

Figure (11)

The WET results in terms of gender



The diagram in figure (11) shows that overall the female participants outperformed the male participants in the WET in their verbalizations of past until now events as they obtained the highest scores in both the intermediate and advanced proficiency group. However, the male performance in the beginner category was best in the entire study.

7.3.2.5.2 The Results of the t-test

The results of the three experimental groups (EG) were compared to one another within the group, and then to those of the control group (CG) using the t.test. The statistical software 'R'[16] was used for the statistical analyses. The t.test was run in order to determine whether the three experimental groups performed significantly differently than the control group in the WET and to determine

[16] (R version 3.2.0 (2015-04-16) "Full of Ingredients "Copyright (C) 2015 The R Foundation for Statistical Computing Platform: x86_64-apple-darwin13.4.0 (64-bit))

whether there are any significant differences between the three proficiency groups within the experimental group.

Starting with the beginner proficiency group, the null hypothesis predicts that the beginner proficiency group's performance will be the same as that of the intermediate proficiency group. The alternative hypothesis predicts that the performance of beginner proficiency group will be different from that of the intermediate proficiency groups.

Since the p-value ($p = 0.00$) is smaller than alpha (.05), I reject the null hypothesis, which predicts that beginner proficiency group's performance is the same as the performance of the intermediate proficiency group. The results of the paired t-test [$t (29) = -4.07$, $p = 0.00$] that aimed to determine whether there are any significant differences between the beginner and intermediate groups' performance in the WET show that there are significant differences between the beginner proficiency and the intermediate proficiency groups' performances.

Comparing the performance of the beginner proficiency group with that of the advanced proficiency group, the null hypothesis assumes no differences between the two proficiency groups, while the alternative hypothesis predicts significant differences between the beginner proficiency group and the advanced proficiency group.

Since the p-value ($p = 0.00$) is smaller than alpha (.05), I reject the null hypothesis, which predicts that beginner proficiency group's performance is the same as the performance of the advanced proficiency group. The results of the paired t-test [$t (29) = -4.07$, $p = 0.00$] show that there are significant differences between the beginner proficiency and the advanced proficiency groups' performances.

Furthermore, the scores of the intermediate proficiency group was compared to that of the advanced proficiency group. The null hypothesis predicted that there will be similarities in

terms of the performance of the intermediate proficiency group as compared to that of the advanced proficiency group. The alternative hypothesis, however, assumes that there will be differences between the intermediate proficiency group and the advanced proficiency group.

Since the p-value ($p = 0.01$) is smaller than alpha (.05), I reject the null hypothesis which predicted that there will be similarities in terms of the performance of the intermediate proficiency group as compared to that of the advanced proficiency group. Therefore, the results [$t(29) = 2.47$, $p = 0.01$] confirm the alternative hypothesis which assumed that there will be differences in terms of the performances between the intermediate proficiency group and the advanced proficiency group.

Finally, the performances of the three proficiency groups of the experimental group (EG) were compared to that of the control group (CG). The null hypothesis predicted that there will be similarities in terms of the performance of the beginner proficiency group as compared to that of the control group. The alternative hypothesis, however, assumes that there will be differences between the beginner proficiency group and the control group.

Since the p-value ($p = 7.284e\text{-}12$) is smaller than alpha (.05), I reject the null hypothesis which predicted that there will be similarities in terms of the performance of the beginner proficiency group as compared to that of the control group. Therefore, I confirm the alternative hypothesis, through the results [$t(29) = -10.9$, $p = 7.284e\text{-}12$], which assumed that there will be differences between the beginner proficiency group and the control group.

Then, the performance of the intermediate proficiency group was compared to that of the control group. The null hypothesis predicted similarities between the two proficiency groups, while the alternative hypothesis assumed differences in the performances of the two proficiency groups.

Since the p-value (p = 1.357e-10) is smaller than alpha (.05), I reject the null hypothesis which predicted that there will be similarities in terms of the performance of the intermediate proficiency group as compared to that of the control group. Therefore, I confirm the alternative hypothesis, through the results [t (29) = -9.6, p = 1.357e-10], which assumed that there will be significant differences between the intermediate proficiency group and the control group.

Finally, the performance of the advanced proficiency group was compared to that of the control group. The null hypothesis predicted that there will be similarities in terms of the performance of the advanced proficiency group as compared to that of the control group. The alternative hypothesis, however, assumes that there will be differences between the advanced proficiency group and the control group.

Since the p-value (p = 1.202e-05) is smaller than alpha (.05), I reject the null hypothesis which predicted that there will be similarities in terms of the performance of the advanced proficiency group as compared to that of the control group. Therefore, I confirm the alternative hypothesis, through these results [t (29) = -5.26, p = 1.202e-05], which assumed that there will be significant differences between the advanced proficiency group and the control group.

7.3.2.6 Discussion

The results (see appendix 17) indicate that there have been transfers from both the L1 and the L2. The transfer from the L1 Lingala might have been resulted in the use of the simple past tense in the TL, or it might have been the result of oblique transfer. Whereas, the negative transfer from the L2 French has been attested through the use of the simple present (including progressive) tense in English for events that started in the past and have some implications in the present time.

The frequency of answers which are qualitatively characterized by negative transfer shows that there was more transfer from the L2 French, which were negative, than positive transfer,

or oblique transfer, from respectively the L1 Lingala, or the TL American and or Canadian English. That is, participants used the simple present tense (frequency: 186) more often than the simple past tense (frequency: 51) in a past until now event context in English. This overall frequency shows that the simple present tense was used about four times more frequently than the simple past tense.

Overall, these results show that in this experiment transfer might have come from the L2, that is, L2 had a stronger influence. However, the results do not reflect the predictions of the 'L2 Status Factor' Model since the model claims that the L2 blocks access to the L1 linguistic system. If this was really the case, the participants of this study would not have produced 21.5 % of oblique transfer from the L1. This percentage indicates that some participants still have access to their L1 linguistic system even though the majority of the participants tap into their linguistic knowledge from the L2.

Likewise, the claims of the CEM could not be supported with these results since the model does not accept any negative transfer in the process of an additional language acquisition. The large majority of the use of the simple present tense in the context of PUNE shows that participants have tapped previous linguistic knowledge from French. This transfer is negative because the use of the simple present tense in the context of PUNE in English is just erroneous.

It should be remembered that whenever participants engage in the process acquiring an additional language beyond the L2, all the previously acquired linguistic systems enter into a competition. The winning system takes precedence over the losing systems, but the winning system does not necessarily block the access to the losing linguistic systems, or to any other competing system.

In the absence of morphosyntactic similarities between the previously acquired linguistic systems and the target language, psychotypology plays an important role. The results in

this study seem to reflect the role of psychotypology and to confirm the role and impact of other linguistic aspects such as the function of the verb tense that could have been associated with the verb function of the TL.

In the absence of a morphosyntactic proximity between the target language and any other previous language, participants may use perceived similarities based on the function of the verb tense. This is what has been predicted in predictions (1) and (2) whereby in the case of prediction (1), it was expected of the participants to use the simple past tense since in Lingala the simple past is used to express past until now events. Hence the similarity in terms of the function may have led my participants to use the simple past as it is used to express past until now events in the L1 Lingala.

Prediction (2) is related to French. In terms of function, some participants seem to have established similarities between the simple present tense in French and the present perfect tense in English; as a consequence, these participants used the simple present tense in English for the past until now event.

Functional similarities between the respective pairs of languages may, thus, have played an important role. First, there is a 'linguistic factor' which is based on the observation that any verbal tense in any language encompasses two dimensions: the verb form and the function (e.g. Cowan 2009). The verb form is more visible in the written form/mode of communication while the function is always abstract. In the absence of an influence from the verb's morphosyntactic form, the function of the tense may play an important role during the acquisition process of an additional language beyond an L2. I suspect that such may have been the case that was observed in this experiment since my participants were initially exposed to English in formal

school setting were the teaching of English is basically structural. The structure of English is primarily presented on the blackboard and students practice through drills.

My L3 learners of English seem to encounter more difficulties learning the use of the present perfect tense than the use of the simple past tense. I identified the type of transfers which may have motivated the tenses that the subjects incorrectly and or correctly used in the context of past until now events; i.e. morphosyntactic transfer and the semantic transfer (function of the verb tense).

Firstly, semantic transfer which is related to the function of the verb tense may have been triggered by psychotypological similarities which participants may have assumed to exist between the function of the simple present tense in French and the function of the present perfect tense in English. These incorrect matches result in negative transfer in the target language evidenced by the use of the English simple present tense in the context of past until now events.[17]

Secondly, the use of the simple past tense in the context of past until now events in English is another instance of transfer from Lingala into English. I argue that participants may have used the simple past tense in the context of past until now event because, in terms of function/use, they did not realize that even if the events in question started in the past they still had repercussions in the present. This transfer is related to the semantic features of the verb tense. In fact, in Kinshasa Lingala the recent past tense may also be used in the context of past until now events but with emphasis on the past aspect of the event without any mention or emphasis on the present implication.

Thirdly, there might be cases of 'reverse transfer' from the L3 to the L2 in terms of the morphosyntactic structure of the verb tense whereby transfer matches the English present

[17] There were also 27.8 % of participants, who used present tense plus the progressive aspect in this task.

perfect tense morphosyntactic form ‘have + past participle’ with the French passé composé morphosyntactic form ‘avoir + participe passé’ and then erroneously participants identify the function of ‘avoir + participe passé’ in French as being equivalent to ‘have + past participle’ in English. Consequently, participants may use the simple past in the context of past until now events in English. This case of reverse transfer involves both the morphosyntactic and semantic transfers. This process of transfer starts with the morphosyntactic identification and matching of the verb tense forms from the L3 to the L2, then their verb tense functions are compared to results in a positive transfer.

Chapter VIII

Investigation of Structural Transfer in Language Comprehension and Judgment

8.1. Introduction

Studies three and four investigate morphosyntactic transfer in sentence judgment with respect to third language acquisition. Study three is based on 'a past completed event' while study four is related to 'an event that started in the past but has some implication in the present'. Both studies comprise of task which involve grammaticality judgments and language comprehension tasks.

Studies three and four aim to test whether morphosyntactic transfer can be detected in the grammaticality judgments of L1 Lingala, L2 French speaking participants who are acquiring L3 English. Both studies test the claims of the Cumulative Enhancement Model (CEM), the 'L2 Status Factor' Model, and the Typological Primacy Model (TPM), respectively, using the following types of sentences:

- A sentence with the verb in the present perfect and/or simple past tense in a context in which an event took place and was completed in the past; here referred to as past completed event,
- A sentence with the verb in the simple past and/or simple present tense in a context whereby an event started in the past and has some implication in the present; here referred to as past until now event.

Again the claims of the three aforementioned models with reference to the language that serves as source of transfer are under investigation. The aims of study 3 and study 4 are twofold: First, they aim to determine whether there is evidence for morphosyntactic transfer during sentence judgment. Second, if there is evidence for transfer, the studies further aim to determine

the language system which serves as the source of transfer as well as to ascertain which factors take precedence in determining the source of morphosyntactic transfer during sentence judgment.

The Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004) claims that previous linguistic knowledge from both L1 and L2 positively impact the acquisition of any subsequent language or remains neutral. The 'L2 Status Factor' Model by Bardel and Falk (2007) privileges and restricts the source of transfer to only the L2, while the Typological Primacy Model (TPM) by Rothman (2010, 2011) constrains transfer to the language that is perceived to be (psycho)-typologically closest to the L3.

This study used the same 120 participants as the previous two studies (see methodology chapter for methods of participant sampling and more detail on this cohort). As before, the control group comprised of 30 native speakers of English; 90 participants were L1 Lingala L2 French who were learning English as L3. The subjects were administered the same cloze test as the one which was administered in previous studies to determine their level of proficiency.

The linguistic phenomena under study are the same as in previous studies: English uses the simple past to talk about past completed event while French and Lingala use the 'passé composé' and the past (remote or recent past) respectively. To express past until now events, English uses the present perfect tense while French uses the simple present and Lingala the past (immediate past). Based on similarities in terms of form, the work posits that English and Lingala are similar when talking about past-completed events while French is different. To talk about a past until now event, there is no similarity between the previously acquired languages and the TL.

Looking at the similarity between the three linguistic systems, it is posited that Lingala is closer to English than French in terms of local typology when talking about past

completed events in English; whereas neither Lingala nor French are similar to English in talking about past until now events. The study circumscribes the similarities and differences, in tense, between the three languages.

8.2 Study three (3): Past Completed Events

Study three is related to an event that started and was completed in the past. The token sentences were encoded with time adverbial to indicate that the event was completed. Therefore, the use of the simple past tense in this context was compulsory.

8.2.1 Participants

This empirical study has used the same participants as those who participated in the previous studies. Their demographics are discussed in chapter VIII, in section 8.2.

8.2.2 Task and Procedures

One hundred and twenty participants were administered an acceptability judgment task (AJT). They were provided with sentences in English, which reflected some features of transfer from either the L1 or L2. Subjects were asked to determine whether those sentences were acceptable (good, correct) in English. The subjects had to read the sentences silently and then provide their decision on whether the sentence was acceptable and thus they had to write (G) next to the sentence to mean that it was 'GOOD', therefore acceptable. In case they judged the sentence unacceptable, they had to write (B) meaning 'BAD' next to the sentence. Finally, in case subjects were in doubt about their judgment or if they did not have any idea, or if they were uncertain they were required to write "DK" meaning "I don't know".

8.2.3 Research Questions and Predictions

The research questions of this experiment which have also been discussed in chapter I, are repeated here as follows:

1. Does the L1, L2, or do both the L1 and L2 serve as source of transfer in judging the selected sentences in the study?
2. Does syntactic similarity play a role in the subjects' sentence judgment?
3. Is the syntactic sentence judgment influenced by the participants' level of proficiency?

The following lines discusses the categories and conditions, which are presented in the prediction table, and it also articulates the predictions of the study. It also presents the materials of the study. The predictions in this dissertation are organized as follows:

Table (30)

Categories and conditions of the tokens

Examples	Transfer from L1 only	Transfer from L2 only	Cumulative transfer from L1 & L2	English
Bob lived in Paris in 2003.	Acceptable	Unacceptable	Acceptable	Acceptable
Joe lived in Paris since 2005.	Acceptable	Unacceptable	?Acceptable	Unacceptable
Bob has studied in Paris from 2000 to 2004.	Unacceptable	Acceptable	?Acceptable	Unacceptable
Clara has lived in Marseille since 2005.	Unacceptable	Unacceptable	Unacceptable	Acceptable
Bob lives in Paris in 2000.	Unacceptable	Unacceptable	?Unacceptable	Unacceptable
Betty lives in Paris since 2007.	Unacceptable	Acceptable	?Acceptable	Unacceptable

The most relevant and plausible predictions concerning the source of transfer in relation to the three tested models, which synoptically capture the realities depicted on the aforementioned table, are summarized as follows:

- The Typological Primacy Model (TPM) claims that only the language with a syntactic proximity to the TL serves as the source of transfer. Thus subjects are predicted to use their L1 as a knowledge source to judge a past completed action in English; consequently, they will judge sentences with the simple past tense verb as correct and acceptable.
- The 'L2 Status Factor' Model claims that the L2 is the strongest source of transfer in L3 acquisition and that the L2 blocks any morphosyntactic transfer from the L1 syntactic system; if subjects are tapping into their linguistic knowledge from their L2 to judge a past completed event in English, they will judge sentences with the present perfect tense verb as correct and acceptable.
- The Cumulative Enhancement Model (CEM) claims that learners rely on their cumulated linguistic knowledge from both L1 and L2 as source of transfer and that transfer is only positive or neutral; if subjects are tapping into their linguistic knowledge from both L1 and L2 to talk about past completed event in English they will judge sentences with the simple past tense as correct and acceptable.

The materials in this study are made up of 36 tokens of which 12 are filers yielding a ratio of 1 filler for every 3 tokens. The tokens reflect the realities of transfer as they are formulated and claimed in the selected tested models of third language acquisition in relation to morphosyntactic transfer.

8.2.4 Data Coding and Analysis

Three coders independently determined the obligatory contexts in which the simple past tense had to be used in the stimulus material which consisted of thirty-six sentences, 10 of which were described a past completed event in English. Two coders are native speakers of English; one is a teacher of English as a second language, one is a linguist. The third coder is the author of the current thesis.

The same coders subsequently assessed the participants' answers for correctness/incorrectness. Coding was done independently; minor differences between coders were resolved through subsequent discussion.

Let consider some sample questions to illustrate how the responses were coded. The two stimulus sentences describing past completed events are presented here for potential acceptability judgments (sentences 1 and 2):

Instruction: Write (G) meaning 'Good' next to the sentence if you judge it acceptable, (B) meaning 'Bad' next to it if you judge it not acceptable. Write (DK) meaning 'I **don't know' if you do not have any idea, or if you are uncertain about your judgment.**

1. Bob cooked rice yesterday. (G)
2. Betty and Joe have cooked rice yesterday. (G)

In sentences (1) and (2) only the use of the simple past tense is acceptable in English since in all cases the event started in the past and was as well completed in the past. Each participant had to judge ten sentences and they were assigned one point for each correct judgment. For example, in sentence 1 "yesterday" refers to a finite period of time that ended in the past, therefore the act of cooking which happened during this period was also completed in the past. Consequently, the participant was granted one point for this correct judgment. The judgment for

sentence 2 is incorrect because sentence 2 also refers to a past completed event. The participant was assigned zero points for this judgment since s/he used the present perfect tense.

8.2.5 The Results and Statistical Analysis

This subsection provides the results of both the descriptive statistics and those of inferential statistics. The results of the descriptive statistics are presented in relation to different proficiency level groups. They provide the summary for each proficiency group, which includes information such as the minimum, the first quartile, the median, the mean, the third quartile, and the maximum for each group. Then, the results of the inferential statistics is presented. The results of the t-test are presented and interpreted thereof.

8.2.5.1 The Results of Descriptive Statistics

This section presents the results of the descriptive statistics for the Acceptability Judgment Task (AJT) in relation to the past completed event.

8.2.5.1.1 The Results of Descriptive Statistics for the Beginner Proficiency Group

The beginner proficiency scores on the AJT varied from three (3.00) as the lowest score to ten (10.00) as the maximum score. The median score of the beginner proficiency group is six (6.00), while the mean of this proficiency group is five point sixty-six (5.66). The first and third quartiles are five (5.00) and six (6.00,) respectively. The total score is out of ten. The summary table for the beginner proficiency group is presented in table (31).[18]

[18] Detailed results of descriptive statistics for the beginner proficiency group are presented in the appendix (18).

Table (31)

Summary for the beginner proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
3.00	5.00	6.00	5.66	6.00	10.00

8.2.5.1.2 The Results of Descriptive Statistics for the Intermediate Proficiency Group

The scores on the AJT in relation to the intermediate proficiency group is presented here. Their scores varied between four (4.00) and seven (7.00) as minimum and maximum scores respectively. The median score is six (6.00), while the mean is five point six (5.6). The first quartile is five (5.00), while the third quartile is six (6.00). The summary table for the intermediate proficiency group is presented in table (32).[19]

Table (32)

Summary for the intermediate proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
4.00	5.00	6.00	5.6	6.00	7.00

The next section discusses the results of descriptive statistics for the advanced proficiency group.

8.2.5.1.3 The Results of Descriptive Statistics for the Advanced Proficiency Group

The scores of the advanced proficiency group varied between seven (7.00) and ten (10.00), with the former figures reflecting the minimum score while the latter shows the maximum score. The advanced proficiency group have eight (8.00) as the value of the first quartile, while nine (9.00) is

[19] Detailed results of descriptive statistics for the intermediate proficiency group are presented in the appendix (19).

the value of the third quartile. The median in this proficiency group is nine (9.00) and the mean is eight point fifty-three. All these values are estimated out of ten (x/10). The summary table for the advanced proficiency group is presented in table (33) [20]

Table (33)

Summary for the advanced proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
7.00	8.00	9.00	8.53	9.00	10.00

8.2.5.1.4 The Results of Descriptive Statistics for the Control Group

The results of the descriptive statistics for the control group were uniform. That is all the figures were maximal. This group had ten (10.00) as the minimum and maximum scores, ten (10.00) as the median and the mean, and ten (10.00) as the first and third quartile. The summary table for the control group is presented in table (34).[21]

Table (34)

Summary for the control group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
10.00	10.00	10.00	10.00	10.00	10.00

8.2.5.1.5 The Results of Descriptive Statistics for the Whole Population of the Study

The results of the descriptive statistics for the whole study is presented as follows: three (3.00) was scored as the minimum score, while ten (10.00) was the maximum score. The first and third

[20] Detailed results of descriptive statistics for the advanced proficiency group are presented in the appendix (20).

[21] Detailed results of descriptive statistics for the control group are presented in the appendix (21).

quartile were respectively six (6.00) and ten (10.00). The median was seven (7.00) and the mean was seven point forty-five (7.45). The summary table for the whole study is presented in table (35).[22]

Table (35)

Summary for the whole study

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
3.00	6.00	7.00	7.45	10.00	10.00

The following table (36) presents the results according to proficiency level. In (36), it shown that the advanced proficiency group has outperformed both the beginner and intermediate proficiency groups. There are no significant differences between the beginner and intermediate groups in terms of their performance. The observed differences between the advanced and both beginner and intermediate proficiency groups suggests that proficiency as a variable plays a differential role in terms of participants' performance at the advanced level.

Table (36)

The AJT results per proficiency level

Level/Category	**Score**	**Percentage**
Beginner	**170**	**56.6 %**
Intermediate	**168**	**56 %**
Advanced	**256**	**85.3 %**
Control Group	**300**	**100 %**

[22] Detailed results of descriptive statistics for the whole study are presented in table (40) in the appendix (23).

Finally, table (37) presents the results of the AJT in terms of both gender and proficiency level. Gender is included as another variable to examine and determine whether gender plays any differential role in terms of the participants' results in different tasks that they performed in this study.

Table (37)

The results of the WET in terms of both gender and proficiency level

Level/Category	Gender	Score	Percent	Total score	Percent
Beginner	Male	**89**	**52.3**	**170**	**56.6%**
	Female	**81**	**47.6**		
Intermediate	Male	**90**	**53.5**	**168**	**56%**
	Female	**78**	**46.4**		
Advanced	Male	**126**	**49.2**	**256**	**85.3%**
	Female	**130**	**50.7**		
Control Group	Male	**150**	**50 %**	**300**	**100 %**
	Female	**150**	**50 %**		

The following histograms represent the results of the AJT. They depict the total points per proficiency level. The category or proficiency groups are presented, and the scores in terms of gender of the participants are as well presented.

Figure (12)

The results of the AJT in a diagram

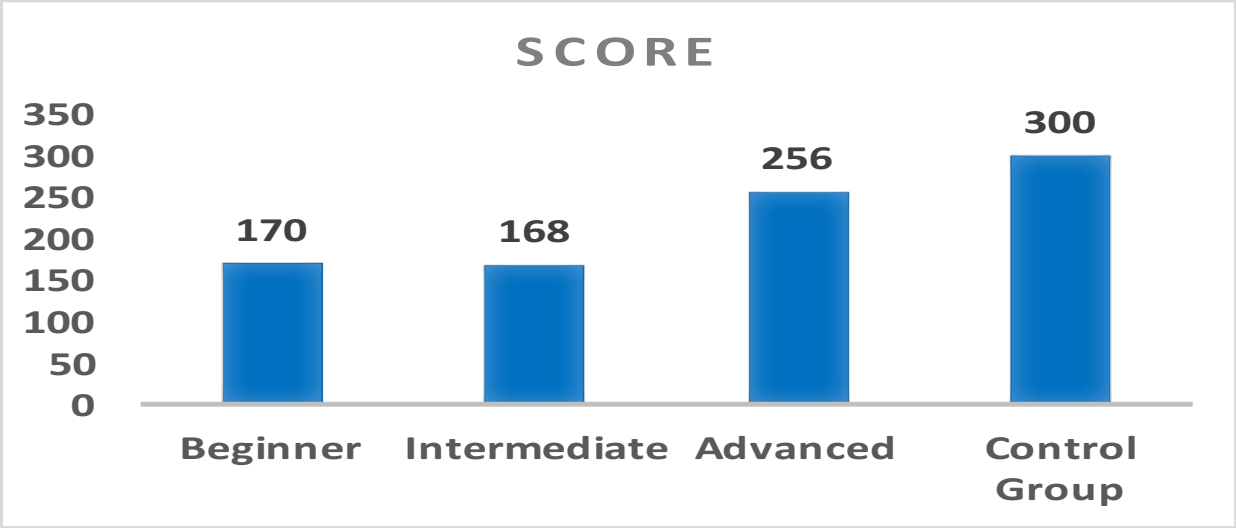
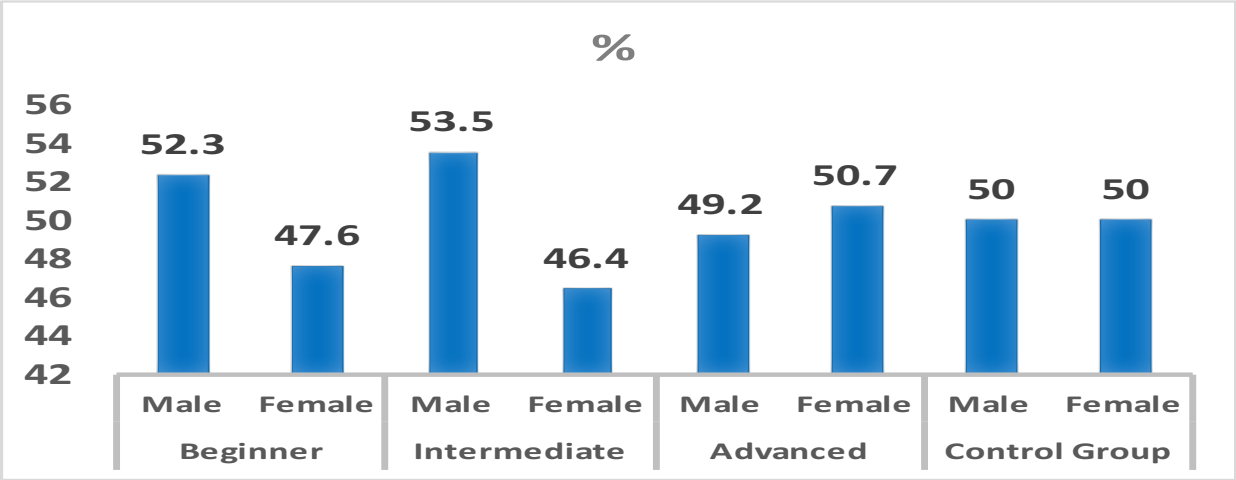


Figure (13) presents the results in histograms of the AJT in terms of the gender for each proficiency group.

Figure (13)

The results of the AJT in terms of gender in histogram



The diagram in figure (13) shows that overall the male subjects outperformed the female subjects in the AJT. The male performance in the intermediate category was the best for

the whole study. However, in the advanced proficiency group, female participants outperformed the male subjects by a small margin.

8.2.5.2 The Results of the t-test

The results of the three experimental groups (EG) were compared with those of the control group (CG) using the t-test. I use the statistical software 'R'[23] to compute the t-test for the four groups. The t-test was run in order to determine whether there are any significant differences between the performances of the three experimental groups in the AJT from the control group. Furthermore, the participants' performance in the AJT was compared across proficiency groups to determine whether there are any significant differences between the targeted proficiency groups. That is, the results of the beginner proficiency group were compared to those of the intermediate proficiency and advanced proficiency groups. Finally, the results of the intermediate proficiency group were compared to those of the advanced proficiency group.

The null hypothesis predicts that the beginner proficiency group's performance will be the same as that of the intermediate proficiency group. This prediction is based on the effects of linguistic proximity between the L1 Lingala and the TL English, which may facilitate the acquisition process of the simple past tense in English for the subjects of all proficiency levels. The alternative hypothesis predicts that the performance of beginner proficiency group will be different from that of the intermediate proficiency groups. This prediction is based on the effects of the proficiency differences between the two groups of participants.

Since the p-value ($p = 0.8367$) is greater than alpha (.05), I accept the null hypothesis, which predicts that beginner proficiency group's performance is the same as the performance of the intermediate proficiency group. The results of the paired t-test [t (40.337) =

[23] (R version 3.2.0 (2015-04-16) "Full of Ingredients "Copyright (C) 2015 The R Foundation for Statistical Computing Platform: x86_64-apple-darwin13.4.0 (64-bit)).

0.20743, p = 0.8367] that aimed to determine whether there are any significant differences between the beginner and intermediate groups' performance in the AJT show that there are no significant differences between the beginner proficiency and the intermediate proficiency groups' performances.

Comparing the performance of the beginner proficiency group with that of the advanced proficiency group, the null hypothesis assumes no differences between the two proficiency groups. However, the alternative hypothesis predicts that there are differences between the beginner proficiency group and the advanced proficiency group.

Since the p-value (p = 6.391e-11) is smaller than alpha (.05), I reject the null hypothesis, which predicts that beginner proficiency group's performance is the same as that of the advanced proficiency group. The results of the paired t-test [t (47.793) = -8.3667, p = 6.391e-16] that aimed to determine whether there are any significant differences between the beginner and advanced groups' performance in the AJT show that there are significant differences between the beginner proficiency and the advanced proficiency groups' performances.

Finally, the intermediate proficiency group was compared with the advanced one. The null hypothesis predicted that there are no differences between the two groups. The alternative hypothesis, however, predicted differences between the two groups.

Since the p-value (p < 2.2e-16) is smaller than alpha (.05), I reject the null hypothesis which predicted no differences between the intermediate proficiency group and the advanced proficiency group. I therefore, confirm through the results [t (53.572) = -13.246, p < 2.2e-16] the alternative hypothesis, which predicted differences between the intermediate proficiency group and the advanced proficiency group.

The performance of the three proficiency levels of the experimental groups were also compared with the performance of the control group. Starting with the beginner group and the control group, the null hypothesis predicted that there are no differences between the beginner proficiency group and the control group. The alternative hypothesis assumed that there are differences between these two targeted groups.

Since the p-value ($p = 4.815e-15$) is smaller than alpha (.05), I reject the null hypothesis which predicted that there are no differences between the beginner proficiency group and the control group. I, therefore, confirm through the results [$t (29) = -14.792$, $p= 4.815e-15$], the alternative hypothesis which predicted significant differences between the two aforementioned groups.

Likewise, the intermediate proficiency group was compared to the control group. The null hypothesis predicted that the intermediate proficiency group is the same as the control group. Whereas, the alternative hypothesis assumed that there are differences between the two groups.

The results [$t (29) = -33.288$, $p < 2.2e-16$] showed that the intermediate proficiency group is significantly different from the control group.

Finally, the advanced proficiency group was compared to the control group. The null hypothesis predicted that the advanced proficiency group is the same as the control group. Whereas, the alternative hypothesis assumed that the advanced proficiency group is different from the control group. The hypotheses are presented as follows:

H_o: advanced proficiency group = control group

H_1: advanced proficiency group ≠ control group

The results [t (29) = -8.254, p = 4.226e-09] showed that there are significant differences between the advanced proficiency group and the control group.

8.2.6 Discussion

The results show that at the initial stage of the acquisition of a third language, the morphosyntactic proximity between a previously acquired linguistic system and a target language plays an important role in the acquisition process. This finding confirms the prediction of the Typological Primacy Model (TPM) by Rothman (2010, 2011) which predicts that learners will benefit from the facilitative effects of a morphosyntactic proximity between two languages.

The performance of the advanced proficiency group shows that morphosyntactic proximity plus language proficiency played an ameliorative role in the process of the acquisition of the target language. These two capital variables combined together in the process of the acquisition of an additional language boost the linguistic capacities of the learner to process the linguistic system of the target language and further facilitate the process of the acquisition of the target language.

Contrary to what is claimed in the 'L2 Status Factor' Model (Bardel and Falk; 2007), the participants of this study seemed to have access to their L1 morphosyntactic system. If the L2 had blocked access to the L1, they would have produced the present perfect tense in the context of a past completed event in English. That was not what was observed in this study. The majority of the participants used the simple past tense in the required context.

Discussing the results in terms of gender, it is observed that male participants have performed better than the female subjects. However, their performances were not statistically significantly different. That is, the observed numerical differences that is attested cannot lead to

any conclusive interpretation in terms which could establish a salient difference between the two groups.

8.3 The Study (4): Past until Now Events

The acceptability judgment task was administered in the context of past until now events. Participants were provided with sentences which had the simple past, simple present, the present perfect, and the future tense in order to judge whether they were acceptable or not. The following section discusses the elicitation of the data in the context of past until now events using the AJT.

Task (1): The Acceptability Judgment Task (AJT)

8.3.1 Rationale

Study 2 examines how L1 Lingala L2 French speakers learning English express an event in English that started in the past and has some connection or implication in the present. It tests the claims of the Cumulative Enhancement Model (CEM) by Flynn, Foley, and Vinnitskaya (2004), the 'L2 Status Factor' Model by Bardel and Falk (2007), and the Typological Primacy Model (TPM) by Rothman (2010, 2011) as outlined in chapter II, pages 69-87. It further tests my new predictions which concern the case that none of the learner's previous languages offers any morphosyntactic similarities with the target language.

8.3.2 Predictions

The predictions for the context of past until now events in the Acceptability Judgment Task are articulated as follows:

- In the absence of any morphosyntactic proximity between either the L1 or the L2 with the target language (L3), both previously acquired linguistic systems will compete and will therefore be accessed; the language that may take precedence and thus serve as source of transfer in the L3 may be the language

which offers similarity in terms of the function/use of the tense, or the language in which the learners are most proficient, and/or the language which offers less linguistic 'insecurity'. The study posits that if subjects are tapping into their linguistic knowledge from the L1 to judge a past until now event in English, they will judge sentences with the simple past tense correct and acceptable.

- If participants are tapping into their linguistic knowledge from the L2 French, they will judge English sentences with the simple present tense as being correct and acceptable when they are asked to judge sentences describing a past until now event.
- Finally, the study posits that if subjects are tapping into their linguistic knowledge from both the L1 and L2 to judge a past until now event in English, they will judge sentences with either the simple past or the simple present tense as correct and acceptable.

8.3.3 Procedures

The same 120 participants who participated in the earlier tasks were administered an Acceptability Judgment Task. The targeted tokens encoded the past until now context. Three different tenses were used in the context of past until now events. Those tenses were the simple present tense, the present perfect tense, and the simple past tense. Test sentences are of the following format (1-4); the complete stimulus material for this task can be found in appendix (23).

(1) Joe lived in Paris since 2005.

(2) Betty has travelled to Paris several times.

(3) Bob works at Walgreens for 10 years.

(4) Abiga learned English since 2007.

Participants had to provide their judgments on the grammaticality (acceptability) and or ungrammaticality (unacceptability) of the target sentences. A grammatical sentence was indicated as a good sentence (G), while an ungrammatical sentence was identified as a bad sentence (B), if the participant was uncertain about the acceptability of a sentence they responded with (DK) meaning 'I do not know' as in the previous task.

Participants were granted as much time as was required by each individual participant to complete the task. This individual time allocation was a way of putting participants in an explicit mode of accessing their linguistic knowledge while performing the task. I used similar procedures as those which were previously used in the WET in the context of past completed event.

8.3.4 Data Coding and Analysis

In all the past until now events, only the present perfect tense was judged as the correct \ tense. However, since this tense was more complex than the simple past in the previous task, five coders determined the judgments of the participants on the tokens that were provided in the AJT (as compared to three coders in the previous task).

The coding of the past until now event required more time than the coding of the WET. In the AJT, participants were provided with sentences which offered the context of past until now event, but with a range of verb tenses which varied across the fifteen sentences from the simple past tense, the simple present tense, to the present perfect tense.

Like before, every correct answer was granted one point, while every incorrect judgment was granted zero points. However, for this task the zero score was further specified depending on the type of incorrect tense that was erroneously judged as correct by the participants in order to be able to trace the source of negative transfer.

As an illustration, let consider a set of sentences and the judgments that were provided by the participants to show how the data of this experiment were coded. For instance, if a participant judged the sentence "Joe lived in Paris since 2005" as correct, s/he would have been granted zero points since this tense is incorrect in the context of past until now event. In the summary result table, the answer would have been entered as '0spt'to specify type of the incorrect answer where 'spt.' signifies that the participant judged the use of the simple past tense in the context of past until now event as correct.

8.3.5 The Results and Statistical Analysis

This subsection provides the results of both the descriptive statistics and those of inferential statistics. The results of the descriptive statistics are presented in relation to different proficiency level groups. They provide the summary for each proficiency group, which includes information such as the minimum, the first quartile, the median, the mean, the third quartile, and the maximum for each group. Then, the results of the inferential statistics is presented. The results of the t-test are presented and interpreted thereof.

8.3.5.1 The Results of Descriptive Statistics

The descriptive statistic results are presented in relation to the four proficiency groups. That is, they are related to the beginner proficiency level, the intermediate proficiency level, the advanced proficiency level, and to the control group which is made up of the native speakers of English. The first set of results concerns the beginner proficiency group.

8.3.5.1.1 The Results of Descriptive Statistics for the Beginner Proficiency Group

The descriptive statistics for the beginner proficiency group on the AJT, in relation to the past until now event varied from zero (0.00) as the minimum score to eight (8.00) as the maximum score. The median score of the beginner proficiency group is four (4.00), while the mean of this

proficiency group is five point three point ninety-six (3.96). The first and third quartiles are two point twenty-five (2.25) and six (6.00) respectively. The total score is out of fifteen (15). The summary table for the beginner proficiency group is presented in table (38).[24]

Table (38)

Summary for the beginner proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
0.00	**2.25**	**4.00**	**3.96**	**6.00**	**8.00**

8.3.5.1.2 The Results of Descriptive Statistics for the Intermediate Proficiency Group

The descriptive statistics for the intermediate proficiency group on the AJT on past until now events show that this category of participants scored four (4.00) as the minimum score, and nine (9.00) as the maximum score. The first quartile is six (6.00), while the third quartile is eight (8.00). The median is seven (7.00) and the mean is six point seven (6.7). The total score is out of fifteen (15). The summary table for the intermediate proficiency group is presented in table (39).[25]

Table (39)

Summary for the intermediate proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
4.00	**6.00**	**7.00**	**6.7**	**8.00**	**9.00**

[24] The results for the beginner proficiency group on the AJT on past until now events are presented in the appendix (24).

[25] The results for the intermediate proficiency group on the AJT on past until now events are presented in the appendix (25).

8.3.5.1.3 The Results of Descriptive Statistics for the Advanced Proficiency Group

The scores for the advanced proficiency group varied from seven (7.00) as the minimum score, to thirteen (13.00) as the maximum score. The first quartile is eight (8.00), while the third quartile is eleven (11.00). The median is nine point five (9.5) and the mean is nine point six (9.6). The total score is out of fifteen (15). The summary table for the intermediate proficiency group is presented in table (40).[26]

Table (40)

Summary for the advanced proficiency group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
7.00	**8.00**	**9.50**	**9.6**	**11.00**	**13.00**

8.3.5.1.4 The Results of Descriptive Statistics for the Control Group

The scores for the control group were perfect in that they scored the maximum scores. This implies that their minimum, maximum, the first quartile, and the third quartile is fifteen (15.00). The median is fifteen (15.00) and the mean is fifteen (15.00) as well. The total score is out of fifteen (15). The summary table for the control group is presented in table (41).[27]

Table (41)

Summary for the control group

Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
15.00	**15.00**	**15.00**	**15.00**	**15.00**	**15.00**

[26] The results for the advanced proficiency group on the AJT on past until now events are presented in the appendix (26).

[27] The results for the control group on the AJT on past until now events are presented in the appendix (27).

The results for the different proficiency levels are presented in the following table (42).

Table (42)

The AJT results per proficiency level

Level/Category	Score	Percent
Beginner	**119**	**26.4 %**
Intermediate	**201**	**44.6 %**
Advanced	**288**	**64 %**
Control Group	**450**	**100 %**

Finally, table (43) presents the results of the AJT in terms of proficiency level. As mentioned earlier, proficiency is included as a further variable to examine whether it plays any differential role in terms of the participants' results in different tasks that they performed in this study.

Table (43)

The results of the AJT in terms of proficiency level

Level/Category	Gender	Score	Percent	Total score	Percent
Beginner	Male	**70**	**58.8 %**	**119**	**26.4 %**
	Female	**49**	**41.7 %**		
Intermediate	Male	**95**	**47.2 %**	**201**	**44.6 %**
	Female	**106**	**52.7 %**		
Advanced	Male	**146**	**50.6 %**	**288**	**64 %**
	Female	**142**	**49.3 %**		

Control Group	Male	**225**	**50 %**	**450**	**100 %**
	Female	**225**	**50 %**		

The following histograms represent the results of the AJT. They depict the total points per proficiency level. The category or proficiency groups are presented, and the scores in terms of gender of the participants are as well presented.

Figure (14)

Diagram of the AJT results

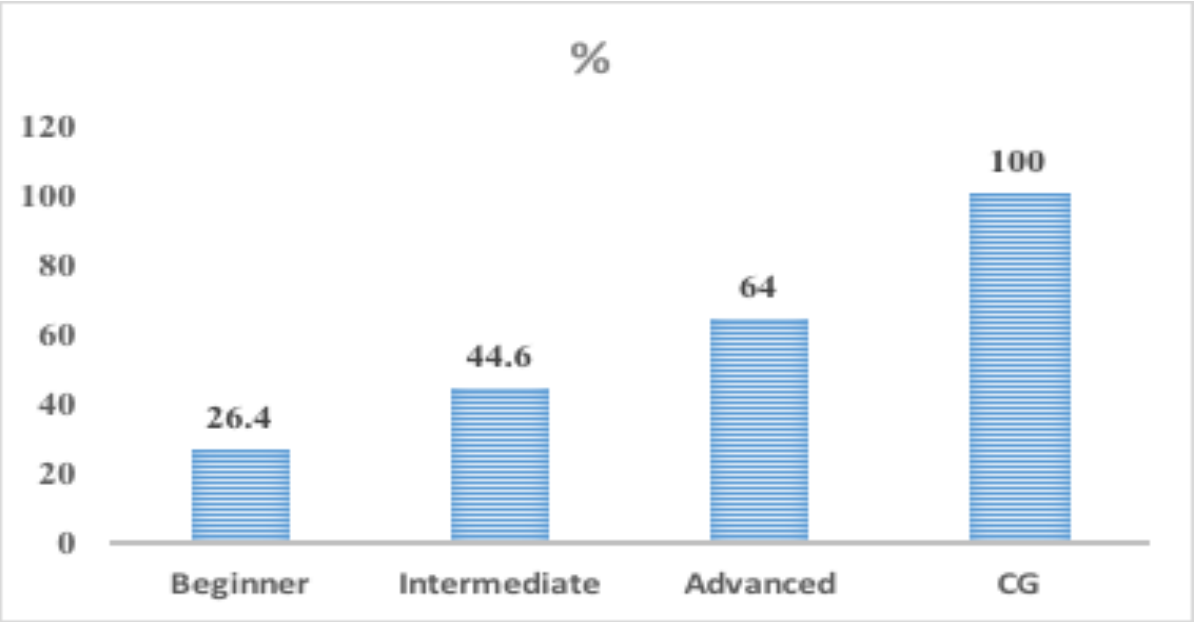
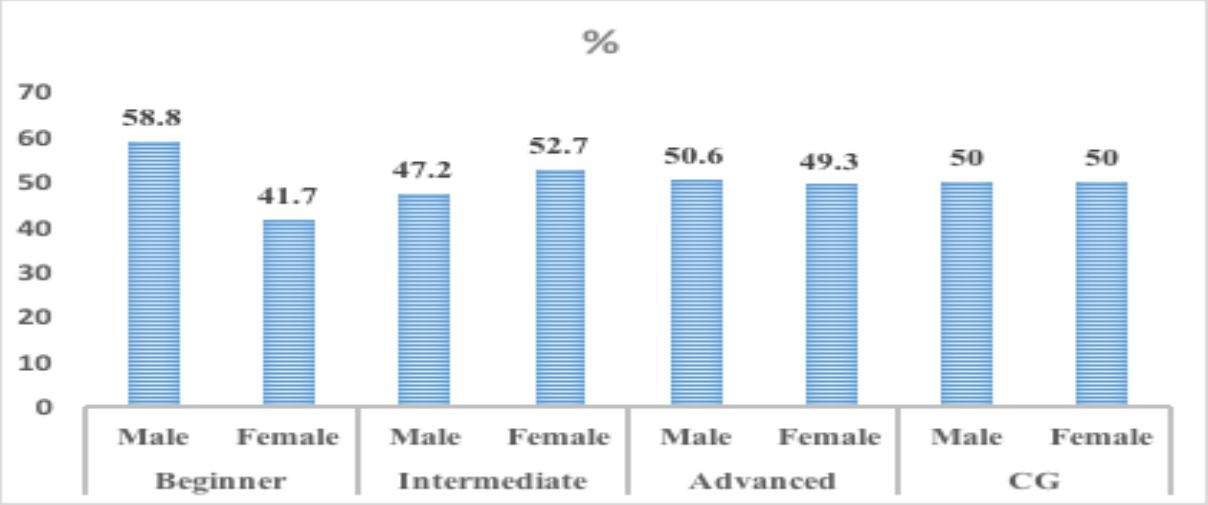


Figure (15)

The histogram of the AJT in terms of gender



In addition, the frequency of negative transfer (negative answers) was computed. A summary of the frequency of negative transfer in the AJT for the past until now event (PUNE) is presented in table (44).[28]

Table (44)

The summary of the frequency showing transfer tendency in the AJT for the PUNE

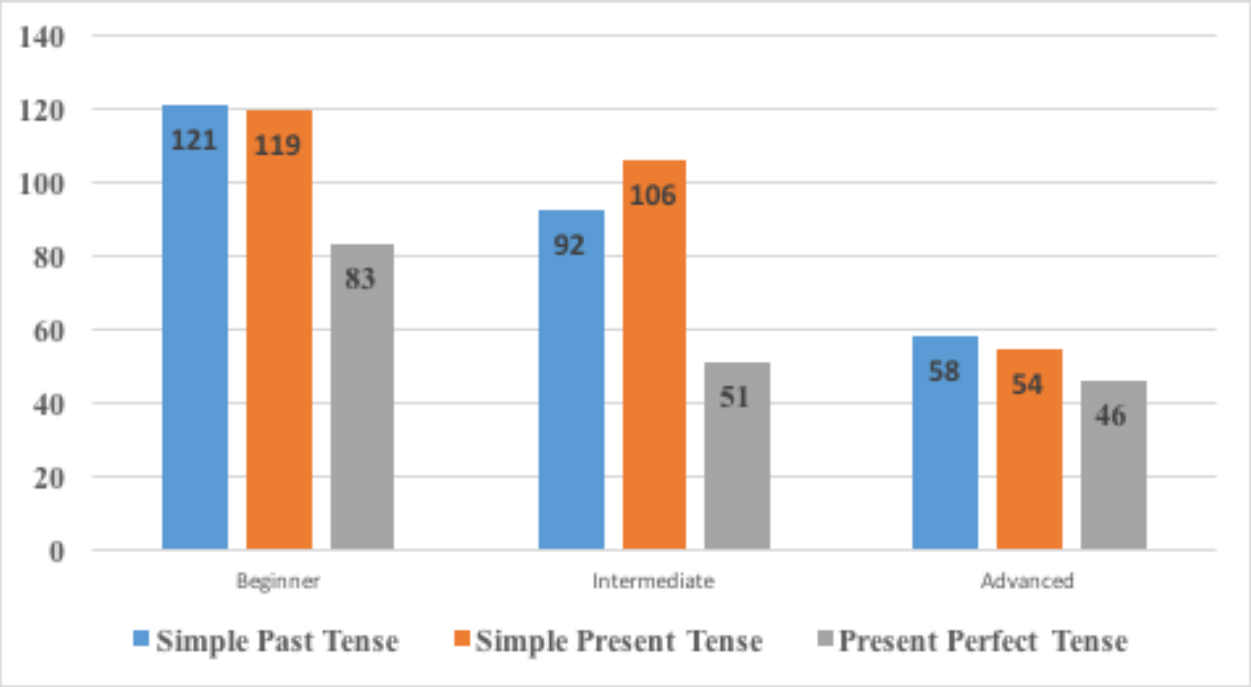
Category	Tense judgment		
	Simple Past Tense	Simple Present Tense	Present Perfect Tense
Beginner	121	119	83
Intermediate	92	106	51
Advanced	58	54	46
Total	271	279	180

[28] Appendix (28) presents the frequency of negative transfer from the beginner proficiency group. Appendix (29) presents the frequency of negative transfer from the intermediate group; and appendixes (30) and (31) present the frequency for the advanced proficiency group and the whole study, respectively.

The results (appendix 33) show the frequency of transfer tendency from both the L1 and the L2. They also show the negative judgment that rejected the correct tense, the present perfect tense, in the context of past until now event. The interpretation of this table is provided in the discussion section number 8.3.6 below. The following histogram presents the results in table (44) graphically.

Figure (16)

The histogram on the frequency of positive and negative transfers from both the L1 and L2.



8.3.5.2 The Results of the Inferential Statistics

The three experimental groups (EG) were compared with those of the control group (CG) using the t-test. I used the statistical software 'R'[29] to compute the t-test for the four groups. The aim of running the t-test was to determine whether there are any significant differences between the performances of the three experimental groups in the AJT from the performance of the control

[29] (R version 3.2.0 (2015-04-16) "Full of Ingredients "Copyright (C) 2015 The R Foundation for Statistical Computing Platform: x86_64-apple-darwin13.4.0 (64-bit))

group. Furthermore, the participants' performance on the AJT was compared across proficiency groups to determine whether there are any significant differences between the selected proficiency groups taken in pairs. Therefore, the scores of the beginner proficiency group were compared to those of the intermediate proficiency and advanced proficiency groups. Finally, the scores of the intermediate proficiency group were compared to those of the advanced proficiency group.

Starting with the beginner and intermediate proficiency pair, the null hypothesis predicts that the beginner proficiency group's performance will be the same as that of the intermediate proficiency group. The alternative hypothesis predicts that the performance of beginner proficiency group will be different from that of the intermediate proficiency groups.

Since the p-value ($p = 3.611e-06$) is smaller than alpha (.05), I reject the null hypothesis, which predicts that beginner proficiency group's performance is the same as the performance of the intermediate proficiency group. Therefore, I accept the alternative hypothesis, through the results [$t (29) = -5.7027$, $p = 3.611e-06$], which predicted that the performance of beginner proficiency group will be different from that of the intermediate proficiency group.

The beginner proficiency group was also compared with the advanced proficiency group. The null hypothesis predicts that the beginner proficiency group's performance will be the same as that of the advanced proficiency group. The alternative hypothesis predicts that the performance of beginner proficiency group will be different from that of the advanced proficiency groups.

Since the p-value ($p = 1.1182e-09$) is smaller than alpha (.05), I reject the null hypothesis which predicted that the beginner proficiency group's performance will be the same as that of the advanced proficiency group. Therefore, I confirm the alternative hypothesis, through

the results [t (29) = -8.7945, p = 1.1182e-09], which predicted that the performance of beginner proficiency group will be different from that of the advanced proficiency group.

Furthermore, the scores of the beginner proficiency group were compared with those of the control group (CG). The null hypothesis predicts that the beginner proficiency group's performance will be the same as that of the control group. The alternative hypothesis predicts that the performance of beginner proficiency group will be different from that of the control group.

Since the p-value ($p < 2.2e-16$) is smaller than alpha (.05), I reject the null hypothesis which predicted that the beginner proficiency group's performance will be the same as that of the control group (CG). Therefore, I confirm the alternative hypothesis which predicted that the performance of beginner proficiency group will be different from that of the control group.

The intermediate proficiency group was also compared to the control group. The null hypothesis predicts that the intermediate proficiency group's performance will be the same as that of the control group. The alternative hypothesis predicts that the performance of intermediate proficiency group will be different from that of the control group. The hypotheses are presented as follows:

Since the p-value ($p < 2.2e-16$) is smaller than alpha (.05), I reject the null hypothesis, which predicted that the intermediate proficiency group's performance will be the same as that of the control group. Thus, I confirm the alternative hypothesis, which predicted that the performance of the intermediate proficiency group will be different from that of the control group.

Finally, the scores of the advanced proficiency group were compared with those of the control group. The null hypothesis predicts that the advanced proficiency group's performance

will be the same as that of the control group. The alternative hypothesis predicts that the performance of advanced proficiency group will be different from that of the control group.

Since the p-value (p = 6.867e-15) is smaller than alpha (0.5), I reject the null hypothesis which predicted that the advanced proficiency group's performance will be the same as that of the control group. As a result, I confirm the alternative hypothesis, which predicted that the performance of the advanced proficiency group will be different from that of the control group.

The t-test on the frequency of negative transfer (incorrect answers) was computed for several reasons. First, it compared beginner as opposed to intermediate proficiency group participants' performances, and aimed therefore, to determine whether there are significant differences between the incorrect use of the simple past tense as compared to the incorrect use of the simple present tense in the context of past until now events. The null hypothesis predicted no significant differences between the two groups; while the alternative hypothesis assumed significant differences between the two proficiency groups.

Since the p-value (p = 0.08) is smaller than alpha (.05), I reject the null hypothesis which predicted no significant differences between the beginner proficiency group and the intermediate proficiency group. Therefore, I confirm the alternative hypothesis, through the results [t (29) = 1.7951, p = 10.08], which assumed significant differences between the two proficiency groups.

The frequencies of negative transfer from the beginner proficiency group were also compared to those of the advanced group. The null hypothesis predicts no significant differences between the two groups. However, the alternative hypothesis predicts significant differences between the beginner proficiency group and the advanced proficiency group.

Since the p-value (p = 1.427e-07) is smaller than alpha (.05), I reject the null hypothesis which predicted no significant differences between the beginner proficiency group and the advanced proficiency group. Therefore, I confirm the alternative hypothesis, through the results [t (29) = 6.8916, p = 1.427e-07], which assumed significant differences between the two proficiency groups.

Finally, the intermediate proficiency group's negative transfer frequencies were compared to those of the advanced group. The null hypothesis predicts no significant differences between the two groups. However, the alternative hypothesis predicts significant differences between the intermediate proficiency group and the advanced proficiency group.

Since the p-value (p = 0.00) is smaller than alpha (.05), I reject the null hypothesis which predicted no significant differences between the intermediate proficiency group and the advanced proficiency group. Therefore, I confirm the alternative hypothesis, through the results [t (29) = 3.7766, p = 0.00], which assumed significant differences between the two proficiency groups.

Furthermore, I compared the frequency of transfers, that is, I compared the frequency of use of the simple past tense to that of the simple present tense of each proficiency group in order to determine the language that is predominant in providing negative transfer to the L3 acquisition process. The aim was to determine whether the frequencies were significantly different in order to draw sound conclusions on the linguistic system that was accessed in the process.

Starting with the beginner proficiency group, I posit as null hypothesis that the frequency of use for the simple past tense is the same as that of the simple present tense. The

alternative hypothesis assumes significant differences between the frequency of use between the simple past tense and the simple present tense.

Since the p-value ($p = 0.80$) is greater than alpha (.05), I confirm, through the results [$t (29) = -0.24605$, $p = 0.80$], the null hypothesis which predicted no significant differences on the performances of the beginner proficiency group between the frequency of use of the simple past tense and the simple present tense.

Then, the intermediate proficiency group was considered. I posit as null hypothesis that the frequency of use of the simple past tense by the intermediate proficiency group is the same as that of the simple present tense by the same group. The alternative hypothesis assumes significant differences between the frequency of use between the simple past tense and the simple present tense by the same aforementioned group.

Since the p-value ($p = 0.1563$) is greater than alpha (.05), I confirm, through the results [$t (29) = 1.4552$, $p = 0.15$], the null hypothesis which predicted that there are no significant differences between the frequency of use of the simple past tense and the simple present tense on the performances of the intermediate proficiency group.

Finally, the advanced proficiency group was considered. I posit as null hypothesis that the frequency of use of the simple past tense by the advanced proficiency group is the same as the frequency of use of the simple present tense by the same group. The alternative hypothesis assumes significant differences between the frequency of use between the simple past tense and the simple present tense by the same group.

Since the p-value ($p = 0.70$) is greater than alpha (.05), I confirm, through the results [$t (29) = -0.37939$, $p = 0.70$], the null hypothesis which predicted no significant differences on the

performances of the advanced proficiency group between the frequency of the use of the simple past tense and the simple present tense.

8.3.6 Discussion

The results of this experiment indicate that participants may have access to both previously acquired linguistic systems in the absence of some facilitative factors such as the structural or morphosyntactic proximity. In this case, transfer comes from the language that offers the most linguistic security. Therefore, the source of transfer could vary depending on several factors such as the language that offers the most linguistic security within a proficiency group.

For example, in the case of beginner proficiency group, it was observed that the L1 played the predominant role in language transfer once we consider the frequency of the answers to the past until now context. Yet the results of the t-test showed that there are no significant differences between the use of the simple past and the simple present tense in the context of past until now events. Likewise, when the use of the simple past was compared to that of the simple present tense in the context of past until now event for respectively the intermediate and advanced proficiency groups, no significant differences were observed. This entails that participants had equal access to both previously acquired linguistic systems.

The use of the simple past tense in the context of past until now events (PUNE) is considered correct since in North America—the USA and Canada—the simple past tense is very often used in this context. The use of the simple past tense by the participants may be considered as a result of positive transfer into the TL. The transfer may be attributed to the influence of the L1 Lingala since in Lingala the remote past is sometimes also used in such a context of past until now event where there is an emphasis on the past. Besides, the same use of the simple past tense in the context of past until now events may also be attributed to the influence of the variety of

English that is spoken in North America (The USA and Canada), which accepts the use of the simple past tense in the context of past until now events. Participants learned to use the present perfect tense in the context of past until now events in their formal school training in high school in the Democratic Republic of Congo where the British variety of English is taught. Since they are now exposed to the North American variety in which the simple past tense is used in this context, this has impacted their performance.

There was also evidence for negative transfer from the L2 French at a lower rate; i.e. the use of the simple present tense. This finding confirms that some participants had access to both previously acquired systems.

In addition, the descriptive statistics indicates a slight preference for the L1 as the predominant source of (positive) transfer. That is, participants made more positive than negative transfer in this task. For instance, even if the beginner proficiency group had access to both previous systems, the L1 Lingala played the most significant role as the source of transfer in the process of the acquisition of English as an L3. On the other hand, a few negative transfers were observed in the performance of some participants. More negative transfer from the L2 French were observed from the performance of the intermediate proficiency group.

Chapter IX

Findings, General Discussion, and Conclusion

This study has endeavored to determine and identify the previously acquired linguistic system that serves as the source of transfer in the acquisition process of an additional language beyond an L2. The claims of three main theoretical models on the acquisition of an L3 were considered, notably the 'L2 Status Factor' Model by Bardel and Falk (2007), the Cumulative Enhancement Model (CEM) by Flynn, Foley and Vinnitskaya (2004), and the Typological Primacy Model (TPM) by Rothman (2010).

The chosen domain of investigation was on linguistic transfer from two previously acquired linguistic systems in the TL. The study circumscribed both the linguistic encoding of past completed events and past until now events as the linguistic phenomena. The language constellation in combination with the chosen domain should yield two different sets of results because of the differences in the nature of the selected linguistic phenomena in the study.

In the consequence the current study investigated two sets of predictions: One set of predictions concerned potential transfer of morphosyntactic features during the verbalization of past completed events, one set of predictions concerned potential transfer of morphosyntactic features during the verbalization of past until now events.

I first, discuss the results obtained from past completed events. Subsequently, I discuss the results related to past until now events. Finally, I determine the mode of access to linguistic knowledge—implicit as opposed to explicit—in which participants transferred their previous linguistic knowledge into the TL.

The predictions in the context of a past completed event were formulated as follows:

- The Typological Primacy Model (TPM) claims that only the language with syntactic proximity with the TL serves as the source of transfer; hence the TPM predicts that if subjects are tapping into their linguistic knowledge from the L1 to talk about a past completed action in English, they will use the simple past tense verb in their sentences in a context in which the simple past tense is required.
- The 'L2 Status Factor' Model claims that the L2 is the strongest source of transfer in L3 acquisition and that the L2 blocks any morphosyntactic transfer from the L1 syntactic system; hence the model posits that if subjects are tapping into their linguistic knowledge from their L2 (French) to talk about a past completed event in their L3 (English), they will use the present perfect tense verb in sentences which require the simple past tense.
- The Cumulative Enhancement Model CEM claims that learners rely on their cumulated linguistic knowledge from both L1 and L2 as source of transfer and that transfer is only positive or null; hence this model posits that if subjects are tapping into their linguistic knowledge from both L1 and L2 to talk about past completed event in English they will use the simple past tense in their sentences.

The claims of the 'L2 Status Factor' Model by Bardel and Falk (2007) were discarded in the context of past completed events since participants predominantly used the simple past tense. Yet the 'L2 Status Factor' Model predicted that participants would use the present perfect tense in this context and that access to the L1 would be blocked. These results entail that the L2 linguistic system did not play a major role in the acquisition process of L3 English tense morphosyntax. Rather, the L1 linguistic influence seems to have overridden the influence of the

L2. This aspect of the findings of this study challenges the claims of the 'L2 Status Factor' Model (Bardel and Falk 2007) which claims that the L2 linguistic system blocks access to the linguistic system of the L1.

The claims of the Cumulative Enhancement Model (CEM) by Flynn, Foley and Vinnitskaya (2004) predicts the use of the simple past tense in the context of past completed events in the L3, here English because the model predicts that learners use cumulative knowledge from both their L1 and their L2. However, the use of cumulative knowledge might be impossible in the current case because in Lingala the recent/remote past is used to verbalize past completed events while in French the *passé composé* needs to be employed. It would thus seem that the use of the simple past tense is solely based on the influence of the L1 Lingala in the current study. If we were to consider negative transfer based on the influence of cumulative knowledge, we could have predicted the use of the present perfect tense in the context of past completed events; however, since the CEM does not allow negative transfer, this option was not considered.

The results show that participants predominantly used the simple past tense to talk about a past completed event in English. This implies that participants tapped into their previous linguistic knowledge from Lingala in this context. This finding confirms what was found in Kabasele (2014) in which participants also used the simple past tense in the context of past completed events. However, while in the previous study, Kabasele (2014), it was not possible to determine whether the use of the simple past tense in the aforementioned context was the result of transfer from the L1 or the consequence of successful learning process (due to lack of statistical power), in the current study the motivation for the use of the simple past tense in the context of past completed events is identified. In fact, the large number of participants (120) has helped to drastically increase the power of statistics and to make sound interpretation of the results. The use

of the simple past tense in the context of past completed events is attributed to positive transfer from the L1 Lingala which presents some morphosyntactic similarities with the TL English. I lend support to Kabasele (2014) who argued that "when an L1 offers some syntactic similarities with the TL, its (L1) syntactic system becomes transparent and thus accessible to the learners" for transfer (p. 50). This finding informs us that on a hierarchy of factors that may impact the acquisition of morphosyntactic features of an L3, the morphosyntactic proximity of a previously acquired linguistic system to the target language takes precedence over the L2 status.

Participants seem to have used their linguistic knowledge from the L1 Lingala to encode past completed events in English. This viewpoint is supported by the statistical differences in the use of the simple past tense and the use of the present perfect tense in the context of past completed event in the study. The attested positive transfer is in alignment with the predictions of the TPM by Rothman (2010, 2011) who argues that transfer comes from the language that offers some morphosyntactic proximity with the TL.

All the three proficiency categories of the experimental group performed far beyond average. This performance could be attributed to the facilitative effects of the morphosyntactic proximity between the L1 Lingala and the TL English which may have positively impacted the three groups in different ways. Proficiency played a facilitative role in the process as is highlighted in the discussion below.

The differences in performance between the beginner proficiency and the advanced proficiency groups, and the intermediate proficiency and the advanced proficiency groups confirm what I stated above. While the morphosyntactic proximity between Lingala and English seems to play a deterministic role for the beginner proficiency and intermediate proficiency groups' performances, I suspect that proficiency also played a facilitative role beside the morphosyntactic

proximity in the advanced proficiency group. This viewpoint is supported by the differences in performance that are observed between the beginner proficiency group and the advanced proficiency group and between the intermediate proficiency group and the advanced proficiency group. I posit that the differences between the beginner proficiency and advanced proficiency groups are dictated by both the linguistic similarity and by the advanced proficiency level of the advanced proficiency group in combination, as the advanced proficiency group outperformed the other two proficiency groups.

If the positive influence was only coming from the morphosyntactic proximity between the L1 Lingala and the TL English, we would not have observed any differences between the beginner proficiency group and the intermediate proficiency group from the advanced proficiency group. The linguistic proximity between the two targeted linguistic systems might rather have allowed subjects at different proficiency levels to perform without any significant differences. However, the observed differences between the beginner proficiency group and the advanced proficiency group support my hypothesis.

Moreover, the significant differences between the intermediate proficiency group and the advanced proficiency group indicate the level at which the impact of proficiency plays a role in the process of acquisition and becomes effective in having a solid impact. Also, if any level or degree of proficiency was enough to impact the acquisition process of the simple past tense, there would neither be any significant differences between the two groups either. The differences between these two groups suggest that low and intermediate proficiency are not strong enough to impact the acquisition process of a linguistic feature such as the acquisition of the simple past tense to the point to equalize the performance of the three targeted proficiency level categories. I

therefore posit that only the advanced proficiency level plays a significant role in demarcating the performance level of the different proficiency groups.

The comparisons of all the three proficiency categories of the experimental groups (EG) with the control group (CG) show significant differences for each pair of the compared groups. This once more demonstrates the positive impact of proficiency in the learning process. From the sum of what is discussed above, it could be implied that morphosyntactic proximity may play a capital and thus facilitative role in the acquisition process of syntactic features of a language. However, advanced linguistic proficiency coupled with morphosyntactic proximity significantly boosts the acquisition process.

It was observed that a few subjects (17%), mostly in the beginner proficiency group, may have transferred their linguistic knowledge from the L2 in the context of past completed events, while the majority of them used the simple past tense in the same context. They used the present perfect tense to talk about events which started and were completed in the past. This finding may be explained by the fact that in the context of past completed events both the L1 and the L2 offered some morphosyntactic similarities with the TL: The similarity between L1 and the TL would result in positive transfer whereas the similarity between the L2 and the TL would result in negative transfer. My results thus indicate that the majority of participants tapped into their knowledge of the L1. Hence the hypothesis that Lingala and English are similar took precedence over the hypothesis that French and English are similar. In the consequence, positive transfer was significantly more frequent than negative transfer in the context of past completed events.

In sum, we may conclude that the predictions of the Cumulative Enhancement Model (CEM) by Flynn, Foley and Vinnitskaya (2004) are debatable in the context of past completed events as the attested positive transfer in this experiment cannot the result of the

cumulated knowledge from both the L1 and the L2 because a contribution of the L2 would result in a case of negative transfer, i.e. the use of the present perfect tense. The CEM does not predict any negative transfer and the only linguistic system that was attested to contribute positive transfer is the L1, i.e. Lingala. Hence we need to acknowledge the effects of morphosyntactic proximity and therefore give credit to the Typological Primacy Model (TPM) by Rothman (2010) whose predictions seem to be reflected in the findings of this experiment.

The predictions for a past until now event were formulated as follows:

- In the absence of any morphosyntactic proximity between either the L1 or the L2 with the target language (L3), both previously acquired linguistic systems will compete and will therefore be accessed; the language that may take precedence and thus serve as source of transfer in the L3 may be the language which offers similarity in terms of the function/use of the tense, or the language in which the learners are most proficient, and/or the language which offers less linguistic 'insecurity'. The study posits that if subjects are tapping into their linguistic knowledge from the L1 to judge a past until now event in English, they will judge sentences with the simple past tense correct and acceptable.
- With reference to the same aforementioned new predictions, the study posits that if subjects are tapping into their linguistic knowledge from the L2 to express a past until now event in English, they will produce sentences with the simple present tense.
- Finally, the study posits that if subjects are tapping into their linguistic knowledge from both the L1 and L2 to express a past until now event in English, they will produce sentences with either the simple past or the simple present

tense in a context where both the L1 and the L2 offer some morphosyntactic differences from the target language.

The results show that participants predominantly used the simple past tense rather than the present perfect tense in the context of past until now events in English. Yet since the participants' linguistic background questionnaire informed us that their English background was predominantly structure-oriented (structure of the English Grammar) and bookish, based on the variety of British English, it was expected that participants would use the present perfect tense in the context of past until now events. However, the use of the simple past tense in the context of past until now event is not entirely surprising since in North America (USA and Canada) the simple past tense is often used in the context of past until now events in English.

I may thus attribute this use of the simple past tense in the context of past until now events to the influence of North American English (the USA and Canada) which seems to be more influential on their current acquisition process than the variety of English—British English— that my participants were previously exposed and which requires the use of the present perfect tense in the context of past until now events (at least in the written register).

This 'oblique transfer' as I dub it may be the result of linguistic insecurity. Oblique transfer happens speakers discard a preciously learned form—here the present perfect tense—and adopt an alternative form—here the simple past tense—as 'correct' because it encodes the same information—here past until now events—and is dominant in their speech community (Labov 1996, 2006, Daftari 2016). Since the American and Canadian speakers of English use the simple past tense in the context of past until now events, the participants of this study seem to have discarded the use of the present perfect tense in this context and adopted the use of the simple past tense as the correct form.

A reason that might have further motivated the preference of the simple past tense in the context of past until now events for my participants is that in Kinshasa Lingala speakers habitually use the recent past to express not only express past completed events but also past until now events. In the latter case the recent past is used to emphasis the past action and to demote its consequences in the present. Participants seem to have transferred the use/function of the recent past from Lingala to English which has resulted in the use of the simple past tense in the context of past until now events.

The question to raise is that of determining the reason why participants did not opt to use French as the source of morphosyntactic transfer in which case the simple present tense could be used. I attribute this choice to both linguistic proficiency and linguistic security. In fact, participants tapped into their linguistic knowledge from Kinshasa Lingala which is the most proficient previously acquired linguistic system that they speak. Their proficiency in Kinshasa Lingala allowed them to circumscribe the tense that is used in similar context of past until now event in Lingala. Once the recent past was identified, its function has been matched with the past until now context in English which resulted in the use of the simple past tense. This process might also have been reinforced by the previously described oblique transfer.

Looking back to the research questions of this study, they were formulated in chapter I, page 9 and are now repeated here as concerns which endeavors to answer questions on the previously acquired language(s) that dominate in L3 transfer. Is the L1 or the L2 more dominant? Or are both the L1 and the L2 equally dominant? Is the L2 the privileged source of transfer even when the L1 offers local similarities with the L3? Do participants transfer more when they access their implicit linguistic knowledge as opposed to explicit linguistic knowledge? Is the

syntactic sentence judgment influenced by the subjects' level of proficiency? This study has shed light on these questions.

The first question was formulated as follows: Which previously acquired language(s) dominate in L3 transfer? Is either the L1 or the L2 more dominant? Or are both the L1 and the L2 equally dominant? The findings of this research indicate that it is not the order of language acquisition which determines the source of linguistic transfer in the acquisition of an additional language beyond L2. Rather, it is the linguistic proximity which plays a capital role in determining the source of transfer. The similarity might be either morphosyntactic or based on the function/use of the targeted tenses. Therefore, the dominant language is identified and determined thanks to the linguistic featural proximity that a previously acquired language offers to the target language.

In the current case of this study we saw the following: Both the L1 Lingala and the L2 French offered some morphosyntactic similarities with the target language; in particular, in the context of past completed events. The similarity between the L1 and the target language was expected to yield a positive transfer, while the morphosyntactic similarity between the L2 and the target language was expected to result in a negative transfer. These similarities imply that both previously linguistic systems could be accessed. However, the predominantly positive transfer from the L1 shows that the latter took precedence in the process of the acquisition of the L3. I argue that other factors such as proficiency played also an important role. If I had to present a hierarchy of the factors that play a deterministic role in circumscribing the source of transfer in L3 acquisition, I would rank morphosyntactic similarity and or function/use similarity on top. Proficiency (as well as linguistic security) would be ranked second, while the L2 status would rank lowest.

The next question aimed to determine whether the L2 could play the role of the privileged source of transfer even when the L1 offers local similarities with the L3. In light of what is discussed above, it seems obvious that the local similarity between the recent/remote past in Lingala and the simple past in English has overridden the L2 status effects. This entails that when morphosyntactic similarity or function similarity are in competition with L2 status effects, the former take precedence over the latter.

The third question endeavored to determine whether participants transfer more when they access their implicit linguistic knowledge as opposed to explicit linguistic knowledge. The results indicate that there were negative transfers from the L2. The negative transfer from the L2 French has been attested through the use of the simple present tense (including the progressive form) in English for events that started in the past and have some implications in the present time. The use of the simple past tense in the context of past until now event has not been judged as negative or erroneous since in both the USA and Canada speakers employ the simple past tense in this context. The use of the simple past tense in this context has been considered as an effect of a combination between oblique transfer as discussed above and transfer from the L1.

Even if some negative transfer came from the L2, the results do not, however, reflect the predictions of the 'L2 Status Factor' Model since it does not predict any negative transfer. Rather the model claims that transfer is always either positive or neutral (Bardel and Falk 2007). Also, the model claims that the L2 blocks access to the L1 linguistic system. If this was really the case, the participants of this study would not have produced 21.5 % negative transfer from the L1.

On the basis of these findings, I argue that whenever participants engage in the process of the acquisition of an additional language beyond the L2, all the previously acquired

linguistic system enter into a competition. The winning system takes precedence over the losing systems, but the former does not block the access to the linguistic systems of the latter, or to any other competing system.

In the absence of the morphosyntactic proximity between the target language and any other previous language, participants may establish similarities based on the function of the verb tense. This is what has been predicted in predictions (1) and (2).

In the case of prediction (1), it was expected of the participants to use the simple past tense when encoding past until now events in English since it is the simple past which is used for this function in Lingala. Prediction (2) projected that participants will use the simple present tense in the context of past until now events. This second prediction reflects the influence of French in this context of past until now events. Some participants have used the simple present tense in English for the past until now event.

The discussion of my findings indicated that semantic features of the targeted languages in this study, that is, functional/use similarities between the pairs of verb tenses of the targeted languages may have played an important role. First, as discussed above, there is a 'linguistic factor' which is based on the observation that any verbal tense in any language encompasses two dimensions: the verb form and the function (e.g. Cowan 2009). The verb form is more visible in written form/mode of communication while the function is always abstract. In the absence of an influence from the verb's morphosyntactic form, the function of the tense may play an important role during the acquisition process of an additional language beyond an L2.

My L3 learners of English seem to encounter more difficulties learning the use of the present perfect tense than the use of the simple past tense. I identified two types of transfers

which may have motivated the tenses that the subjects incorrectly and or correctly used in the context of past until now events; i.e. morphosyntactic transfer and the function (semantic) transfer.

The third research question concerns the difference in processing when participants have access to implicit knowledge as compared to off-line processing that allows access to explicit knowledge. It was found that there were more transfers when participants were in the explicit knowledge mode than when they were in the implicit knowledge mode.[30]

However, rather than observing more transfer while participants were in the implicit knowledge mode which might have resulted from time pressure as a capital factor, the opposite pattern was observed. Specifically, the more time the participants had to perform a task (and probably go back to readjust their answers), the more they showed their systematic dependence on previously acquired linguistic systems. This finding replicates what Kabasele (2014:54) found. Kabasele (2014) stated that "This finding corroborates with those of previous studies whereby it was attested that subjects were more accurate when in explicit mode than in implicit one (Schmidt 2001, 1995, Leow 1998, Robinson 1997)" (p. 54). It was otherwise observed that the more the proficiency increased the less negative transfers were observed.

Overall, the findings of this study show that participants positively transferred from the L1 Lingala which showed morphosyntactic similarities with the target language English in the context of past until now events. These findings corroborate with the claims of the Typological Proximity Model (TPM) by Rothman (2010, 2011) which predicts that transfer in the process of the acquisition of an L3 comes from the language which shows morphosyntactic proximity with the TL. The TPM is open on the nature of transfer. It predicts that transfer may be positive or

[30] As discussed above, the explicit knowledge was accessed in different written tasks in which participants had ample amount of time to perform the required tasks, while in the implicit mode of knowledge participants worked under time constraints, such as time pressure as in the interview.

negative depending on the case. In this context of the study, the observed transfers were positive, therefore facilitates the process of acquisition.

On the other hand, the findings of the study showed that both previous linguistic systems competed in the case there was no morphosyntactic similarities among the targeted languages. In this case, the participants made semantic transfers. That is, they circumscribed the similarities based on the psychotypological features of the functions of the targeted verb tenses. The use of the simple past tense in the context of past until now events was considered as an effect of a combination between oblique transfer as discussed above and the semantic transfer from the L1 Lingala. The use of the simple past tense in this context was deemed correct

The oblique transfer is here considered as the result of linguistic insecurity. The oblique transfer was triggered through the comparison of the function of the simple past tense in the context of past until now events in both American and Canadian English to the use of the present perfect tense in British English in the context of past until now events. This comparison of verb tense functions by the participants results in discarding the use of the present perfect tense in the context of past until now events in English, and privileging the use of the simple past tense in this context. This use of the simple past tense is attributed to linguistic insecurity (Labov 1996, 2006, Daftari 2016). The choice of the simple past tense was motivated by the fact that American and Canadian speakers of English use the simple past tense in the context of past until now events; therefore, the participants of this study discarded the use of the present perfect tense in this context to adopt the use of the simple past tense as the correct form. This transfer is motivated by sociolinguistic factors. Likewise, the use of the simple past tense in the context of past until now events could also be attributed to semantic transfer from the L1 Lingala or to reverse transfer as discussed in on page 236. It could also be said that participants used the simple past tense in the

context of past until now events as a result of the similarities in terms of the function of the recent past tense in Lingala and the past until now context in English.

Table (45) presents a synoptic summary of the findings of this study in both the past completed events and past until now event contexts. The table provides information on the context of study: past completed events and past until now events. The source of transfer, the nature of transfer: either positive or negative, and/or morphosyntactic, semantic, or sociolinguistic transfer. Finally, the table provides the motivation or the reason that triggered that transfer. For the sake of space, 'PCE' is used to refer to past completed events in English while 'PUNE' is used to refer to past until now events in English

Table (45)

The synoptic summary of the findings of the study

Context	Source of transfer	Type of transfer	Nature of transfer	Motivation
PCE	From Lingala verb form	Positive transfer	Morphosyntactic transfer	Motivated by the morphosyntactic similarities between the morphosyntactic form of the verb tense in L1 Lingala and the TL English
PUNE	Three possible sources, natures, and motivations for the transfer:			
	1. Fron Lingala verb tense function	Positive transfer	Semantic transfer	Participants used the simple past tense in the context of past until now events as a result of the similarities in terms of the function of the recent past tense in Lingala and the past until now context in English.
	2. From L3	Positive transfer	Reverse transfer that is triggered by perceived morphosyntactic and psychotypological semantic similarities	Participants matched the English present perfect tense morphosyntactic form 'have + past participle' with the French passé composé morphosyntactic form 'avoir + participe passé' and then erroneously participants identified the function of

				'avoir + participe passé' in French as being equivalent to 'have + past participle' in English, this incidentally resulted in positive transfer.
	3. From North American variety of English	Positive transfer	Oblique transfer that is due to sociolinguistic factors such as linguistic insecurity	Since the American and Canadian speakers of English use the simple past tense in the context of past until now events, participants discarded the use of the present perfect tense in this context to adopt the use of the simple past tense as the correct form.

This study presents some interesting implications in the field of third language acquisition. It opens new venues in relation to situations and circonstances in which the previous linguistic systems show no morphosyntactic proximity with the target language. In the light of the findings of this study, it is attested that when there is no morphosyntactic proximity, participants may refer to the semantic similarities between a previously acquired language with the TL in order to establish either a perceived proximity or a psychotypological similarity in order to determine the source of linguistic transfer. This way of establishing matches between a previous language and the TL might have a direct implication in the process of language teaching and learning. In terms of language teaching practice, this finding appeals to the teachers to not only teach the form of the language, but also to put an emphasis on the function that the morphosyntactic form fulfils in the process of interaction in real life.

The findings of this study have, at some extent, shown that there is a hierarchy in identifying and determining the source of linguistic transfer in the process of the acquisition of an L3. It was attested in this study that morphosyntactic proximity takes precedence over the L2

status effects. Likewise, the study has tentatively shown that the morphosyntactic similarities may also take precedence over the semantic proximity.

This research has made some contributions in terms of the literature in the acquisition process of an L3. Its contribution is in relation to the existing literature on language transfer types. Such a concept as oblique transfer has been identified and it needs to be further investigated in future studies. This notion of oblique transfer relates the situation of L3 acquisition to the sociolinguistic notion of linguistic insecurity. This shows that linguistic insecurity as a sociolinguistic variable puts certain pressure on learners of a variety of a language in a specific context of language acquisition. I wonder whether learners of English who have initially been exposed to the American variety of English and then move to the UK, in their initial stage of language learning, may shift their use of the simple past tense in the context of past until now events to use the present perfect tense in the context as a result of their exposure to the variety of British English and as a result of linguistic insecurity. A study that may try to replicate the findings of this current study would be interesting in that it will shed more light on the novel notion of oblique transfer and reveal the impact of sociolinguistic in the process of the acquisition of an additional language.

The research has presented some limitations. The study was not able to control a few participants who worked on the Written Elicitation Task at home in the absence of the researchers. Even if their number was very small, the ideal could be to have all the participants work on this task in the presence of the researcher in order to make sure that there was no interference from any other person.

As an outlook to further research, I suggest that further studies which may control the impact of both the verb tense morphosyntactic similarities and that of the verb tense functions

be conducted in order to further confirm the findings of this study. There is a need to undertake studies which may determine a hierarchical scale of factors which have been identified as playing a certain role in the acquisition process of an L3. Studies in this direction will help to circumscribe the relevant factors which have been attested and to rank them in terms of their impact and contribution in the process of the acquisition of an additional language beyond an L2. As projected in Kabasele (2014), I still have to integrate in future studies the ERP or Eye-tracking techniques in order to determine how the brain behaves in processing sentences reflecting morphosyntactic transfer from previously acquired linguistic systems (p. 56).

Moreover, the impact of cumulative knowledge in L3 needs to be further investigated in order to determine to which extent the performance of participants in a given language acquisition process may clearly be identified as the result of cumulative knowledge. For instance, could we still talk of cumulative knowledge even when say the predictions of a study project that the L1 may use say the simple past tense in past completed event context and those of the L2 predict the use of say the present perfect tense? In such a case, how would the performance of the participants be cumulative? There is a need of a matrix of criteria which may help to tease apart the impacts and effects of cumulative knowledge from those of non-cumulative knowledge.

It is an ultimate wish to test the occurrence of oblique transfer with other dialects of the same language or with two mutually intelligible languages which may offer differences in terms the function of a linguistic form in both variants of the language. In this context, the research will have to control the previous exposure of participants in one variants and their recent exposure to the other variant in order to determine whether such a sociolinguistic factor such as linguistic insecurity may interact with the acquisition process of the L3.

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Appendices

Appendix (1)

Consent Form

University of KwaZulu-Natal

Consent Form: Language typology and L3 transfer phenomena in adult learners: The case of Lingala-French speakers learning English

You are being invited to participate in a research project. Researchers are required to provide a consent form to inform you about the study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researcher any questions you may have.

Researcher and Title: Philothé Mwamba Kabasele, PhD.

Department and Institution: Department of Linguistics, University of KwaZulu-Natal

Address and Contact Information: Philothe M. Kabasele 587-832-4441 (tel), philokabasele@yahoo.fr, Dr. Heike M.E. Tappe tappe@ukzn.ac.za (email) ; Mr. Prem Mohun – Administrative Officer Email: mohunp@ukzn.ac.za, Tel: 031 260 4557, Fax: 031 260 4609; Ms Mariette Snyman - Administrative Officer Email: snymanm@ukzn.ac.za Tel: 031 260 8350, Fax: 031 260 4609; Ms Phumelele Ximba - Administrative Officer Email: ximbap@ukzn.ac.za , Tel: 031 260 3587, Fax: 031 260 4609

Purpose of research: The goal of this research is to investigate the linguistic as well as non-linguistic factors which trigger transfer from an already acquired language into an

additional language while acquiring a 3rd language. It is hoped that through this research, we will gain knowledge of the factors which trigger structural transfer and identify the overriding one in case there is competition. You are invited to participate in this study (all participants must be between 18 and 64 years of age). You have been selected as a possible participant as a result of your volunteering to participate after hearing about the study through face-to-face, phone, or e-mail recruitment. In the entire study, 120 people will be invited to participate. It is estimated that participants will require one session of approximately 60 minutes to complete the study. Testing will take place in a venue agreed by both the subject and the researcher. If a participant requests for one reason or another to be interviewed at his/her home, then the Investigator may do so.

What you will do: As part of the study, you will be asked to complete a language history questionnaire, detailing any experience with foreign languages and you will also be asked to self-rate your proficiency in both English and French. You will then be interviewed. The interviewer will ask you to describe events in your life in English. After the interview, you will be asked to fill in the blanks with verbs in the tense required by the context; then you will also have to judge the acceptability of some sentences in English. Responses will be audio-recorded via a digital voice recorder. If you prefer not to have your responses recorded, then the Investigator will then write them down. Findings from all tasks will be provided to you after all data analysis has been completed if you request such information.

Potential benefits: There is no payment for your participation in this study. Your responses will be used to investigate the factors which trigger structural transfer when acquiring a 3rd language which is typologically partially similar to one of the already acquired languages. In addition, your responses will also help to identify the factor which overrides in case of multiple

competing factors that trigger transfer. The information gained could have implications for theories of language acquisition and transfer.

Potential risks: There are no risks or discomforts expected as a result of your participation, other than the minor risk that you may experience temporary task/test anxiety.

Privacy and confidentiality: Your performance in this study will be treated strictly confidentially, with all information about you kept confidential to the maximum extent allowable by law. Your name will be replaced with a number for coding and analysis of the data. Only the Responsible Project Investigator and the Investigator will have the key to the code and this will be destroyed after data analysis is finished. Only the Institutional Review Board and the Responsible Project Investigator will have access to the coded data. All electronic data will be stored on the Investigator's password-protected computer and/or external hard drive; paper tasks will be stored in the Investigator's private office in a secured file cabinet. At no time will your name or any audio recording of you be used in any publication or presentation of this research. All electronic data and paper tasks will be destroyed three years after data collection has been completed.

Your rights to participate, say no, or withdraw: Participation in this study is strictly voluntary; you have the right to say no. You are free to discontinue participation in the study at any time, and/or request that your data be destroyed and thus excluded from the study. The decision to participate, decline, or withdraw from participation will have no effect on your status at, or future relations with the University of Illinois or any other institution, or with the investigator.

Compensation for being in the study: There will be no payment for having participated to the experiments.

Contact information for questions and concerns: If you have any questions about this study, such as scientific issues or how to do any part of it, please contact the researcher

(Philothe Kabasele, Dept. of Linguistics, University of KwaZulu-Natal, Phone: 587-832-4441, philokabasele@yahoo.fr, Dr. Heike M.E. Tappe tappe@ukzn.ac.za (email) ; Mr. Prem Mohun – Administrative Officer Email: mohunp@ukzn.ac.za, Tel: 031 260 4557, Fax: 031 260 4609; Ms Mariette Snyman - Administrative Officer Email: snymanm@ukzn.ac.za Tel: 031 260 8350, Fax: 031 260 4609; Ms Phumelele Ximba - Administrative Officer Email: ximbap@ukzn.ac.za , Tel: 031 260 3587, Fax: 031 260 4609

Documentation of informed consent: You are making a decision whether or not to participate. Your signature below indicates that you have read and understood the information provided above and have decided to participate. You may withdraw at any time after signing this form, should you choose to discontinue participation in this study.

□ I consent to have my interview audio-recorded: _____ (initial)

□ I consent to have my interview video-recorded: _____ (initial)

I have read and understand the above information, and voluntarily agree to participate in this research.

_____ _____

Signature of Participant Date

_____ _____

Signature of Investigator Date

You will be given a copy of this form to keep

DECLARATION

I…… (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT DATE

…… ……

Email of participant (for those who want feedbacks after the study)

……

Informed consent letter

School of Arts, College of Humanities,

University of KwaZulu-Natal,

Howard College Campus,

Dear Participant

INFORMED CONSENT LETTER

My name is ……. I am a Linguistic PhD candidate studying at the University of KwaZulu-Natal, Howard College campus, South Africa.

I am interested in learning about how people's first and second languages help them in learning an additional language. I am studying third language transfer phenomena in adult learners, the case of Lingala-French speakers who are learning English. My study is interested in Kinshasa-Lingala speakers. To gather the information, I am interested in asking you some questions.

Please note that:

- Your confidentiality is guaranteed as your inputs will not be attributed to you in person, but reported only as a population member opinion.
- The interview and the written task will last for about 1 hour and will be split.
- Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.
- Data will be stored in secure storage and destroyed after 5 years.
- You have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.

- The research aims at knowing the language (s) that serves as source of transfer when learning an additional language.
- Your involvement is purely for academic purposes only, and there are no financial benefits involved.
- If you are willing to be interviewed, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded by the following equipment:

	willing	Not willing
Audio equipment		
Photographic equipment		
Video equipment		

I can be contacted at:

Email: philokabasele@yafoo.fr

Cell: +5878324441 or +4034744442.

My supervisor is Prof. Heike M.E. Tappe who is located at the School of Arts, College of Humanities, Department of Linguistics, Howard College campus of the University of KwaZulu-Natal.

Contact details: email: tappe@ukzn.ac.za Phone number: 0027 31 260 1131 or +27834281695

You may also contact the Research Office through:

P. Mohun

HSSREC Research Office,

Tel: 031 260 4557 E-mail: mohunp@ukzn.ac.za

Thank you for your contribution to this research.

Appendix (2)

The English version of the cloze test

CL T

Number: _____

For each blank in the following passage, please circle one of three options given. Please choose the option appropriate for the context. Please choose one option only for each blank.

Joe came home from work on Friday. It was payday, but he wasn't ____ **(1) even / more / ever__** excited about it. He knew that __ **(2) then / when / while___** he sat down and paid his

___ **(3) checks / bills / salary___** and set aside money for groceries, __ **(4) driving / pay / gas__** for the car and a small ___ **(5) deposit / withdrawal / money____** in his savings account, there wouldn't be

___ **(6) quite / not / too___** much left over for a good __ **(7) pleasure / leisure / life____.**

He thought about going out for ____ **(8) eat / dinner / eating____** at his favorite restaurant, but he ___ **(9) just / only / very___** wasn't in the mood. He wandered __ **(10) around / at / in____** his apartment and ate a sandwich. ___ **(11) In / For / After____** a while, he couldn't stop himself

__ **(12) for / from / about___** worrying about the money situation. Finally, ____ **(13) he / she / it__** got into his car and started ___ **(14) drive / driven / driving___.**

He didn't have a destination in ___ **(15) head / mind / fact___,** but he knew that he wanted

___ **(16) be / to be / being__ far** away from the city ____ **(17) which / there / where____** he lived. He turned onto a quiet country ___ **(18) road / house / air___.** The country sights made him feel

___ **(19) as good / better / best___.** His mind wandered as he drove ___ **(20) past / in / to____** small farms and he began to __ **(21) try / think / imagine__** living on his own piece of __ **(22) house / land / farm___** and becoming self-sufficient. It had always __ **(23) being / been / be___** a dream of his, but he

___ **(24) having / have / had____** never done anything to make it ___ **(25) a / one / some____** reality. Even as he was thinking, ___ **(26) their / his / her___** logical side was scoffing at his__ **(27) favorite / practical / impractical____** imaginings. He debated the advantages and___ **(28) cons / disadvantages / problems____** of living in the country and___ **(29) growing / breeding / building___** his own food. He imagined his__ **(30) farmhouse /**

truck / tractor____ equipped with a solar energy panel **__ (31) at / out / on__** the roof to heat the house **____ (32) in / for / over____** winter and power a water heater. **___ (33) She / He / They__** envisioned fields of vegetables for canning **__ (34) either / and / but___** preserving to last through the winter. **___ (35) Whether / Even / If___** the crops had a good yield, **___ (36) maybe / possible / may____** he could sell the surplus and **___ (37) store / save / buy__** some farming equipment with the extra**___ (38) economy / cost / money____.**

Suddenly, Joe stopped thinking and laughed **___ (39) at / out / so____** loud, "I'm really going to go **__ (40) through / away / in___** with this?"

Adapted from American Kernel Lessons: Advanced Students' Book. O'Neill, Cornelius and Washburn (1981).

Appendix (3)

The scores for the beginner proficiency group on the English cloze test

ID	speaker	level	gender	score
1	speaker1	beginner	m	14
2	speaker2	beginner	m	10
3	speaker3	beginner	m	11
4	speaker4	beginner	m	20
5	speaker5	beginner	m	15
6	speaker6	beginner	f	11
7	speaker7	beginner	f	12
8	speaker8	beginner	m	17
9	speaker9	beginner	m	15
10	speaker10	beginner	f	15
11	speaker11	beginner	f	12
12	speaker12	beginner	f	8
13	speaker13	beginner	m	15
14	speaker14	beginner	f	17
15	speaker15	beginner	m	16
16	speaker16	beginner	m	21
17	speaker17	beginner	m	15
18	speaker18	beginner	m	16
19	speaker19	beginner	f	16
20	speaker20	beginner	f	18
21	speaker21	beginner	f	11
22	speaker22	beginner	f	12
23	speaker23	beginner	f	13
24	speaker24	beginner	f	17
25	speaker25	beginner	f	15
26	speaker26	beginner	f	14
27	speaker27	beginner	m	17
28	speaker28	beginner	m	15
29	speaker29	beginner	m	17
30	speaker30	beginner	f	15

Appendix (4)

The scores for the intermediate proficiency group on the English cloze test

ID	speaker	level	gender	score
31	speaker31	intermediate	m	23
32	speaker32	intermediate	m	27
33	speaker33	intermediate	f	28
34	speaker34	intermediate	f	27
35	speaker35	intermediate	m	25
36	speaker36	intermediate	f	27
37	speaker37	intermediate	m	27
38	speaker38	intermediate	m	26
39	speaker39	intermediate	m	26
40	speaker40	intermediate	m	24
41	speaker41	intermediate	f	26
42	speaker42	intermediate	f	24
43	speaker43	intermediate	f	26
44	speaker44	intermediate	m	25
45	speaker45	intermediate	m	28
46	speaker46	intermediate	f	26
47	speaker47	intermediate	f	27
48	speaker48	intermediate	m	23
49	speaker49	intermediate	f	23
50	speaker50	intermediate	m	24
51	speaker51	intermediate	f	25
52	speaker52	intermediate	f	28
53	speaker53	intermediate	m	26
54	speaker54	intermediate	f	28
55	speaker55	intermediate	m	26
56	speaker56	intermediate	f	27
57	speaker57	intermediate	m	24
58	speaker58	intermediate	f	26
59	speaker59	intermediate	m	25
60	speaker60	intermediate	f	29

Appendix (5)

The scores for the advanced proficiency group on the English cloze test

ID	speaker	level	gender	score
61	speaker61	advanced	f	30
62	speaker62	advanced	m	33
63	speaker63	advanced	f	37
64	speaker64	advanced	f	32
65	speaker65	advanced	f	34
66	speaker66	advanced	f	36
67	speaker67	advanced	f	32
68	speaker68	advanced	f	30
69	speaker69	advanced	m	34
70	speaker70	advanced	m	35
71	speaker71	advanced	f	37
72	speaker72	advanced	m	35
73	speaker73	advanced	m	36
74	speaker74	advanced	f	39
75	speaker75	advanced	m	36
76	speaker76	advanced	f	34
77	speaker77	advanced	m	33
78	speaker78	advanced	f	35
79	speaker79	advanced	f	38
80	speaker80	advanced	m	35
81	speaker81	advanced	m	34
82	speaker82	advanced	f	39
83	speaker83	advanced	f	35
84	speaker84	advanced	m	36
85	speaker85	advanced	f	33
86	speaker86	advanced	m	35
87	speaker87	advanced	m	37
88	speaker88	advanced	m	34
89	speaker89	advanced	m	33
90	speaker90	advanced	m	36

Appendix (6)

The scores for the control group on the English cloze test

ID	speaker	level	gender	score
91	speaker91	native speaker	m	40
92	speaker92	native speaker	m	40
93	speaker93	native speaker	m	40
94	speaker94	native speaker	m	40
95	speaker95	native speaker	f	40
96	speaker96	native speaker	f	40
97	speaker97	native speaker	f	40
98	speaker98	native speaker	m	40
99	speaker99	native speaker	f	40
100	speaker100	native speaker	f	40
101	speaker101	native speaker	f	40
102	speaker102	native speaker	m	40
103	speaker103	native speaker	m	40
104	speaker104	native speaker	f	40
105	speaker105	native speaker	f	40
106	speaker106	native speaker	m	40
107	speaker107	native speaker	m	40
108	speaker108	native speaker	m	40
109	speaker109	native speaker	m	40
110	speaker110	native speaker	f	40
111	speaker111	native speaker	f	40
112	speaker112	native speaker	f	40
113	speaker113	native speaker	f	40
114	speaker114	native speaker	f	40
115	speaker115	native speaker	m	40
116	speaker116	native speaker	m	40
117	speaker117	native speaker	m	40
118	speaker118	native speaker	f	40
119	speaker119	native speaker	f	40
120	speaker120	native speaker	m	40

Appendix (7)

The French version of the cloze test

Sommaire : Lecture - Phrases à trous

Exercice de lecture et compréhension de texte : Tintin

Placez les mots ci-dessous dans cet article sur le personnage de bande dessinée, Tintin

épisode - Aventures - belge - ensuite - et - héros - monde - personnages - supplément - travaillait

Tintin est le _____ principal, un jeune journaliste qui parcourt le _____ pour des enquêtes et reportages. Dès le début, il est accompagné de son chien Milou. Au fil des albums, d'autres _____ sont apparus, que l'on retrouvera _____ régulièrement. Parmi eux, il y a le capitaine Haddock, qui est arrivé dans l'album Le Crabe aux pinces d'or et sera présent ensuite dans tous les autres. Le 10 janvier 1929, dans le numéro onze du Petit Vingtième, le _____ jeunesse du Vingtième siècle, un journal _____ catholique dans lequel Hergé _____, paraissait le premier _____ de Tintin au pays des Soviets, sur commande directe de l'abbé Norbert Wallez : c'était le début des _____ de Tintin _____ Milou.*(article paru dans : fr.vikidia.org)*

Vérifier

Appendix (8)

The results of the French cloze test

ID	speaker	level	gender	score
1	speaker1	beginner	m	18
2	speaker2	Beginner	m	20
3	speaker3	beginner	m	20
4	speaker4	beginner	m	19
5	speaker5	beginner	m	20
6	speaker6	beginner	f	18
7	speaker7	beginner	f	19
8	speaker8	beginner	m	19
9	speaker9	beginner	m	16
10	speaker10	beginner	f	16
11	speaker11	beginner	f	19
12	speaker12	beginner	f	17
13	speaker13	beginner	m	19
14	speaker14	beginner	f	18
15	speaker15	beginner	m	20
16	speaker16	beginner	m	20
17	speaker17	beginner	m	20
18	speaker18	beginner	m	19
19	speaker19	beginner	f	18
20	speaker20	beginner	f	19
21	speaker21	beginner	f	18
22	speaker22	beginner	f	19
23	speaker23	beginner	f	17
24	speaker24	beginner	f	19
25	speaker25	beginner	f	19
26	speaker26	beginner	f	17
27	speaker27	beginner	m	19
28	speaker28	beginner	m	19
29	speaker29	beginner	m	16
30	speaker30	beginner	f	19
31	speaker31	intermediate	m	18
32	speaker32	intermediate	m	16
33	speaker33	intermediate	f	20
34	speaker34	intermediate	f	20
35	speaker35	intermediate	m	20
36	speaker36	intermediate	f	19

37	speaker37	intermediate	m	20
38	speaker38	intermediate	m	18
39	speaker39	intermediate	m	19
40	speaker40	intermediate	m	19
41	speaker41	intermediate	f	16
42	speaker42	intermediate	f	16
43	speaker43	intermediate	f	19
44	speaker44	intermediate	m	17
45	speaker45	intermediate	m	19
46	speaker46	intermediate	f	18
47	speaker47	intermediate	f	20
48	speaker48	intermediate	m	20
49	speaker49	intermediate	f	20
50	speaker50	intermediate	m	19
51	speaker51	intermediate	f	18
52	speaker52	intermediate	f	19
53	speaker53	intermediate	m	18
54	speaker54	intermediate	f	19
55	speaker55	intermediate	m	17
56	speaker56	intermediate	f	19
57	speaker57	intermediate	m	19
58	speaker58	intermediate	f	18
59	speaker59	intermediate	m	20
60	speaker60	intermediate	f	19
61	speaker61	advanced	f	17
62	speaker62	advanced	m	16
63	speaker63	advanced	f	19
64	speaker64	advanced	f	20
65	speaker65	advanced	f	20
66	speaker66	advanced	f	18
67	speaker67	advanced	f	18
68	speaker68	advanced	f	20
69	speaker69	advanced	m	18
70	speaker70	advanced	m	16
71	speaker71	advanced	f	20
72	speaker72	advanced	m	20
73	speaker73	advanced	m	18
74	speaker74	advanced	f	19
75	speaker75	advanced	m	16
76	speaker76	advanced	f	17

77	speaker77	advanced	m	19
78	speaker78	advanced	f	19
79	speaker79	advanced	f	18
80	speaker80	advanced	m	20
81	speaker81	advanced	m	19
82	speaker82	advanced	f	18
83	speaker83	advanced	f	20
84	speaker84	advanced	m	20
85	speaker85	advanced	f	18
86	speaker86	advanced	m	16
87	speaker87	advanced	m	20
88	speaker88	advanced	m	19
89	speaker89	advanced	m	17
90	speaker90	advanced	m	18

Appendix (9)

The questionnaire of the linguistic background and language history

Subjects' language learning history

Participants'Language Learning History /Informations linguistiques concernant les sujets de recherche

Title: Multilingual background questionnaire for Lingala-French-English Speakers

(This information will be kept confidential/ ces informations seront gardées secretes)

Participant research ID number/numéro d'identité de recherche pour le sujet: _____

Country of origin/pays d'origine:_____

Country of current residence/pays de residence actuelle:_____

I. Personal Data/Informations personnelles

1. What is your level of education/ Quel est votre niveau d'éducation?

   a. High school/diplôme d'état b. some college/études supérieures non achevées

   c. college, university, graduate/ études supérieures, Universitaires, études post universitaires

2. How long have you lived in the USA or Canada ? / Depuis quand que vous êtes aux USA /Canada ?

II. Family History /Informations Familiales

3. What language did you grow up speaking /Quand vous grandissiez quelle est la langue que vous parliez :

At home / à la maison : _____

With friends/avec les amis : _____

At school/à l'école : _____

4. What language do you speak the most in daily basis/quelle langue vous parlez de plus au quotidien?

5. What language do you speak the least on a daily basis? Under which occasion? / quelle langue vous parlez de moins au quotidien? Dans quelles circonstances?

III. Linguistic History/Informations linguistiques

6. What age did you start to learn English_____, French_____? /A quel age avez vous commence à apprendre l'Anglais: _____, le Français: _____

7. Was French spoken at home alongside with Lingala ? /Est-ce que le Français était parlé à la maison au même moment que l'Anglais ?

8. What language did your parents speak at home ? / Quelle est la langue que tes parents parlaient à la maison ?

9. What language did you speak with your siblings and relatives at home ? /Quelle est la langue que tu parlais avec tes frères et sœurs et autres membres de la famille à la maison?

10. What language did your siblings and relatives use when speaking to you ? /Quelle est la langue que tes frères et sœurs et autres membres de la famille utilisaient en communiquant avec vous ?

11. Which language did you use with your classmates outside the class ? / Quelle est la langue que tu parlais avec tes condisciples de classe une fois que vous étiez en dehors de la classe ou après les cours ?

12. What language do you usually speak at home here in the USA/Canada? Quelle langue tu parles d'habitude à la maison ici aux Etats Unis/Canada ?

13. What language do you usually speak at the work place in the USA or Canada/ quelle langue tu parles d'habitudes au lieu de travail ici aux Etats Unis/Canada ?

14. What language do you usually speak with friends once you are outside the work place here in the USA or Canada/ quelle langue tu parles d'habitude avec les amis une fois que tu es hors de lieu de travail ici aux Etats Unis/Canada ?

Appendix (10)

Language self-rating form

1. Rate your proficiency in French and English (speaking, reading, writing, listening) according to the following scale (write the number next to each skill):

6 = NATIVE FLUENCY

5 = NEAR (ALMOST) NATIVE FLUENCY

4 = ADVANCED FLUENCY

3 = UPPER INTERMEDIATE

2 = LOWER INTERMEDIATE

1 = BEGINNING LEVEL

French		**English**	
Skill	**Rating**	**Skill**	**Rating**
Speaking		Speaking	
Writing		Writing	
Reading		Reading	
Listening		Listening	

2. Overall, how would you rate yourself:

6 = NATIVE FLUENCY

5 = NEAR (ALMOST) NATIVE FLUENCY

4 = ADVANCED FLUENCY

3 = UPPER INTERMEDIATE

2 = LOWER INTERMEDIATE

1 = BEGINNING LEVEL

Appendix (11)

Sample of the Written Elicitation Task (WET)

Fill in the blanks with the verb provided in the parentheses; use the correct form of the verb.

Example: Mary…… dinner right now (eat).

Correct: Mary is eating dinner right now.

Example: Jeff……to play guitar (like).

Correct: Jeff likes to play guitar.

1. Joe……a car 10 years ago (buy).
2. Abigael…….to Paris soon (travel).
3. Nathan……in Urbana since 2011(live).
4. Passy…….…….food now (cook).
5. Bob and Joe……soccer at the moment (play).
6. Betty……..home next week (go).
7. Mimie…...……London last year (visit).
8. Paul…….French now (teach).
9. Brendon usually……French at home (speak).
10. Betty…….……..…to France many times (travel).
11. Lisette……rice yesterday (Cook).
12. Bob sometimes……very happy (seem).
13. Nathan……. since January at the zoo (work).
14. Jovany……...basketball tomorrow (play).
15. Allegresse..……in Champaign in 2012 (arrive).

16. John always……..……very fast (drive).

17. Paul…….....to church next Sunday (go).

18. Betty……..……..piano for six years (play).

19. Bob…….the suspect last week (see).

20. Joe……..……here for 5 years (live).

21. Betty often……on Sunday (swim)

22. Paul…….....that car next week (buy).

23. Bob……..London several times (visit).

24. Andy……...to Paris last month (go).

Appendix (12)

Frequency of the answer results for the WET

Part & ID	Level	Gen	Q 1	Q 7	Q 11	Q 15	Q 19	Q 24	Total score	%
speaker1	beg	m	1	1	1	1	1	1	6	100
speaker2	beg	m	0	1	1	1	1	1	5	83.3
speaker3	beg	m	1	1	1	1	0	1	5	83.3
speaker4	beg	m	1	0	1	1	0	1	4	66.6
speaker5	beg	m	0	1	1	0	1	0	3	50
speaker6	beg	f	1	0	1	1	1	1	5	83.3
speaker7	beg	f	1	1	0	1	0	1	4	66.6
speaker8	beg	m	1	1	1	1	1	1	6	100
speaker9	beg	m	1	1	1	0	1	1	5	83.3
speaker10	beg	f	1	1	1	1	1	1	6	100
speaker11	beg	f	1	1	1	1	1	1	6	100
speaker12	beg	f	0	1	0	1	1	0	3	50
speaker13	beg	m	1	1	1	1	0	1	5	83.3
speaker14	beg	f	1	0	1	0	0	0	2	33.3
speaker15	beg	m	1	1	1	0	1	1	5	83.3
speaker16	beg	m	1	1	1	1	1	1	6	100
speaker17	beg	m	1	0	1	1	0	1	4	66.6
speaker18	beg	m	1	1	1	1	1	1	6	100
speaker19	beg	f	1	1	1	1	1	1	6	100
speaker20	beg	f	1	1	0	1	0	1	4	66.6
speaker21	beg	f	1	1	1	0	1	1	5	83.3
speaker22	beg	f	0	1	0	1	1	1	4	66.6
speaker23	beg	f	1	1	1	1	0	0	4	66.6
speaker24	beg	f	1	1	0	0	1	1	4	66.6
speaker25	beg	f	0	0	1	1	0	1	3	50
speaker26	beg	f	1	1	0	0	1	0	3	50
speaker27	beg	m	1	1	1	1	1	1	6	100
speaker28	beg	m	1	1	1	1	1	1	6	100
speaker29	beg	m	1	1	0	1	1	1	5	83.3
speaker30	beg	f	0	0	1	1	1	1	4	66.6
speaker31	inter	m	0	0	0	1	1	1	3	50
speaker32	inter	m	1	0	0	1	1	1	4	66.6
speaker33	inter	f	0	1	0	1	1	0	3	50

speaker34	inter	f	1	0	1	1	1	1	5	83.3
speaker35	inter	m	1	1	1	1	1	1	6	100
speaker36	inter	f	1	1	1	0	1	1	5	83.3
speaker37	inter	m	1	1	1	1	1	1	6	100
speaker38	inter	m	1	1	1	1	1	0	5	83.3
speaker39	inter	m	1	1	1	1	1	1	6	100
speaker40	inter	m	1	0	1	1	1	1	5	83.3
speaker41	inter	f	1	1	0	1	1	1	5	83.3
speaker42	inter	f	1	1	1	1	1	1	6	100
speaker43	inter	f	0	1	1	1	0	1	4	66.6
speaker44	inter	m	1	1	0	1	1	1	5	83.3
speaker45	inter	m	1	1	1	1	1	1	6	100
speaker46	inter	f	1	1	0	1	1	1	5	83.3
speaker47	inter	f	1	1	1	1	0	1	5	83.3
speaker48	inter	m	0	1	1	1	0	1	4	66.6
speaker49	inter	f	1	1	1	1	1	1	6	100
speaker50	inter	m	1	1	0	1	0	1	4	66.6
speaker51	inter	f	1	0	1	1	1	1	5	83.3
speaker52	inter	f	1	1	1	1	1	0	5	83.3
speaker53	inter	m	1	1	0	1	1	0	4	66.6
speaker54	inter	f	1	1	1	1	1	1	6	100
speaker55	inter	m	1	1	0	1	1	1	5	83.3
speaker56	inter	f	1	1	1	1	1	0	5	83.3
speaker57	inter	m	1	0	1	1	1	0	4	66.6
speaker58	inter	f	0	1	1	1	0	1	4	66.6
speaker59	inter	m	1	1	1	1	1	1	6	100
speaker60	inter	f	1	1	1	1	1	1	6	100
speaker61	adv	f	1	0	1	1	1	1	5	83.3
speaker62	adv	m	1	1	1	1	1	1	6	100
speaker63	adv	f	1	1	1	1	1	1	6	100
speaker64	adv	f	1	1	1	1	1	1	6	100
speaker65	adv	f	0	1	1	0	1	1	4	66.6
speaker66	adv	f	1	1	1	0	1	1	5	83.3
speaker67	adv	f	1	1	1	1	1	1	6	100
speaker68	adv	f	1	1	1	1	1	1	6	100
speaker69	adv	m	1	1	1	1	1	1	6	100
speaker70	adv	m	1	1	1	1	1	1	6	100
speaker71	adv	f	1	1	1	1	1	1	6	100
speaker72	adv	m	1	1	0	1	1	1	5	83.3

speaker73	adv	m	1	1	1	1	1	1	6	100
speaker74	adv	f	1	0	1	1	0	1	4	66.6
speaker75	adv	m	1	1	1	1	1	0	5	83.3
speaker76	adv	f	1	1	1	1	1	1	6	100
speaker77	adv	m	1	1	1	1	1	1	6	100
speaker78	adv	f	1	1	1	0	1	1	5	83.3
speaker79	adv	f	1	1	1	1	1	1	6	100
speaker80	adv	m	1	1	1	1	1	1	6	100
speaker81	adv	m	1	1	1	1	1	1	6	100
speaker82	adv	f	1	0	1	1	1	1	5	83.3
speaker83	adv	f	1	1	1	1	1	1	6	100
speaker84	adv	m	1	1	1	1	1	1	6	100
speaker85	adv	f	1	1	1	1	1	1	6	100
speaker86	adv	m	1	1	1	1	1	1	6	100
speaker87	adv	m	1	1	1	1	1	1	6	100
speaker88	adv	m	1	1	1	1	1	1	6	100
speaker89	adv	m	1	1	1	0	1	1	5	83.3
speaker90	adv	m	1	1	1	1	1	1	6	100
speaker91	CG	m	1	1	1	1	1	1	6	100
speaker92	CG	m	1	1	1	1	1	1	6	100
speaker93	CG	m	1	1	1	1	1	1	6	100
speaker94	CG	m	1	1	1	1	1	1	6	100
speaker95	CG	f	1	1	1	1	1	1	6	100
speaker96	CG	f	1	1	1	1	1	1	6	100
speaker97	CG	f	1	1	1	1	1	1	6	100
speaker98	CG	m	1	1	1	1	1	1	6	100
speaker99	CG	f	1	1	1	1	1	1	6	100
speaker100	CG	f	1	1	1	1	1	1	6	100
speaker101	CG	f	1	1	1	1	1	1	6	100
speaker102	CG	m	1	1	1	1	1	1	6	100
speaker103	CG	m	1	1	1	1	1	1	6	100
speaker104	CG	f	1	1	1	1	1	1	6	100
speaker105	CG	f	1	1	1	1	1	1	6	100
speaker106	CG	m	1	1	1	1	1	1	6	100
speaker107	CG	m	1	1	1	1	1	1	6	100
speaker108	CG	m	1	1	1	1	1	1	6	100
speaker109	CG	m	1	1	1	1	1	1	6	100
speaker110	CG	f	1	1	1	1	1	1	6	100
speaker111	CG	f	1	1	1	1	1	1	6	100

speaker112	CG	f	1	1	1	1	1	1	6	100
speaker113	CG	f	1	1	1	1	1	1	6	100
speaker114	CG	f	1	1	1	1	1	1	6	100
speaker115	CG	m	1	1	1	1	1	1	6	100
speaker116	CG	m	1	1	1	1	1	1	6	100
speaker117	CG	m	1	1	1	1	1	1	6	100
speaker118	CG	f	1	1	1	1	1	1	6	100
speaker119	CG	f	1	1	1	1	1	1	6	100
speaker120	CG	m	1	1	1	1	1	1	6	100

Appendix (13)

Frequency of the answer for the beginner proficiency group on the AJT

Part. & ID	Level	Gen.	Q 1	Q 7	Q 8	Q 16	Q 18	Q 21	Q 26	Q 29	Q 32	Q 34	Total Score	%
Part.1	beg	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.2	beg	m	1	0	1	1	1	1	0	0	1	0	6	60
Part.3	beg	m	1	0	1	1	0	1	0	1	0	1	6	60
Part.4	beg	m	1	1	1	0	1	0	1	0	1	0	6	60
Part.5	beg	m	1	0	0	0	1	1	1	0	1	0	5	50
Part.6	beg	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.7	beg	f	1	0	1	1	1	0	1	0	1	0	6	60
Part.8	beg	m	1	0	0	0	1	0	0	1	0	0	3	30
Part.9	beg	m	1	0	1	0	0	1	1	1	1	1	7	70
Part.10	beg	f	1	0	0	1	1	1	0	1	0	1	6	60
Part.11	beg	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.12	beg	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.13	beg	m	1	1	1	0	1	1	1	0	1	0	7	70
Part.14	beg	f	1	0	0	1	0	1	1	0	1	0	5	50
Part.15	beg	m	0	0	1	0	0	0	1	0	1	0	3	30
Part.16	beg	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.17	beg	m	1	0	1	0	1	0	1	1	1	0	6	60
Part.18	beg	m	1	0	1	0	1	0	1	0	1	1	6	60
Part.19	beg	f	1	1	1	0	1	0	1	0	1	1	7	70
Part.20	beg	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.21	beg	f	1	0	1	0	1	1	0	0	1	0	5	50
Part.22	beg	f	0	0	1	0	1	0	1	0	1	0	4	40
Part.23	beg	f	1	0	1	0	1	0	1	0	1	0	5	50
Part.24	beg	f	1	0	0	0	1	0	1	0	0	0	3	30
Part.25	beg	f	1	0	1	0	1	0	1	1	1	0	6	60
Part.26	beg	f	1	1	0	0	1	0	1	0	1	0	5	50
Part.27	beg	m	1	1	1	0	1	0	1	0	1	0	6	60

Part.28	beg	m	1	0	1	0	1	0	1	0	1	1	6	60
Part.29	beg	m	1	0	1	0	0	0	1	0	1	0	4	40
Part.30	beg	f	1	0	1	0	1	0	1	0	1	0	5	50

Appendix (14)

Frequency of the answer for the intermediate proficiency group on the AJT

Part.	Level	Gen.	Q 1	Q 7	Q 8	Q 16	Q 18	Q 21	Q 26	Q 29	Q 32	Q 34	Total Score	%
Part.31	Int	m	1	0	1	0	1	1	1	0	1	0	6	60
Part.32	Int	m	1	0	1	0	1	1	1	1	1	0	7	70
Part.33	Int	f	1	0	1	0	1	0	0	0	1	0	4	40
Part.34	Int	f	1	0	1	0	1	1	1	0	1	0	6	60
Part.35	Int	m	1	0	1	1	1	0	0	1	1	0	6	60
Part.36	Int	f	1	0	1	0	1	0	1	0	1	0	5	50
Part.37	Int	m	1	1	0	0	1	1	1	0	1	0	6	60
Part.38	Int	m	1	0	1	1	1	0	0	1	1	0	6	60
Part.39	Int	m	1	1	1	0	1	0	1	0	1	1	7	70
Part.40	Int	m	1	0	1	1	1	0	0	1	1	0	6	60
Part.41	Int	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.42	Int	f	1	0	1	1	1	0	0	1	1	0	6	60
Part.43	Int	f	1	1	0	0	1	0	1	0	1	0	5	50
Part.44	Int	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.45	Int	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.46	Int	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.47	Int	f	1	0	1	1	1	0	0	1	1	0	6	60
Part.48	Int	m	1	1	0	0	1	0	1	0	1	0	5	50
Part.49	Int	f	1	0	1	0	1	0	1	0	1	0	5	50
Part.50	Int	m	1	0	1	0	1	0	0	0	1	0	4	40
Part.51	Int	f	1	0	1	1	1	0	0	1	1	0	6	60
Part.52	Int	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.53	Int	m	1	0	1	1	0	0	1	0	1	0	5	50
Part.54	Int	f	1	0	1	1	1	0	1	0	1	0	6	60
Part.55	Int	m	1	1	1	0	1	0	1	0	1	0	6	60
Part.56	Int	f	1	0	1	1	0	0	1	0	1	0	5	50

Part.57	Int	m	1	0	1	1	0	0	1	0	1	0	5	50
Part.58	Int	f	1	0	1	0	0	1	1	0	1	0	5	50
Part.59	Int	m	1	0	1	1	1	0	1	0	1	0	6	60
Part.60	Int	f	1	0	1	0	1	0	1	0	1	1	6	60

Appendix (15)

Frequency of the answer for the advanced proficiency group on the AJT

Part.	Level	Gen.	Q 1	Q 7	Q 8	Q 16	Q 18	Q 21	Q 26	Q 29	Q 32	Q 34	Total Score	%
Part.61	adv	f	1	1	1	1	1	0	1	0	1	0	7	70
Part.62	adv	m	1	0	1	1	1	0	1	1	1	0	7	70
Part.63	adv	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.64	adv	f	1	1	1	0	1	0	1	1	1	1	8	80
Part.65	adv	f	1	1	1	1	1	1	1	0	1	1	9	90
Part.66	adv	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.67	adv	f	1	0	1	0	1	0	1	1	1	1	7	70
Part.68	adv	f	1	1	1	1	1	1	1	1	1	0	9	90
Part.69	adv	m	1	1	1	1	1	1	1	0	1	1	9	90
Part.70	adv	m	1	0	1	1	1	1	1	1	1	1	9	90
Part.71	adv	f	1	1	1	0	1	1	1	1	1	1	9	90
Part.72	adv	m	1	0	1	0	1	1	1	0	1	1	7	70
Part.73	adv	m	1	0	1	0	1	1	1		1	1	8	80
Part.74	adv	f	1	1	1	0	1	1	1	1	1	1	9	90
Part.75	adv	m	1	0	1	1	0	1	1	0	1	1	7	70
Part.76	adv	f	1	1	1	0	1	0	1	1	1	1	8	80
Part.77	adv	m	1	1	1	0	1	1	1	1	1	0	8	80
Part.78	adv	f	1	1	1	0	1	1	1	1	1	1	9	90
Part.79	adv	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.80	adv	m	1	1	1	0	1	0	1	1	1	1	8	80
Part.81	adv	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.82	adv	f	1	1	1	1	1	1	1	1	1	0	9	90
Part.83	adv	f	1	1	1	0	1	1	1	1	1	0	8	80
Part.84	adv	m	1	1	1	1	1	0	1	0	1	1	8	80
Part.85	adv	f	1	1	1	1	1	1	1	0	1	0	8	80
Part.86	adv	m	1	0	1	1	1	1	1	1	1	1	9	90
Part.87	adv	m	1	1	1	1	1	1	1	1	1	0	9	90
Part.88	adv	m	1	1	1	1	1	1	1	1	1	1	10	100

Part.89	adv	m	1	1	1	0	1	1	1	1	1	0	8	80
Part.90	adv	m	1	0	1	1	1	1	1	1	1	1	9	90

Appendix (16)

Frequency of the answer for the control group on the AJT

Part. & ID	Level	Gen	Q 1	Q 7	Q 8	Q 16	Q 18	Q 21	Q 26	Q 29	Q 32	Q 34	Total Score	%
Part.91	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.92	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.93	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.94	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.95	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.96	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.97	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.98	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.99	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.100	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.101	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.102	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.103	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.104	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.105	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.106	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.107	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.108	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.109	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.110	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.111	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.112	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.113	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.114	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.115	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.116	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.117	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.118	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.119	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.120	CG	m	1	1	1	1	1	1	1	1	1	1	10	100

Appendix (17)

Frequency of the answer for the whole study on the AJT

Part. & ID	Level	Gen.	Q 1	Q 7	Q 8	Q 16	Q 18	Q 21	Q 26	Q 29	Q 32	Q 34	Total Score	%
Part.1	beg	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.2	beg	m	1	0	1	1	1	1	0	0	1	0	6	60
Part.3	beg	m	1	0	1	1	0	1	0	1	0	1	6	60
Part.4	beg	m	1	1	1	0	1	0	1	0	1	0	6	60
Part.5	beg	m	1	0	0	0	1	1	1	0	1	0	5	50
Part.6	beg	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.7	beg	f	1	0	1	1	1	0	1	0	1	0	6	60
Part.8	beg	m	1	0	0	0	1	0	0	1	0	0	3	30
Part.9	beg	m	1	0	1	0	0	1	1	1	1	1	7	70
Part.10	beg	f	1	0	0	1	1	1	0	1	0	1	6	60
Part.11	beg	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.12	beg	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.13	beg	m	1	1	1	0	1	1	1	0	1	0	7	70
Part.14	beg	f	1	0	0	1	0	1	1	0	1	0	5	50
Part.15	beg	m	0	0	1	0	0	0	1	0	1	0	3	30
Part.16	beg	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.17	beg	m	1	0	1	0	1	0	1	1	1	0	6	60
Part.18	beg	m	1	0	1	0	1	0	1	0	1	1	6	60
Part.19	beg	f	1	1	1	0	1	0	1	0	1	1	7	70
Part.20	beg	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.21	beg	f	1	0	1	0	1	1	0	0	1	0	5	50
Part.22	beg	f	0	0	1	0	1	0	1	0	1	0	4	40
Part.23	beg	f	1	0	1	0	1	0	1	0	1	0	5	50
Part.24	beg	f	1	0	0	0	1	0	1	0	0	0	3	30
Part.25	beg	f	1	0	1	0	1	0	1	1	1	0	6	60
Part.26	beg	f	1	1	0	0	1	0	1	0	1	0	5	50
Part.27	beg	m	1	1	1	0	1	0	1	0	1	0	6	60

Part.28	beg	m	1	0	1	0	1	0	1	0	1	1	6	60
Part.29	beg	m	1	0	1	0	0	0	1	0	1	0	4	40
Part.30	beg	f	1	0	1	0	1	0	1	0	1	0	5	50
Part.31	Int	m	1	0	1	0	1	1	1	0	1	0	6	60
Part.32	Int	m	1	0	1	0	1	1	1	1	1	0	7	70
Part.33	Int	f	1	0	1	0	1	0	0	0	1	0	4	40
Part.34	Int	f	1	0	1	0	1	1	1	0	1	0	6	60
Part.35	Int	m	1	0	1	1	1	0	0	1	1	0	6	60
Part.36	Int	f	1	0	1	0	1	0	1	0	1	0	5	50
Part.37	Int	m	1	1	0	0	1	1	1	0	1	0	6	60
Part.38	Int	m	1	0	1	1	1	0	0	1	1	0	6	60
Part.39	Int	m	1	1	1	0	1	0	1	0	1	1	7	70
Part.40	Int	m	1	0	1	1	1	0	0	1	1	0	6	60
Part.41	Int	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.42	Int	f	1	0	1	1	1	0	0	1	1	0	6	60
Part.43	Int	f	1	1	0	0	1	0	1	0	1	0	5	50
Part.44	Int	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.45	Int	m	1	0	1	0	1	0	1	0	1	0	5	50
Part.46	Int	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.47	Int	f	1	0	1	1	1	0	0	1	1	0	6	60
Part.48	Int	m	1	1	0	0	1	0	1	0	1	0	5	50
Part.49	Int	f	1	0	1	0	1	0	1	0	1	0	5	50
Part.50	Int	m	1	0	1	0	1	0	0	0	1	0	4	40
Part.51	Int	f	1	0	1	1	1	0	0	1	1	0	6	60
Part.52	Int	f	1	1	1	0	1	0	1	0	1	0	6	60
Part.53	Int	m	1	0	1	1	0	0	1	0	1	0	5	50
Part.54	Int	f	1	0	1	1	1	0	1	0	1	0	6	60
Part.55	Int	m	1	1	1	0	1	0	1	0	1	0	6	60
Part.56	Int	f	1	0	1	1	0	0	1	0	1	0	5	50
Part.57	Int	m	1	0	1	1	0	0	1	0	1	0	5	50
Part.58	Int	f	1	0	1	0	0	1	1	0	1	0	5	50
Part.59	Int	m	1	0	1	1	1	0	1	0	1	0	6	60

Part.60	Int	f	1	0	1	0	1	0	1	0	1	1	6	60
Part.61	adv	f	1	1	1	1	1	0	1	0	1	0	7	70
Part.62	adv	m	1	0	1	1	1	0	1	1	1	0	7	70
Part.63	adv	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.64	adv	f	1	1	1	0	1	0	1	1	1	1	8	80
Part.65	adv	f	1	1	1	1	1	1	1	0	1	1	9	90
Part.66	adv	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.67	adv	f	1	0	1	0	1	0	1	1	1	1	7	70
Part.68	adv	f	1	1	1	1	1	1	1	1	1	0	9	90
Part.69	adv	m	1	1	1	1	1	1	1	0	1	1	9	90
Part.70	adv	m	1	0	1	1	1	1	1	1	1	1	9	90
Part.71	adv	f	1	1	1	0	1	1	1	1	1	1	9	90
Part.72	adv	m	1	0	1	0	1	1	1	0	1	1	7	70
Part.73	adv	m	1	0	1	0	1	1	1		1	1	8	80
Part.74	adv	f	1	1	1	0	1	1	1	1	1	1	9	90
Part.75	adv	m	1	0	1	1	0	1	1	0	1	1	7	70
Part.76	adv	f	1	1	1	0	1	0	1	1	1	1	8	80
Part.77	adv	m	1	1	1	0	1	1	1	1	1	0	8	80
Part.78	adv	f	1	1	1	0	1	1	1	1	1	1	9	90
Part.79	adv	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.80	adv	m	1	1	1	0	1	0	1	1	1	1	8	80
Part.81	adv	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.82	adv	f	1	1	1	1	1	1	1	1	1	0	9	90
Part.83	adv	f	1	1	1	0	1	1	1	1	1	0	8	80
Part.84	adv	m	1	1	1	1	1	0	1	0	1	1	8	80
Part.85	adv	f	1	1	1	1	1	1	1	0	1	0	8	80
Part.86	adv	m	1	0	1	1	1	1	1	1	1	1	9	90
Part.87	adv	m	1	1	1	1	1	1	1	1	1	0	9	90
Part.88	adv	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.89	adv	m	1	1	1	0	1	1	1	1	1	0	8	80
Part.90	adv	m	1	0	1	1	1	1	1	1	1	1	9	90
Part.91	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.92	CG	m	1	1	1	1	1	1	1	1	1	1	10	100

Part.93	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.94	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.95	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.96	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.97	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.98	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.99	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.100	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.101	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.102	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.103	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.104	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.105	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.106	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.107	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.108	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.109	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.110	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.111	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.112	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.113	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.114	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.115	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.116	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.117	CG	m	1	1	1	1	1	1	1	1	1	1	10	100
Part.118	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.119	CG	f	1	1	1	1	1	1	1	1	1	1	10	100
Part.120	CG	m	1	1	1	1	1	1	1	1	1	1	10	100

Appendix (18)

The WET past until now event results for the beginner proficiency group

ID	speaker	level	gender	Q3	Q10	Q13	Q18	Q20	Q23	Total
1	speaker1	beginner	m	0 (S. Pres)	1	0 (S. Pres)	1	0 (S. Pres)	1	3
2	speaker2	beginner	m	0 (S. Past)	0 (S. Pres)	0 (S. Past)	0 (S. Past)	0 (S. Past)	0 (S. Past)	0
3	speaker3	beginner	m	0 (S. Past)	0 (S. Pres)	0 (S. Past)	0	0	0 (S. Pres)	0
4	speaker4	beginner	m	1	0	0	0	0 (Pres. Prog)	0 (S. Pres)	1
5	speaker5	beginner	m	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0	0 (S. Pres)	0
6	speaker6	beginner	f	1	1	1	1	1	1	6
7	speaker7	beginner	f	0 (S. Past)	0 (S. Pres)	0 (S. Past)	0 (S. Past)	0 (S. Past)	0 (S. Pres)	0
8	speaker8	beginner	m	1	0	1	1	1	1	5
9	speaker9	beginner	m	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0	0 (S. Pres)	0	0
10	speaker10	beginner	f	0 (S. Past)	0 (S. Past)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0	0
11	speaker11	beginner	f	0 (S. Pres)	0 (S. Past)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0
12	speaker12	beginner	f	0 (S. Past)	0	0 (S. Past)	1	0 (S. Past)	0	1
13	speaker13	beginner	m	0 (Pres. Prog)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0
14	speaker14	beginner	f	0 (S. Past)	0 (S. Pres)	0 (S. Pres)	0	0	0	0
15	speaker15	beginner	m	0 (S. Past)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Past)	0 (S. Pres)	0
16	speaker16	beginner	m	0 (S. Past)	1	1	1	1	1	5
17	speaker17	beginner	m	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0	0	0
18	speaker18	beginner	m	1	1	1	1	1	1	6
19	speaker19	beginner	f	0 (S. Pres)	0	1	1	1	0	3
20	speaker20	beginner	f	0	0	0	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0
21	speaker21	beginner	f	0	0 (S. Pres)	0	0 (S. Pres)	0 (S. Past)	0	0
22	speaker22	beginner	f	0	0	0 (S. Pres)	0 (Pres. Prog)	0 (Pres. Prog)	0 (S. Pres)	0
23	speaker23	beginner	f	0	0 (Pres. Prog)	1	0 (S. Pres)	0	0 (S. Pres)	1
24	speaker24	beginner	f	0	0 (S. Past)	0 (S. Pres)	0 (Pres. Prog)	0 (S. Pres)	0	0
25	speaker25	beginner	f	0 (Pres. Prog)	0 (S. Pres)	0 (S. Pres)	0	0 (S. Pres)	0	0
26	speaker26	beginner	f	0	0	0 (S. Pres)	0 (Pres. Prog)	1	0 (S. Pres)	1
27	speaker27	beginner	m	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0	0	0	0
28	speaker28	beginner	m	1	1	1	0 (S. Pres)	1	1	5
29	speaker29	beginner	m	1	1	1	1	1	1	6
30	speaker30	beginner	f	0	0 (S. Pres)	0 (S. Pres)	1	1	1	3

Appendix (19)

The WET past until now event results for the intermediate proficiency group

ID	speaker	level	gender	Q3	Q10	Q13	Q18	Q20	Q23	Total
31	speaker31	intermediate	m	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (Pres. Prog)	0 (S. Pres)	0 (S. Pres)	0
32	speaker32	intermediate	m	0 (S. Past)	1	0 (S. Pres)	0 (S. Past)	0 (S. Pres)	0 (S. Past)	1
33	speaker33	intermediate	f	0 (S. Past)	0	0 (S. Past)	1	0 (S. Past)	0	1
34	speaker34	intermediate	f	1	1	1	0 (S. Pres)	0 (S. Past)	1	4
35	speaker35	intermediate	m	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (Pres. Prog)	0 (S. Pres)	1	1
36	speaker36	intermediate	f	0	0 (S. Pres)	0 (S. Pres)	1	0 (Pres. Prog)	0 (S. Pres)	1
37	speaker37	intermediate	m	0 (S. Pres)	1	1	1	1	0 (S. Pres)	4
38	speaker38	intermediate	m	0 (S. Pres)	0 (S. Pres)	0	0	0	1	1
39	speaker39	intermediate	m	0 (S. Pres)	0 (Pres. Prog)	0	1	0 (S. Pres)	0 (S. Past)	1
40	speaker40	intermediate	m	1	0	0	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	1
41	speaker41	intermediate	f	0	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Past)	0 (S. Pres)	0
42	speaker42	intermediate	f	0 (Pres. Prog)	0 (Pres. Prog)	1	0 (S. Pres)	0 (S. Pres)	0	1
43	speaker43	intermediate	f	0	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	1	0	1
44	speaker44	intermediate	m	0 (S. Pres)	1	1	1	0 (S. Pres)	1	4
45	speaker45	intermediate	m	1	1	1	1	1	1	6
46	speaker46	intermediate	f	0 (Pres. Prog)	1	1	1	0 (S. Pres)	1	4
47	speaker47	intermediate	f	0	0	0 (S. Pres)	0 (S. Past)	1	0	1
48	speaker48	intermediate	m	0 (Pres. Prog)	0 (S. Pres)	0 (S. Pres)	0	0 (S. Pres)	1	1
49	speaker49	intermediate	f	1	1	1	1	1	1	6
50	speaker50	intermediate	m	1	1	0	0 (S. Pres)	1	1	4
51	speaker51	intermediate	f	1	1	1	1	1	1	6
52	speaker52	intermediate	f	0	1	0 (S. Pres)	0 (Pres. Prog)	0 (S. Pres)	0 (S. Pres)	1
53	speaker53	intermediate	m	0 (Pres. Prog)	0 (Pres. Prog)	1	1	1	1	4
54	speaker54	intermediate	f	1	1	1	1	1	0 (S. Pres)	5
55	speaker55	intermediate	m	0	1	1	1	0 (S. Pres)	1	4
56	speaker56	intermediate	f	0 (S. Pres)	1	1	1	1	1	5
57	speaker57	intermediate	m	1	0	0 (S. Pres)	1	1	1	4
58	speaker58	intermediate	f	0 (Pres. Prog)	0 (S. Pres)	1	0	0	0 (S. Pres)	1
59	speaker59	intermediate	m	0 (S. Pres)	0 (S. Past)	1	0 (S. Pres)	0 (S. Pres)	1	2
60	speaker60	intermediate	f	0 (S. Pres)	0 (S. Pres)	1	0 (S. Pres)	0	0	1

Appendix (20)

The WET past until now event results for the advanced proficiency group

ID	speaker	level	gender	Q3	Q10	Q13	Q18	Q20	Q23	Total
61	speaker61	advanced	f	1	1	1	1	1	1	6
62	speaker62	advanced	m	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (S. Past)	0 (S. Pres)	1	1
63	speaker63	advanced	f	1	1	1	1	1	1	6
64	speaker64	advanced	f	1	1	1	1	1	1	6
65	speaker65	advanced	f	0 (S. Pres)	1	0 (S. Pres)	0 (Pres. Prog)	0 (Pres. Prog)	0 (S. Past)	1
66	speaker66	advanced	f	0 (S. Past)	0 (S. Past)	0 (S. Past)	1	0 (S. Past)	0 (S. Past)	1
67	speaker67	advanced	f	0 (S. Pres)	1	0 (S. Pres)	1	0 (S. Past)	1	3
68	speaker68	advanced	f	1	1	1	1	0 (S. Past)	0	4
69	speaker69	advanced	m	1	1	1	1	1	1	6
70	speaker70	advanced	m	0 (S. Pres)	1	1	0 (S. Past)	0 (S. Past)	1	3
71	speaker71	advanced	f	1	1	1	1	1	1	6
72	speaker72	advanced	m	1	1	0 (S. Pres)	1	0 (S. Past)	1	4
73	speaker73	advanced	m	1	1	1	1	1	1	6
74	speaker74	advanced	f	1	1	1	1	1	1	6
75	speaker75	advanced	m	0 (Pres. Prog)	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	0 (Pres. Prog)	0 (S. Pres)	1
76	speaker76	advanced	f	0 (S. Pres)	1	0 (S. Pres)	1	0 (S. Pres)	1	3
77	speaker77	advanced	m	1	1	1	1	1	1	6
78	speaker78	advanced	f	1	1	1	1	1	1	6
79	speaker79	advanced	f	0	0 (S. Pres)	1	0	0 (S. Pres)	0 (S. Pres)	1
80	speaker80	advanced	m	1	0	0 (S. Pres)	0	0 (S. Pres)	0 (S. Past)	1
81	speaker81	advanced	m	1	1	1	1	1	1	6
82	speaker82	advanced	f	1	1	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	1	3
83	speaker83	advanced	f	1	1	1	1	1	1	6
84	speaker84	advanced	m	1	1	1	1	1	1	6
85	speaker85	advanced	f	0	0 (Pres. Prog)	1	1	0 (S. Pres)	1	3
86	speaker86	advanced	m	0 (Pres. Prog)	0 (Pres. Prog)	0 (S. Pres)	0 (Pres. Prog)	1	0	1
87	speaker87	advanced	m	1	1	1	1	1	1	6
88	speaker88	advanced	m		0 (S. Past)	1	1	0 (Pres. Prog)	1	3
89	speaker89	advanced	m	1	1	1	1	1	1	6
90	speaker90	advanced	m	0 (S. Pres)	0 (Pres. Prog)	1	0 (S. Pres)	0 (S. Pres)	0 (S. Pres)	1

Appendix (21)

The WET past until now event results for the control group

ID	speaker	level	gender	Q3	Q10	Q13	Q18	Q20	Q23	Total
91	speaker91	nativespeaker	m	1	1	1	1	1	1	6
92	speaker92	nativespeaker	m	1	1	1	1	1	1	6
93	speaker93	nativespeaker	m	1	1	1	1	1	1	6
94	speaker94	nativespeaker	m	1	1	1	1	1	1	6
95	speaker95	nativespeaker	f	1	1	1	1	1	1	6
96	speaker96	nativespeaker	f	1	1	1	1	1	1	6
97	speaker97	nativespeaker	f	1	1	1	1	1	1	6
98	speaker98	nativespeaker	m	1	1	1	1	1	1	6
99	speaker99	nativespeaker	f	1	1	1	1	1	1	6
100	speaker100	nativespeaker	f	1	1	1	1	1	1	6
101	speaker101	nativespeaker	f	1	1	1	1	1	1	6
102	speaker102	nativespeaker	m	1	1	1	1	1	1	6
103	speaker103	nativespeaker	m	1	1	1	1	1	1	6
104	speaker104	nativespeaker	f	1	1	1	1	1	1	6
105	speaker105	nativespeaker	f	1	1	1	1	1	1	6
106	speaker106	nativespeaker	m	1	1	1	1	1	1	6
107	speaker107	nativespeaker	m	1	1	1	1	1	1	6
108	speaker108	nativespeaker	m	1	1	1	1	1	1	6
109	speaker109	nativespeaker	m	1	1	1	1	1	1	6
110	speaker110	nativespeaker	f	1	1	1	1	1	1	6
111	speaker111	nativespeaker	f	1	1	1	1	1	1	6
112	speaker112	nativespeaker	f	1	1	1	1	1	1	6
113	speaker113	nativespeaker	f	1	1	1	1	1	1	6
114	speaker114	nativespeaker	f	1	1	1	1	1	1	6
115	speaker115	nativespeaker	m	1	1	1	1	1	1	6
116	speaker116	nativespeaker	m	1	1	1	1	1	1	6
117	speaker117	nativespeaker	m	1	1	1	1	1	1	6
118	speaker118	nativespeaker	f	1	1	1	1	1	1	6
119	speaker119	nativespeaker	f	1	1	1	1	1	1	6
120	speaker120	nativespeaker	m	1	1	1	1	1	1	6

Appendix (22)

The WET past until now event results for the whole population of the study

speaker	level	Gen	Q 3	Q 10	Q 13	Q 18	Q 20	Q 23	Tot.
speaker1	beg	m	0 S. Pres	1	0 S. Pres)	1	0 S. Pres	1	3
speaker2	beg	m	0 S. Past	0 S. Pres	0 S. Past	0 S. Past	0 S. Past	0 S. Past	0
speaker3	beg	m	0 S. Past	0 S. Pres	0 S. Past	0	0	0 S. Pres	0
speaker4	beg	m	1	0	0	0	0 PresProg	0 S. Pres	1
speaker5	beg	m	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Pres	0	0 S. Pres	0
speaker6	beg	f	1	1	1	1	1	1	6
speaker7	beg	f	0 S. Past	0 S. Pres	0 S. Past	0 S. Past	0 S. Past	0 S. Pres	0
speaker8	beg	m	1	0	1	1	1	1	5
speaker9	beg	m	0 S. Pres	0 S. Pres	0 S. Pres	0	0 S. Pres	0	0
speaker10	beg	f	0 S. Past	0 S. Past	0 S. Pres	0 S. Pres	0 S. Pres	0	0
speaker11	beg	f	0 S. Pres	0 S. Past	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Pres	0
speaker12	beg	f	0 S. Past	0	0 S. Past	1	0 S. Past	0	1
speaker13	beg	m	0 Pres.Prog	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Pres	0
speaker14	beg	f	0 S. Past	0 S. Pres	0 S. Pres	0	0	0	0
speaker15	beg	m	0 S. Past	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Past	0 S. Pres	0
speaker16	beg	m	0 S. Past	1	1	1	1	1	5
speaker17	beg	m	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Pres	0	0	0
speaker18	beg	m	1	1	1	1	1	1	6
speaker19	beg	f	0 S. Pres	0	1	1	1	0	3
speaker20	beg	f	0	0	0	0 S. Pres	0 S. Pres	0 S. Pres	0
speaker21	beg	f	0	0 S. Pres	0	0 S. Pres	0 S. Past	0	0
speaker22	beg	f	0	0	0 S. Pres	0 Pres. Prog	0 Pres. Prog	0 S. Pres	0
speaker23	beg	f	0	0	1	0 S. Pres	0	0 S. Pres	1

				Pres. Prog					
speaker24	beg	f	0	0 S. Past	0 S. Pres	0 Pres. Prog	0 S. Pres	0	0
speaker25	beg	f	0 Pres. Prog	0 S. Pres	0 S. Pres	0	0 S. Pres	0	0
speaker26	beg	f	0	0	0 S. Pres	0 Pres. Prog	1	0 S. Pres	1
speaker27	beg	m	0 S. Pres	0 S. Pres	0 S. Pres	0	0	0	0
speaker28	beg	m	1	1	1	0 S. Pres	1	1	5
speaker29	beg	m	1	1	1	1	1	1	6
speaker30	beg.	f	0	0 S. Pres	0 S. Pres	1	1	1	3
speaker31	Int	m	0 S. Pres	0 S. Pres	0 S. Pres	0 Pres. Prog	0 S. Pres	0 S. Pres	0
speaker32	Int	m	0 S. Past	1	0 S. Pres	0 S. Past	0 S. Pres	0 S. Past	1
speaker33	Int	f	0 S. Past	0	0 S. Past	1	0 S. Past	0	1
speaker34	Int	f	1	1	1	0 S. Pres	0 S. Past	1	4
speaker35	Int	m	0 S. Pres	0 S. Pres	0 S. Pres	0 Pres. Prog	0 S. Pres	1	1
speaker36	Int	f	0	0 S. Pres	0 S. Pres	1	0 Pres. Prog	0 S. Pres	1
speaker37	Int	m	0 S. Pres	1	1	1	1	0 S. Pres	4
speaker38	Int	m	0 S. Pres	0 S. Pres	0	0	0	1	1
speaker39	Int	m	0 S. Pres	0 Pres.Prog	0	1	0 S. Pres	0 S. Past	1
speaker40	Int	m	1	0	0	0 S. Pres	0 S. Pres	0 S. Pres	1
speaker41	Int	f	0	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Past	0 S. Pres	0
speaker42	Int	f	0 Pres. Prog	0 Pres.Prog	1	0 S. Pres	0 S. Pres	0	1
speaker43	Int	f	0	0 S. Pres	0 S. Pres	0 S. Pres	1	0	1
speaker44	Int	m	0 S. Pres	1	1	1	0 S. Pres	1	4
speaker45	Int	m	1	1	1	1	1	1	6
speaker46	Int	f	0 Pres. Prog	1	1	1	0 S. Pres	1	4

speaker47	Int	f	0	0	0 S. Pres	0 S. Past	1	0	1
speaker48	Int	m	0 Pres. Prog	0 S. Pres	0 S. Pres	0	0 S. Pres	1	1
speaker49	Int	f	1	1	1	1	1	1	6
speaker50	Int	m	1	1	0	0 S. Pres	1	1	4
speaker51	Int	f	1	1	1	1	1	1	6
speaker52	Int	f	0	1	0 S. Pres	0 Pres. Prog	0 S. Pres	0 S. Pres	1
speaker53	Int	m	0 Pres. Prog	0 Pres.Prog	1	1	1	1	4
speaker54	Int	f	1	1	1	1	1	0 S. Pres	5
speaker55	Int	m	0	1	1	1	0 S. Pres	1	4
speaker56	Int	f	0 S. Pres	1	1	1	1	1	5
speaker57	Int	m	1	0	0 S. Pres	1	1	1	4
speaker58	Int	f	0 Pres. Prog	0 S. Pres	1	0	0	0 S. Pres	1
speaker59	Int	m	0 S. Pres	0 S. Past	1	0 S. Pres	0 S. Pres	1	2
speaker60	Int	f	0 S. Pres	0 S. Pres	1	0 S. Pres	0	0	1
speaker61	Adv.	f	1	1	1	1	1	1	6
speaker62	Adv.	m	0 S. Pres	0 S. Pres	0 S. Pres	0 S. Past	0 S. Pres	1	1
speaker63	Adv.	f	1	1	1	1	1	1	6
speaker64	Adv.	f	1	1	1	1	1	1	6
speaker65	Adv.	f	0 S. Pres	1	0 S. Pres	0 Pres. Prog	0 Pres. Prog	0 S. Past	1
speaker66	Adv.	f	0 S. Past	0 S. Past	0 S. Past	1	0 S. Past	0 S. Past	1
speaker67	Adv.	f	0 (S. Pres)	1	0 (S. Pres)	1	0 S. Past	1	3
speaker68	Adv.	f	1	1	1	1	0 S. Past	0	4
speaker69	Adv.	m	1	1	1	1	1	1	6
speaker70	Adv.	m	0 S. Pres	1	1	0 S. Past	0 S. Past	1	3
speaker71	Adv.	f	1	1	1	1	1	1	6
speaker72	Adv.	m	1	1	0 S. Pres	1	0 S. Past	1	4
speaker73	Adv.	m	1	1	1	1	1	1	6

speaker74	Adv.	f	1	1	1	1	1	1	6
speaker75	Adv.	m	0 Pres. Prog	0 S. Pres	0 S. Pres	0 S. Pres	0 Pres. Prog	0 S. Pres	1
speaker76	Adv.	f	0 S. Pres	1	0 S. Pres	1	0 S. Pres	1	3
speaker77	Adv.	m	1	1	1	1	1	1	6
speaker78	Adv.	f	1	1	1	1	1	1	6
speaker79	Adv.	f	0	0 S. Pres	1	0	0 S. Pres	0 S. Pres	1
speaker80	Adv.	m	1	0	0 S. Pres	0	0 S. Pres	0 S. Past	1
speaker81	Adv.	m	1	1	1	1	1	1	6
speaker82	Adv.	f	1	1	0 S. Pres	0 S. Pres	0 S. Pres	1	3
speaker83	Adv.	f	1	1	1	1	1	1	6
speaker84	Adv.	m	1	1	1	1	1	1	6
speaker85	Adv.	f	0	0 Pres. Prog	1	1	0 S. Pres	1	3
speaker86	Adv.	m	0 Pres.Prog	0 Pres. Prog	0 S. Pres	0 Pres. Prog	1	0	1
speaker87	Adv.	m	1	1	1	1	1	1	6
speaker88	Adv.	m		0 S. Past	1	1	0 Pres. Prog	1	3
speaker89	Adv.	m	1	1	1	1	1	1	6
speaker90	Adv.	m	0 S. Pres	0 Pres. Prog	1	0 S. Pres	0 S. Pres	0 S. Pres	1
speaker91	CG	m	1	1	1	1	1	1	6
speaker92	CG	m	1	1	1	1	1	1	6
speaker93	CG	m	1	1	1	1	1	1	6
speaker94	CG	m	1	1	1	1	1	1	6
speaker95	CG	f	1	1	1	1	1	1	6
speaker96	CG	f	1	1	1	1	1	1	6
speaker97	CG	f	1	1	1	1	1	1	6
speaker98	CG	m	1	1	1	1	1	1	6
speaker99	CG	f	1	1	1	1	1	1	6
speaker100	CG	f	1	1	1	1	1	1	6
speaker101	CG	f	1	1	1	1	1	1	6
speaker102	CG	m	1	1	1	1	1	1	6
speaker103	CG	m	1	1	1	1	1	1	6
speaker104	CG	f	1	1	1	1	1	1	6
speaker105	CG	f	1	1	1	1	1	1	6

speaker106	CG	m	1	1	1	1	1	1	6
speaker107	CG	m	1	1	1	1	1	1	6
speaker108	CG	m	1	1	1	1	1	1	6
speaker109	CG	m	1	1	1	1	1	1	6
speaker110	CG	f	1	1	1	1	1	1	6
speaker111	CG	f	1	1	1	1	1	1	6
speaker112	CG	f	1	1	1	1	1	1	6
speaker113	CG	f	1	1	1	1	1	1	6
speaker114	CG	f	1	1	1	1	1	1	6
speaker115	CG	m	1	1	1	1	1	1	6
speaker116	CG	m	1	1	1	1	1	1	6
speaker117	CG	m	1	1	1	1	1	1	6
speaker118	CG	f	1	1	1	1	1	1	6
speaker119	CG	f	1	1	1	1	1	1	6
speaker120	CG	m	1	1	1	1	1	1	6

Appendix (23)

Sample of the Acceptability Judgment Task

Acceptability judgment task with Lingala-French speakers acquiring English

Write (G) meaning 'GOOD' next to the sentence if you judge it acceptable, (B) means "BAD' next to it if you judge it not acceptable.

Example: (B) Bob will buy a pen last week

(G) Bob was born in 1988.

1. Bob cooked rice yesterday.
2. Joe is learning English these days.
3. Joe lived in Paris since 2005.
4. Betty has travelled to Paris several times.
5. Betty lives in Paris since 2007.
6. Joe will visit Paris next semester.
7. Betty and Joe have cooked rice yesterday.
8. Joe visited Paris last year.
9. Betty worked for General Motors for 5 years.
10. Rose and Paul are speaking Lingala now.
11. Bob works at Walgreen for 10 years.
12. Joe has visited London since 2011.
13. Betty will buy a car next week.
14. Joe plays piano for six years.
15. Paul disapproved that policy since 2009.
16. Bob has visited London in 2000.

17. Betty is teaching now.
18. Paul invited Joe last month
19. Ben visited London several times.
20. Paul has worked for BAT since 2012.
21. Paul has worked for BAT in 2006.
22. Betty will live there in 2 years.
23. Nathan plays basketball since 2008.
24. Andy has learned English for 10 years.
25. Joe will travel to Paris next week.
26. Betty lived in London in 1993.
27. Betty learns French since 2010.
28. Bob is playing soccer now.
29. Joe has lived in Paris in 2011.
30. Philo will go there next month.
31. Bob is writing a letter now.
32. Joe celebrated his birthday last month.
33. Abiga learned English since 2007.
34. Andy has learned French two years ago.
35. Bob has lived in Paris for 5 years.
36. Betty will buy a car last week.

Appendix (24)

The results for the beginner proficiency group on the AJT on past until now events

Spk & ID	lev	gen	Q3	Q4	Q5	Q9	Q11	Q12	Q14	Q15	Q19	Q20	Q23	Q24	Q27	Q33	Q35	Tot.
spk1	Beg.	m	0 spt	1	0 spr	1	0 spr	1	0 spr	0 spt	1	0 ppt	0 spr	1	0 spr	1	1	7
spk2	Beg.	m	0 spt	1	1	0 spt	0 spr	1	0 spr	0 spt	1	1	0 spr	1	1	0 spt	1	8
spk3	Beg.	m	1	0 ppt	1	0 spt	1	0 ppt	0 spr	1	0 spt	0 ppt	0 spr	1	0 spr	0 spt	1	6
spk4	Beg.	m	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	0 ppt	0
spk5	Beg.	m	1	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	6
spk6	Beg.	f	0 spt	0 ppt	0 spr	0 spt	1	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk7	Beg.	f	1	1	1	0 spt	1	0 ppt	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	0 ppt	6
spk8	Beg.	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	1	1	0 ppt	1	1	0 spr	0 spt	1	7
spk9	Beg.	m	0 spt	0 ppt	0 spr	1	0 spr	1	0 spr	0 spt	1	0 ppt	0 spr	0 ppt	0 spr	1	0 ppt	4
spk10	Beg.	f	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	1	1
spk11	Beg.	f	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	0 ppt	0
spk12	Beg.	f	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spt	0 ppt	0 spr	0 spt	0 ppt	0
spk13	Beg.	m	0 spt	1	0 spr	0 spt	0 spr	1	1	0 spt	0 spt	1	0 spr	0 ppt	0 spr	0 spt	1	5
spk14	Beg.	f	1	0 ppt	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk15	Beg.	m	0 spt	1	0 spr	0 spt	1	0 ppt	1	0 spt	0 spt	0 ppt	0 spr	1	1	0 spt	1	6
spk16	Beg.	m	1	0 ppt	1	0 spt	0 spr	1	0 spr	0 spt	1	0 ppt	1	0 ppt	0 spr	1	0 ppt	6
spk17	Beg.	m	0 spt	0 ppt	0 spr	1	0 spr	0 ppt	1	0 spt	0 spt	0 ppt	0 spr	1	0 spr	1	0 ppt	4
spk18	Beg.	m	0 spt	1	0 spr	0 spt	1	0 ppt	0 spr	0 spt	1	0 ppt	0 spr	0 ppt	0 spr	0 spt	1	4

spk19	Beg.	f	0 s pt	1	0 s pr	0 s pt	1	0 p pt	0 spr	0 s pt	0 s pt	1	0 s pr	1	0 s pr	0 s pt	1	5
spk20	Beg.	f	1	0 p pt	0 s pr	0 s pt	0 s pr	0 p pt	0 spr	0 s pt	0 s pt	1	0 s pr	0 p pt	0 s pr	0 s pt	0 p pt	2
spk21	Beg.	f	1	0 p pt	0 s pr	0 s pt	1	0 p pt	0 spr	1	0 s pt	0 ppt	0 s pr	0 p pt	1	1	0 p pt	5
spk22	Beg.	f	0 s pt	0 p pt	0 s pr	0 s pt	0 s pr	1	0 spr	0 s pt	0 s pt	1	0 s pr	1	0 s pr	0 s pt	1	4
spk23	Beg.	f	0 s pt	0 p pt	0 s pr	0 s pt	0 s pr	1	0 spr	0 s pt	0 s pt	0 ppt	1	0 p pt	0 s pr	0 s pt	0 p pt	2
spk24	Beg.	f	0 s pt	0 p pt	0 s pr	0 s pt	0 s pr	0 p pt	0 spr	0 s pt	0 s pt	0 ppt	0 s pr	0 p pt	0 s pr	0 s pt	0 p pt	0
spk25	Beg.	F	0 s pt	0 p pt	0 s pr	1	0 s pr	0 p pt	0 spr	1	0 s pt	0 ppt	1	0 p pt	0 s pr	0 s pt	0 p pt	3
spk26	Beg.	F	0 s pt	0 p pt	0 s pr	1	0 s pr	0 p pt	0 spr	1	0 s pt	0 ppt	1	0 p pt	0 s pr	0 s pt	0 p pt	4
spk27	Beg.	M	0 s pt	1	0 s pr	0 s pt	0 s pr	1	0 spr	0 s pt	0 s pt	0 ppt	0 s pr	0 p pt	0 s pr	1	0 p pt	3
spk28	Beg.	M	0 s pt	0 ppt	0 s pr	0 s pt	0 s pr	0 p pt	0 spr	0 s pt	0 s pt	0 ppt	0 s pr	0 p pt	0 s pr	0 s pt	0 p pt	0
spk29	Beg.	M	0 s pt	1	0 s pr	0 s pt	0 s pr	1	0 spr	0 s pt	0 s pt	1	0 s pr	0 p pt	1	0 s pt	0 p pt	4
spk30	Beg.	f	1	0 p pt	1	0 s pt	1	0 p pt	0 spr	1	0 s pt	1	0 s pr	1	1	0 s pt	0 p pt	7

Appendix (25)

The results for the intermediate proficiency group on the AJT on past until now events

Spk & ID	lev	gen	Q 3	Q 4	Q 5	Q 9	Q 11	Q 12	Q 14	Q 15	Q 19	Q 20	Q 23	Q 24	Q 27	Q 33	Q 35	Tot.
spk31	Int.	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk32	Int.	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk33	Int.	f	1	1	0 spr	1	0 spr	1	0 spr	0 spt	0 spt	0 ppt	0 spr	1	0 spr	0 spt	1	6
spk34	Int.	f	0 spt	1	1	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	1	1	1	0 spt	0 ppt	7
spk35	Int.	m	1	1	1	1	1	0 ppt	1	1	0 spt	0 ppt	0 spr	0 ppt	0 spr	1	0 ppt	8
spk36	Int.	f	0 spt	1	0 spr	1	1	0 ppt	0 spr	1	0 spt	1	0 spr	0 ppt	1	0 spt	1	7
spk37	Int.	m	0 spt	1	0 spr	0 spt	1	1	1	0 spt	0 spt	1	1	1	0 spr	0 spt	1	8
spk38	Int.	m	0 spt	1	1	1	0 spr	1	1	0 spt	1	0 ppt	1	0 ppt	0 spr	1	0 ppt	8
spk39	Int.	m	1	0 spr	1	0 spt	1	0 ppt	0 spr	0 spt	1	0 ppt	1	0 ppt	0 spr	0 spt	1	6
spk40	Int.	m	0 spt	0 spr	0 spr	1	0 spr	0 ppt	0 spr	1	0 spt	1	0 spr	0 ppt	1	0 spt	1	5
spk41	Int.	f	1	0 spr	1	0 spt	1	0 ppt	1	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	7
spk42	Int.	f	1	0 spr	0 spr	1	1	1	0 spr	1	0 spt	1	0 spr	1	1	0 spt	0 ppt	8
spk43	Int.	f	0 spt	0 spr	1	0 spt	1	0 ppt	0 spr	1	0 spt	1	0 spr	0 ppt	1	0 spt	0 ppt	5
spk44	Int.	m	0 spt	1	0 spr	0 spt	1	1	0 spr	1	0 spt	1	0 spr	1	1	0 spt	1	8
spk45	Int.	m	0 spt	0 spr	1	0 spt	0 spr	1	1	0 spt	1	0 ppt	0 spr	0 ppt	1	0 spt	1	6
spk46	Int.	f	0 spt	1	0 spr	1	1	0 ppt	1	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	7
spk47	Int.	f	1	0 spr	1	1	0 spr	1	0 spr	1	0 spt	0 ppt	1	0 ppt	0 spr	1	1	8
spk48	Int.	m	0 spt	1	0 spr	1	0 spr	0 ppt	1	1	0 spt	0 ppt	0 spr	0 ppt	1	0 spt	1	6
spk49	Int.	f	0 spt	1	0 spr	1	1	1	0 spr	0 spt	1	0 ppt	0 spr	1	0 spr	0 spt	1	7
spk50	Int.	m	0 spt	0 spr	1	0 spt	0 spr	1	1	0 spt	0 spt	1	0 spr	1	0 spr	1	0 ppt	6
spk51	Int.	f	1	0 spr	1	1	0 spr	1	1	0 spt	1	1	0 spr	1	0 spr	0 spt	0 ppt	8
spk52	Int.	f	1	0 spr	0 spr		1	1	1	0 spt	1	1	0 spt	1	1	0 spt	1	9

spk53	Int.	m	0 spt	0 spr	1	0 spt	0 spr	1	0 spr	0 spt	1	0 ppt	1	0 ppt	0 spr	0 spt	1	5
spk54	Int.	f		0 spr	0 spr	1	0 spr	0 ppt	0 spr	1	0 spt	0 ppt	0 spr	0 ppt	1	0 spt	1	4
spk55	Int.	m	0 spt	0 spr	0 spr	1	0 spr	0 ppt	0 spr	1	1	0 ppt	0 spr	1	0 spr	0 spt	1	6
spk56	Int.	f	0 spt	0 spr	1	1	0 spr	1	1	0 spt	1	0 ppt	1	1	0 spr	1	0 ppt	8
spk57	Int.	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	1	0 spt	1	1	0 ppt	0 spr	1	0 ppt	6
spk58	Int.	f	1	0 spr	1	1	0 spr	1	0 spr	0 spt	1	1	0 spr	1	0 spr	1	0 ppt	8
spk59	Int.	m	0 spt	1	0 spr	0 spt	0 spr	0 ppt	0 spr	1	0 spt	1	1	1	1	0 spt	1	7
spk60	Int.	f	1	0 spr	1	0 spt	0 spr	1	0 spr	1	0 spt	0 ppt	1	1	0 spr	1	0 ppt	7

Appendix (26)

The results for the advanced proficiency group on the AJT on past until now events

spk	lev	gen	Q 3	Q 4	Q 5	Q 9	Q 11	Q 12	Q 14	Q 15	Q 19	Q 20	Q 23	Q 24	Q 27	Q 33	Q 35	Tot.
Spk 61	adv	f	0 spt	0 ppt	0 spr	1	1	1	1	0 spt	0 spt	1	0 spr	0 ppt	1	1	0 ppt	7
Spk 62	adv	m	1	1	0 spr	1	1	1	0 spr	0 spt	1	1	0 spr	1	0 spr	1	1	10
Spk 63	adv	f	1	1	1	0 spt	1	0 ppt	1	1	0 spt	1	1	0 ppt	1	1	1	11
Spk 64	adv	f	1	1	1	1	1	1	1	0 spt	1	1	1	1	1	0 spt	1	13
Spk 65	adv	f	1	1	0 spr	0 spt	1	1	0 spr	0 spt	0 spt	1	0 spr	0 ppt	1	1	1	8
Spk 66	adv	f	0 spt	1	1	0 spt	1	0 ppt	1	0 spt	0 spt	1	1	0 ppt	1	1	1	9
Spk 67	adv	f	1	1	0 spr	0 spt	1	0 ppt	1	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	7
Spk 68	adv	f	1	1	1	0 spt	1	1	1	1	0 spt	1	0 spr	1	1	1	1	12
Spk 69	adv	m	0 spt	0 ppt	1	1	1	0 ppt	1	1	1	1	1	1	1	1	1	12
Spk 70	adv	m	1	1	0 spr	0 spt	1	1	1	0 spt	0 spt	0 ppt	1	1	1	0 spt	0 ppt	8
Spk 71	adv	f	1	1	0 spr	0 spt	1	0 ppt	1	1	0 spt	1	1	1	1	1	1	11
Spk 72	adv	m	1	0 ppt	1	1	1	1	0 spr	1	1	1	0 spr	1	1	1	1	8
Spk 73	adv	m	1	0 ppt	1	1	0 spr	1	0 spr	1	1	1	0 spr	1	0 spr	1	1	10
Spk 74	adv	f	1	0	0 spr	1	1	0 ppt	0 spr	1	1	0 ppt	1	1	0 spr	1	0 ppt	8
Spk 75	adv	m	0 spt	1	1	1	0 spr	1	0 spr	1	0 spt	0 ppt	1	0 ppt	0 spr	0 spt	1	7
Spk 76	adv	f	1	1	0 spr	0 spt	1	0 ppt	0 spr	1	0 spt	0 ppt	1	1	1	0 spt	1	8
Spk 77	adv	m	1	1	1	1	1	0 ppt	1	1	0 spt	1	1	0 ppt	1	1	0 ppt	11
Spk 78	adv	f	1	1	1	1	0 spr	1	0 spr	1	1	0 ppt	1	1	0 spr	1	0 ppt	10
Spk 79	adv	f	1	1	1	1	1	0 ppt		1	0 spt	1	0	1	1	1	1	12
Spk 80	adv	m	1	0 ppt	0 spr	1	0 spr	1	0 spr	1	0 spt	0 ppt	1	1	0 spr	1	0 ppt	7
Spk 81	adv	m	1	0	1	0 spt	1	0 ppt	1	1	1	0 ppt	1	1	0 spr	1	0 ppt	9
Spk 82	adv	f	1	1	1	0 spt	1	1	0 spr	1	1	1	1	0 ppt	1	0 spt	1	11
Spk 83	adv	f	0 spt	1	0 spr	1	0 spr	1	0 spr	1	0 spt	1	1	0 ppt	1	1	0 ppt	8
Spk 84	adv	m	1	1	1	1	0 spr	1	1	1	1	1	0 spr	1	1	0 spt	1	12
Spk 85	adv	f	0 spt	1	0 spr	0 spt	1	1	0 spr	1	0 spt	1	0	1	0 spr	0 spt	1	7
Spk 86	adv	m	1	0 ppt	1	1	1	0 ppt	0 spr	0 spt	0 spt	1	1	1	0 spr	1	1	9
Spk 87	adv	m	1	1	1	1	1	1	1	1	0 spt	0 ppt	1	1	1	0 spt	1	12

Spk 88	adv	m	1	1	1	1	0 spr	1	1	1	0 spt	1	0	1	1	0 spt	1	11
Spk 89	adv	m	1	1	1	1	1	1	1	1	0 spt	1	1	1	1	0 spt	1	13
Spk 90	adv	m		0	1	1	0 spr	0 ppt	1	0 spt	1	0 ppt	0	1	1	0 spt	1	7

Appendix (27)

The results for the control group on the AJT on past until now events

Spk& ID	lev	gen	Q 3	Q 4	Q 5	Q 9	Q 11	Q 12	Q 14	Q 15	Q 19	Q 20	Q 23	Q 24	Q 27	Q 33	Q 35	Tot.
Spk 91	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 92	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 93	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 94	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 95	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 96	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 97	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 98	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 99	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 100	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 101	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 102	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 103	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 104	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 105	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 106	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 107	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 108	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 109	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 110	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 111	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 112	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 113	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 114	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 115	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 116	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 117	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 118	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 119	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
Spk 120	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15

Appendix (28)

The frequency of negative transfer from the beginner proficiency group

ID	speaker	level	gender	0spt	0spr	0ppt
1	speaker1	beginner	m	2	5	1
2	speaker2	beginner	m	4	3	0
3	speaker3	beginner	m	5	3	3
4	speaker4	beginner	m	5	5	4
5	speaker5	beginner	m	4	5	0
6	speaker6	beginner	f	5	4	1
7	speaker7	beginner	f	4	3	2
8	speaker8	beginner	m	3	4	1
9	speaker9	beginner	m	2	5	4
10	speaker10	beginner	f	5	5	4
11	speaker11	beginner	f	5	5	5
12	speaker12	beginner	f	5	4	5
13	speaker13	beginner	m	5	4	1
14	speaker14	beginner	f	4	5	1
15	speaker15	beginner	m	5	2	2
16	speaker16	beginner	m	2	3	4
17	speaker17	beginner	m	3	4	4
18	speaker18	beginner	m	4	4	3
19	speaker19	beginner	f	5	4	1
20	speaker20	beginner	f	4	5	4
21	speaker21	beginner	f	2	3	5
22	speaker22	beginner	f	5	5	1
23	speaker23	beginner	f	5	4	4
24	speaker24	beginner	f	5	5	5
25	speaker25	beginner	f	3	4	5
26	speaker26	beginner	f	3	4	5
27	speaker27	beginner	m	4	0	0
28	speaker28	beginner	m	5	5	5
29	speaker29	beginner	m	5	4	2
30	speaker30	beginner	f	3	3	2
Total				121	119	83

Appendix (29)

The frequency of negative transfer from the intermediate proficiency group

ID	speaker	level	gender	0spt	0spr	0ppt
31	speaker31	intermediate	m	5	5	0
32	speaker32	intermediate	m	5	5	0
33	speaker33	intermediate	f	3	5	1
34	speaker34	intermediate	f	5	2	4
35	speaker35	intermediate	m	1	2	4
36	speaker36	intermediate	f	2	3	3
37	speaker37	intermediate	m	5	2	0
38	speaker38	intermediate	m	2	2	3
39	speaker39	intermediate	m	3	3	3
40	speaker40	intermediate	m	4	4	2
41	speaker41	intermediate	f	4	3	1
42	speaker42	intermediate	f	2	4	1
43	speaker43	intermediate	f	4	3	3
44	speaker44	intermediate	m	4	3	0
45	speaker45	intermediate	m	4	3	2
46	speaker46	intermediate	f	4	3	1
47	speaker47	intermediate	f	1	4	2
48	speaker48	intermediate	m	3	3	3
49	speaker49	intermediate	f	3	4	1
50	speaker50	intermediate	m	1	4	1
51	speaker51	intermediate	f	2	4	1
52	speaker52	intermediate	f	4	2	0
53	speaker53	intermediate	m	4	4	2
54	speaker54	intermediate	f	3	5	3
55	speaker55	intermediate	m	2	5	2
56	speaker56	intermediate	f	2	3	2
57	speaker57	intermediate	m	3	4	2
58	speaker58	intermediate	f	1	5	1
59	speaker59	intermediate	m	4	3	1
60	speaker60	intermediate	f	2	4	2
Total				92	106	51

Appendix (30)

The frequency of negative transfer from the advanced proficiency group

ID	speaker	level	gender	0spt	0spr	0ppt
61	speaker61	advanced	f	3	2	3
62	speaker62	advanced	m	1	4	0
63	speaker63	advanced	f	2	0	2
64	speaker64	advanced	f	2	0	0
65	speaker65	advanced	f	3	3	1
66	speaker66	advanced	f	4	0	2
67	speaker67	advanced	f	4	3	1
68	speaker68	advanced	f	2	1	0
69	speaker69	advanced	m	1	0	2
70	speaker70	advanced	m	4	1	2
71	speaker71	advanced	f	2	1	1
72	speaker72	advanced	m	0	2	1
73	speaker73	advanced	m	0	4	1
74	speaker74	advanced	f	0	3	4
75	speaker75	advanced	m	3	3	2
76	speaker76	advanced	f	3	2	2
77	speaker77	advanced	m	1	0	3
78	speaker78	advanced	f	0	3	2
79	speaker79	advanced	f	1	1	1
80	speaker80	advanced	m	1	4	3
81	speaker81	advanced	m	1	1	4
82	speaker82	advanced	f	2	1	1
83	speaker83	advanced	f	2	3	2
84	speaker84	advanced	m	1	2	0
85	speaker85	advanced	f	4	4	0
86	speaker86	advanced	m	2	2	2
87	speaker87	advanced	m	2	0	1
88	speaker88	advanced	m	2	2	0
89	speaker89	advanced	m	2	0	0
90	speaker90	advanced	m	3	2	3
Total				58	54	46

Appendix (31)

The frequency of negative transfer from the whole group

ID	speaker	level	gender	0spt	0spr	0ppt
1	speaker1	beginner	m	2	5	1
2	speaker2	beginner	m	4	3	0
3	speaker3	beginner	m	5	3	3
4	speaker4	beginner	m	5	5	4
5	speaker5	beginner	m	4	5	0
6	speaker6	beginner	f	5	4	1
7	speaker7	beginner	f	4	3	2
8	speaker8	beginner	m	3	4	1
9	speaker9	beginner	m	2	5	4
10	speaker10	beginner	f	5	5	4
11	speaker11	beginner	f	5	5	5
12	speaker12	beginner	f	5	4	5
13	speaker13	beginner	m	5	4	1
14	speaker14	beginner	f	4	5	1
15	speaker15	beginner	m	5	2	2
16	speaker16	beginner	m	2	3	4
17	speaker17	beginner	m	3	4	4
18	speaker18	beginner	m	4	4	3
19	speaker19	beginner	f	5	4	1
20	speaker20	beginner	f	4	5	4
21	speaker21	beginner	f	2	3	5
22	speaker22	beginner	f	5	5	1
23	speaker23	beginner	f	5	4	4
24	speaker24	beginner	f	5	5	5
25	speaker25	beginner	f	3	4	5
26	speaker26	beginner	f	3	4	5
27	speaker27	beginner	m	4	0	0
28	speaker28	beginner	m	5	5	5
29	speaker29	beginner	m	5	4	2
30	speaker30	beginner	f	3	3	2
Total				121	119	83
31	speaker31	intermediate	m	5	5	0
32	speaker32	intermediate	m	5	5	0
33	speaker33	intermediate	f	3	5	1
34	speaker34	intermediate	f	5	2	4

35	**speaker35**	**intermediate**	**m**	**1**	**2**	**4**
36	**speaker36**	**intermediate**	**f**	**2**	**3**	**3**
37	**speaker37**	**intermediate**	**m**	**5**	**2**	**0**
38	**speaker38**	**intermediate**	**m**	**2**	**2**	**3**
39	**speaker39**	**intermediate**	**m**	**3**	**3**	**3**
40	**speaker40**	**intermediate**	**m**	**4**	**4**	**2**
41	**speaker41**	**intermediate**	**f**	**4**	**3**	**1**
42	**speaker42**	**intermediate**	**f**	**2**	**4**	**1**
43	**speaker43**	**intermediate**	**f**	**4**	**3**	**3**
44	**speaker44**	**intermediate**	**m**	**4**	**3**	**0**
45	**speaker45**	**intermediate**	**m**	**4**	**3**	**2**
46	**speaker46**	**intermediate**	**f**	**4**	**3**	**1**
47	**speaker47**	**intermediate**	**f**	**1**	**4**	**2**
48	**speaker48**	**intermediate**	**m**	**3**	**3**	**3**
49	**speaker49**	**intermediate**	**f**	**3**	**4**	**1**
50	**speaker50**	**intermediate**	**m**	**1**	**4**	**1**
51	**speaker51**	**intermediate**	**f**	**2**	**4**	**1**
52	**speaker52**	**intermediate**	**f**	**4**	**2**	**0**
53	**speaker53**	**intermediate**	**m**	**4**	**4**	**2**
54	**speaker54**	**intermediate**	**f**	**3**	**5**	**3**
55	**speaker55**	**intermediate**	**m**	**2**	**5**	**2**
56	**speaker56**	**intermediate**	**f**	**2**	**3**	**2**
57	**speaker57**	**intermediate**	**m**	**3**	**4**	**2**
58	**speaker58**	**intermediate**	**f**	**1**	**5**	**1**
59	**speaker59**	**intermediate**	**m**	**4**	**3**	**1**
60	**speaker60**	**intermediate**	**f**	**2**	**4**	**2**
Total				**92**	**106**	**51**
61	**speaker61**	**advanced**	**f**	**3**	**2**	**3**
62	**speaker62**	**advanced**	**m**	**1**	**4**	**0**
63	**speaker63**	**advanced**	**f**	**2**	**0**	**2**
64	**speaker64**	**advanced**	**f**	**2**	**0**	**0**
65	**speaker65**	**advanced**	**f**	**3**	**3**	**1**
66	**speaker66**	**advanced**	**f**	**4**	**0**	**2**
67	**speaker67**	**advanced**	**f**	**4**	**3**	**1**
68	**speaker68**	**advanced**	**f**	**2**	**1**	**0**
69	**speaker69**	**advanced**	**m**	**1**	**0**	**2**
70	**speaker70**	**advanced**	**m**	**4**	**1**	**2**
71	**speaker71**	**advanced**	**f**	**2**	**1**	**1**
72	**speaker72**	**advanced**	**m**	**0**	**2**	**1**

73	**speaker73**	**advanced**	**m**	**0**	**4**	**1**
74	**speaker74**	**advanced**	**f**	**0**	**3**	**4**
75	**speaker75**	**advanced**	**m**	**3**	**3**	**2**
76	**speaker76**	**advanced**	**f**	**3**	**2**	**2**
77	**speaker77**	**advanced**	**m**	**1**	**0**	**3**
78	**speaker78**	**advanced**	**f**	**0**	**3**	**2**
79	**speaker79**	**advanced**	**f**	**1**	**1**	**1**
80	**speaker80**	**advanced**	**m**	**1**	**4**	**3**
81	**speaker81**	**advanced**	**m**	**1**	**1**	**4**
82	**speaker82**	**advanced**	**f**	**2**	**1**	**1**
83	**speaker83**	**advanced**	**f**	**2**	**3**	**2**
84	**speaker84**	**advanced**	**m**	**1**	**2**	**0**
85	**speaker85**	**advanced**	**f**	**4**	**4**	**0**
86	**speaker86**	**advanced**	**m**	**2**	**2**	**2**
87	**speaker87**	**advanced**	**m**	**2**	**0**	**1**
88	**speaker88**	**advanced**	**m**	**2**	**2**	**0**
89	**speaker89**	**advanced**	**m**	**2**	**0**	**0**
90	**speaker90**	**advanced**	**m**	**3**	**2**	**3**
Total				**58**	**54**	**46**
General Total				**271**	**279**	**181**

Appendix (32)

The results for the whole population on the AJT on past until now events

Spk & ID	lev	gen	Q 3	Q 4	Q 5	Q 9	Q 11	Q 12	Q 14	Q 15	Q 19	Q 20	Q 23	Q 24	Q 27	Q 33	Q 35	Tot
spk1	Beg	m	0 spt	1	0 spr	1	0 spr	1	0 spr	0 spt	1	0 ppt	0 spr	1	0 spr	1	1	7
spk2	Beg	m	0 spt	1	1	0 spt	0 spr	1	0 spr	0 spt	1	1	0 spr	1	1	0 spt	1	8
spk3	Beg	m	1	0 ppt	1	0 spt	1	0 ppt	0 spr	1	0 spt	0 ppt	0 spr	1	0 spr	0 spt	1	6
spk4	Beg	m	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	0 ppt	0
spk5	Beg	m	1	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	6
spk6	Beg	f	0 spt	0 ppt	0 spr	0 spt	1	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk7	Beg	f	1	1	1	0 spt	1	0 ppt	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	0 ppt	6
spk8	Beg	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	1	1	0 ppt	1	1	0 spr	0 spt	1	7
spk9	Beg	m	0 spt	0 ppt	0 spr	1	0 spr	1	0 spr	0 spt	1	0 ppt	0 spr	0 ppt	0 spr	1	0 ppt	4
spk10	Beg	f	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	1	1
spk11	Beg	f	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	0 ppt	0
spk12	Beg	f	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spt	0 ppt	0 spr	0 spt	0 ppt	0
spk13	Beg	m	0 spt	1	0 spr	0 spt	0 spr	1	1	0 spt	0 spt	1	0 spr	0 ppt	0 spr	0 spt	1	5
spk14	Beg	f	1	0 ppt	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk15	Beg	m	0 spt	1	0 spr	0 spt	1	0 ppt	1	0 spt	0 spt	0 ppt	0 spr	1	1	0 spt	1	6
spk16	Beg	m	1	0 ppt	1	0 spt	0 spr	1	0 spr	0 spt	1	0 ppt	1	0 ppt	0 spr	1	0 ppt	6
spk17	Beg	m	0 spt	0 ppt	0 spr	1	0 spr	0 ppt	1	0 spt	0 spt	0 ppt	0 spr	1	0 spr	1	0 ppt	4
spk18	Beg	m	0 spt	1	0 spr	0 spt	1	0 ppt	0 spr	0 spt	1	0 ppt	0 spr	0 ppt	0 spr	0 spt	1	4
spk19	Beg	f	0 spt	1	0 spr	0 spt	1	0 ppt	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk20	Beg	f	1	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	1	0 spr	0 ppt	0 spr	0 spt	0 ppt	2
spk21	Beg	f	1	0 ppt	0 spr	0 spt	1	0 ppt	0 spr	1	0 spt	0 ppt	0 spr	0 ppt	1	1	0 ppt	5
spk22	Beg	f	0 spt	0 ppt	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	4
spk23	Beg	f	0 spt	0 ppt	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	0 ppt	1	0 ppt	0 spr	0 spt	0 ppt	2
spk24	Beg	f	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	0 ppt	0
spk25	Beg	f	0 spt	0 ppt	0 spr	1	0 spr	0 ppt	0 spr	1	0 spt	0 ppt	1	0 ppt	0 spr	0 spt	0 ppt	3
spk26	Beg	f	0 spt	0 ppt	0 spr	1	0 spr	0 ppt	0spr	1	0 spt	0 ppt	1	0 ppt	0 spr	0 spt	0 ppt	4
spk27	Beg	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	1	0 ppt	3
spk28	Beg	m	0 spt	0 ppt	0 spr	0 spt	0 spr	0 ppt	0 spr	0 spt	0 spt	0 ppt	0 spr	0 ppt	0 spr	0 spt	0 ppt	0

spk29	Beg	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	0 ppt	1	0 spt	0 ppt	4
spk30	Beg	f	1	0 ppt	1	0 spt	1	0 ppt	0 spr	1	0 spt	1	0 spr	1	1	0 spt	0 ppt	7
spk31	Int.	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk32	Int.	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	5
spk33	Int.	f	1	1	0 spr	1	0 spr	1	0 spr	0 spt	0 spt	0 ppt	0 spr	1	0 spr	0 spt	1	6
spk34	Int.	f	0 spt	1	1	0 spt	0 spr	1	0 spr	0 spt	0 spt	1	1	1	1	0 spt	0 ppt	7
spk35	Int.	m	1	1	1	1	1	0 ppt	1	1	0 spt	0 ppt	0 spr	0 ppt	0 spr	1	0 ppt	8
spk36	Int.	f	0 spt	1	0 spr	1	1	0 ppt	0 spr	1	0 spt	1	0 spr	0 ppt	1	0 spt	1	7
spk37	Int.	m	0 spt	1	0 spr	0 spt	1	1	1	0 spt	0 spt	1	1	1	0 spr	0 spt	1	8
spk38	Int.	m	0 spt	1	1	1	0 spr	1	1	0 spt	1	0 ppt	1	0 ppt	0 spr	1	0 ppt	8
spk39	Int.	m	1	0 spr	1	0 spt	1	0 ppt	0 spr	0 spt	1	0 ppt	1	0 ppt	0 spr	0 spt	1	6
spk40	Int.	m	0 spt	0 spr	0 spr	1	0 spr	0 ppt	0 spr	1	0 spt	1	0 spr	0 ppt	1	0 spt	1	5
spk41	Int.	f	1	0 spr	1	0 spt	1	0 ppt	1	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	7
spk42	Int.	f	1	0 spr	0 spr	1	1	1	0 spr	1	0 spt	1	0 spr	1	1	0 spt	0 ppt	8
spk43	Int.	f	0 spt	0 spr	1	0 spt	1	0 ppt	0 spr	1	0 spt	1	0 spr	0 ppt	1	0 spt	0 ppt	5
spk44	Int.	m	0 spt	1	0 spr	0 spt	1	1	0 spr	1	0 spt	1	0 spr	1	1	0 spt	1	8
spk45	Int.	m	0 spt	0 spr	1	0 spt	0 spr	1	1	0 spt	1	0 ppt	0 spr	0 ppt	1	0 spt	1	6
spk46	Int.	f	0 spt	1	0 spr	1	1	0 ppt	1	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	7
spk47	Int.	f	1	0 spr	1	1	0 spr	1	0 spr	1	0 spt	0 ppt	1	0 ppt	0 spr	1	1	8
spk48	Int.	m	0 spt	1	0 spr	1	0 spr	0 ppt	1	1	0 spt	0 ppt	0 spr	0 ppt	1	0 spt	1	6
spk49	Int.	f	0 spt	1	0 spr	1	1	1	0 spr	0 spt	1	0 ppt	0 spr	1	0 spr	0 spt	1	7
spk50	Int.	m	0 spt	0 spr	1	0 spt	0 spr	1	1	0 spt	0 spt	1	0 spr	1	0 spr	1	0 ppt	6
spk51	Int.	f	1	0 spr	1	1	0 spr	1	1	0 spt	1	1	0 spr	1	0 spr	0 spt	0 ppt	8
spk52	Int.	f	1	0 spr	0 spr		1	1	1	0 spt	1	1	0 spt	1	1	0 spt	1	9
spk53	Int.	m	0 spt	0 spr	1	0 spt	0 spr	1	0 spr	0 spt	1	0 ppt	1	0 ppt	0 spr	0 spt	1	5
spk54	Int.	f	0spr	0 spr	0 spr	1	0 spr	0 ppt	0 spr	1	0 spt	0 ppt	0 spr	0 ppt	1	0 spt	1	4
spk55	Int.	m	0 spt	0 spr	0 spr	1	0 spr	0 ppt	0 spr	1	1	0 ppt	0 spr	1	0 spr	0 spt	1	6
spk56	Int.	f	0 spt	0 spr	1	1	0 spr	1	1	0 spt	1	0 ppt	1	1	0 spr	1	0 ppt	8
spk57	Int.	m	0 spt	1	0 spr	0 spt	0 spr	1	0 spr	1	0 spt	1	1	0 ppt	0 spr	1	0 ppt	6
spk58	Int.	f	1	0 spr	1	1	0 spr	1	0 spr	0 spt	1	1	0 spr	1	0 spr	1	0 ppt	8
spk59	Int.	m	0 spt	1	0 spr	0 spt	0 spr	0 ppt	0 spr	1	0 spt	1	1	1	1	0 spt	1	7
spk60	Int.	f	1	0 spr	1	0 spt	0 spr	1	0 spr	1	0 spt	0 ppt	1	1	0 spr	1	0 ppt	7
spk61	adv	f	0 spt	0 ppt	0 spr	1	1	1	1	0 spt	0 spt	1	0 spr	0 ppt	1	1	0 ppt	7
spk62	ad	m	1	1	0 spr	1	1	1	0 spr	0 spt	1	1	0 spr	1	0 spr	1	1	10

spk63	adv	f	1	1	1	0 spt	1	0 ppt	1	1	0 spt	1	1	0 ppt	1	1	1	11
spk64	adv	f	1	1	1	1	1	1	1	0 spt	1	1	1	1	1	0 spt	1	13
spk65	adv	f	1	1	0 spr	0 spt	1	1	0 spr	0 spt	0 spt	1	0 spr	0 ppt	1	1	1	8
spk66	adv	f	0 spt	1	1	0 spt	1	0 ppt	1	0 spt	0 spt	1	1	0 ppt	1	1	1	9
spk67	adv	f	1	1	0 spr	0 spt	1	0 ppt	1	0 spt	0 spt	1	0 spr	1	0 spr	0 spt	1	7
spk68	adv	f	1	1	1	0 spt	1	1	1	1	0 spt	1	0 spr	1	1	1	1	12
spk69	adv	m	0 spt	0 ppt	1	1	1	0 ppt	1	1	1	1	1	1	1	1	1	12
spk70	adv	m	1	1	0 spr	0 spt	1	1	1	0 spt	0 spt	0 ppt	1	1	1	0 spt	0 ppt	8
spk71	adv	f	1	1	0 spr	0 spt	1	0 ppt	1	1	0 spt	1	1	1	1	1	1	11
spk72	adv	m	1	0 ppt	1	1	1	1	0 spr	1	1	1	0 spr	1	1	1	1	8
spk73	adv	m	1	0 ppt	1	1	0 spr	1	0 spr	1	1	1	0 spr	1	0 spr	1	1	10
spk74	adv	f	1	0	0 spr	1	1	0 ppt	0 spr	1	1	0 ppt	1	1	0 spr	1	0 ppt	8
spk75	adv	m	0 spt	1	1	1	0 spr	1	0 spr	1	0 spt	0 ppt	1	0 ppt	0 spr	0 spt	1	7
spk76	adv	f	1	1	0 spr	0 spt	1	0 ppt	0 spr	1	0 spt	0 ppt	1	1	1	0 spt	1	8
spk77	adv	m	1	1	1	1	1	0 ppt	1	1	0 spt	1	1	0 ppt	1	1	0 ppt	11
spk78	adv	f	1	1	1	1	0 spr	1	0 spr	1	1	0 ppt	1	1	0 spr	1	0 ppt	10
spk79	adv	f	1	1	1	1	1	0 ppt		1	0 spt	1	0	1	1	1	1	12
spk80	adv	m	1	0 ppt	0 spr	1	0 spr	1	0 spr	1	0 spt	0 ppt	1	1	0 spr	1	0 ppt	7
spk81	adv	m	1	0 spt	1	0 spt	1	0 ppt	1	1	1	0 ppt	1	1	0 spr	1	0 ppt	9
spk82	adv	f	1	1	1	0 spt	1	1	0 spr	1	1	1	1	0 ppt	1	0 spt	1	11
spk83	adv	f	0 spt	1	0 spr	1	0 spr	1	0 spr	1	0 spt	1	1	0 ppt	1	1	0 ppt	8
spk84	adv	m	1	1	1	1	0 spr	1	1	1	1	1	0 spr	1	1	0 spt	1	12
spk85	adv	f	0 spt	1	0 spr	0 spt	1	1	0 spr	1	0 spt	1	0	1	0 spr	0 spt	1	7
spk86	adv	m	1	0 ppt	1	1	1	0 ppt	0 spr	0 spt	0 spt	1	1	1	0 spr	1	1	9
spk87	adv	m	1	1	1	1	1	1	1	1	0 spt	0 ppt	1	1	1	0 spt	1	12
spk88	adv	m	1	1	1	1	0 spr	1	1	1	0 spt	1	0	1	1	0 spt	1	11
spk89	adv	m	1	1	1	1	1	1	1	1	0 spt	1	1	1	1	0 spt	1	13
spk90	adv	m		0	1	1	0 spr	0 ppt	1	0 spt	1	0 ppt	0	1	1	0 spt	1	7
spk91	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk92	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk93	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk94	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk95	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk96	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15

spk97	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk98	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk99	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk100	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk101	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk102	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk103	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk104	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk105	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk106	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk107	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk108	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk109	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk110	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk111	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk112	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk113	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk114	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk115	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk116	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk117	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk118	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk119	CG	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
spk120	CG	m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15

Appendix (33)

Frequency of errors in the written task, WET past until now event

ID	Speaker	Level	Gender	S. Pres.	S. past	Pres. Prog.
1	speaker1	beginner	m	3	0	0
2	speaker2	beginner	m	1	5	0
3	speaker3	beginner	m	2	2	0
4	speaker4	beginner	m	1	0	1
5	speaker5	beginner	m	5	0	0
6	speaker6	beginner	f	0	0	0
7	speaker7	beginner	f	2	4	0
8	speaker8	beginner	m	0	0	0
9	speaker9	beginner	m	4	0	0
10	speaker10	beginner	f	3	2	0
11	speaker11	beginner	f	5	1	0
12	speaker12	beginner	f	0	3	0
13	speaker13	beginner	m	5	0	1
14	speaker14	beginner	f	2	1	0
15	speaker15	beginner	m	4	2	0
16	speaker16	beginner	m	0	1	0
17	speaker17	beginner	m	4	0	0
18	speaker18	beginner	m	1	1	1
19	speaker19	beginner	f	1	0	0
20	speaker20	beginner	f	3	0	0
21	speaker21	beginner	f	2	1	0
22	speaker22	beginner	f	2	0	2
23	speaker23	beginner	f	2	0	1
24	speaker24	beginner	f	2	1	1
25	speaker25	beginner	f	3	0	1
26	speaker26	beginner	f	2	0	1
27	speaker27	beginner	m	3	0	0
28	speaker28	beginner	m	1	0	0
29	speaker29	beginner	m	0	0	0
30	speaker30	beginner	f	2	0	0
31	speaker31	intermediate	m	5	0	1
32	speaker32	intermediate	m	2	3	0
33	speaker33	intermediate	f	0	3	0
34	speaker34	intermediate	f	1	1	0

35	speaker35	intermediate	m	4	0	1
36	speaker36	intermediate	f	3	0	1
37	speaker37	intermediate	m	2	0	0
38	speaker38	intermediate	m	2	0	0
39	speaker39	intermediate	m	2	1	1
40	speaker40	intermediate	m	3	0	0
41	speaker41	intermediate	f	4	1	0
42	speaker42	intermediate	f	2	0	2
43	speaker43	intermediate	f	3	0	0
44	speaker44	intermediate	m	2	0	0
45	speaker45	intermediate	m	1	1	1
46	speaker46	intermediate	f	1	0	1
47	speaker47	intermediate	f	1	1	0
48	speaker48	intermediate	m	3	0	1
49	speaker49	intermediate	f	1	1	1
50	speaker50	intermediate	m	1	0	0
51	speaker51	intermediate	f	0	0	0
52	speaker52	intermediate	f	3	0	1
53	speaker53	intermediate	m	0	0	2
54	speaker54	intermediate	f	1	0	0
55	speaker55	intermediate	m	1	0	0
56	speaker56	intermediate	f	1	0	0
57	speaker57	intermediate	m	1	0	0
58	speaker58	intermediate	f	2	0	1
59	speaker59	intermediate	m	3	1	0
60	speaker60	intermediate	f	3	0	0
61	speaker61	advanced	f	0	0	0
62	speaker62	advanced	m	4	1	0
63	speaker63	advanced	f	0	0	0
64	speaker64	advanced	f	0	0	0
65	speaker65	advanced	f	2	1	2
66	speaker66	advanced	f	0	5	0
67	speaker67	advanced	f	2	1	0
68	speaker68	advanced	f	0	1	0
69	speaker69	advanced	m	0	0	0
70	speaker70	advanced	m	1	2	0
71	speaker71	advanced	f	0	0	0
72	speaker72	advanced	m	1	1	0
73	speaker73	advanced	m	0	0	0

74	speaker74	advanced	f	0	0	0
75	speaker75	advanced	m	4	0	1
76	speaker76	advanced	f	3	0	0
77	speaker77	advanced	m	0	0	0
78	speaker78	advanced	f	0	0	0
79	speaker79	advanced	f	3	0	0
80	speaker80	advanced	m	2	1	0
81	speaker81	advanced	m	0	0	0
82	speaker82	advanced	f	3	0	0
83	speaker83	advanced	f	0	0	0
84	speaker84	advanced	m	0	0	0
85	speaker85	advanced	f	1	0	1
86	speaker86	advanced	m	1	0	3
87	speaker87	advanced	m	0	0	0
88	speaker88	advanced	m	0	1	1
89	speaker89	advanced	m	0	0	0
90	speaker90	advanced	m	4	0	1
Total				**154**	**51**	**32**

Appendix (34)

The interview

1. Tell me about something that you remember when you were in high school.
2. Tell me about your two big accomplishments in the last six months.
3. Tell me about something that you would like to do in six months.
4. Tell me about your first week experience at college/ University/ work.
5. Tell me about something you remember from your childhood

Appendix (35)

The Written Elicitation Task

Written elicitation task of study 1 and 2 with Lingala-French speakers acquiring English

The written elicitation task

Fill in the blanks with the verb provided in the parentheses; use the correct form of the verb.

Example: Mary…….. dinner right now (eat).

Correct: Mary is eating dinner right now.

Example: Jeff……to play guitar (like).

Correct: Jeff likes to play guitar.

1. Joe……..…a car 10 years ago (buy).
2. Abigael…….to Paris soon (travel).
3. Nathan…… in Urbana since 2011(live).
4. Passy…….…….……..food now (cook).
5. Bob and Joe……soccer at the moment (play).
6. Betty……..home next week (go).
7. Mimie…...……London last year (visit).
8. Paul…….French now (teach).
9. Brendon usually……French at home (speak).
10. Betty……..…to France many times (travel).
11. Lisette……rice yesterday (Cook).
12. Bob sometimes……very happy (seem).

13. Nathan……. since January at the zoo (work).

14. Jovany…….....basketball tomorrow (play).

15. Allegress..……in Champaign in 2012 (arrive).

16. John always……..……very fast (drive).

17. Paul…….....to church next Sunday (go).

18. Betty……..piano for six years (play).

19. Bob…….the suspect last week (see).

20. Joe……here for 5 years (live).

21. Betty often……on Sunday (swim)

22. Paul…….....that car next week (buy).

23. Bob……..London several times (visit).

24. Andy……...to Paris last month (go).